

Bidder	Basis of Award
REKOR	\$341,742.00
MOTOROLA SOLUTIONS	Non-responsive
NEOLOGY	Non-responsive
COMSONICS	Non-responsive
UTILITY ASSOCIATES	Non-responsive

Bids
Received



SUBMITTED BY:

Rekor Recognition Systems

7172 Columbia Gateway Dr. Suite 400

Columbia, MD 21046

www.rekor.ai info@rekor.ai 410.762.0800

December 31, 2020

Request For Bid | RFB# 10684

License Plate Readers



SUBMITTED TO:



San Diego County Sheriff's Department

5560 Overland Avenue, Suite 270

1891 Jim Keene Blvd

San Diego, CA 92123-1204



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Transmittal Letter

December 31, 2020

San Diego County Sheriff's Department
5560 Overland Avenue, Suite 270
San Diego, CA 92123-1204

To whom it may concern:

It is my pleasure to transmit to the San Diego County Sheriff's Department ("Sheriff's Department") this response to your Request for Bids ("RFB") #10684, for License Plate Readers, including Addendums No. 1, 2, and 3.

Rekor Recognition Systems, Inc. ("Rekor") is a Maryland-based company that provides real-time roadway intelligence through AI-driven decisions. We are a leading technology provider of public safety solutions, including our advanced AI-based vehicle recognition system. Our innovative approach to affordable turnkey subscription-based vehicle recognition and ALPR services has been a game changer for government clients.

Rekor provides vehicle recognition systems powered by our innovative machine learning Watchman (aka OpenALPR) software, which dramatically improves the accuracy of license plate reads and also identifies the make, model, color, and body type of vehicles. Rekor's solutions include artificial intelligence software that upgrades nearly any Internet Protocol ("IP") security camera to a license plate reader, as well as highly accurate mobile and fixed vehicle recognition systems that are continuously improving with machine learning techniques and regular added feature releases. Rekor's applications and solutions are intelligent, flexible, and leading the next generation of vehicle recognition.

Rekor acknowledges the instructions and terms of the Request for Bids and agrees to comply with them. This proposal is firm for 90 days from the submittal date and may be extended upon mutual agreement if the Sheriff's Department requests so in writing. I am the primary person authorized to answer any questions and make representations for Rekor and my contact information is below.

Rekor's stands ready to provide the Sheriff's Department with a modern solution that not only dramatically outperforms current-day OCR-based legacy products, but also offers a long-term horizon for software-based technology improvements as they become available. Benefits include capabilities that go beyond just ALPR or vehicle recognition, thus leveraging the Sheriff's Department investment to support future roadway intelligence initiatives.



As your team evaluates the product options available, it is important to point out that capabilities and performance in a law enforcement environment represent a key differentiator for Rekor's technology. Our Edge 300 roadside product offers full video streaming plate capture with edge processing, and it is designed for highway speeds. Certain competitor products are designed for low-speed residential applications and others use outdated OCR technology with cameras that cover one lane of traffic. In most law enforcement implementations, the vast majority of locations require coverage of up to three lanes at highway speeds and these locations are best served by state-of-the art equipment which is becoming more affordable to a greater number of law enforcement agencies.

In reviewing the RFB, it seems evident that there is an expectation of performance that is based on perceptions of older technology offerings. Rekor does not make empty promises or claims, thus we would be glad to provide an extended on-site demonstration of the technology, directly against any other competitor of your choosing. Our detection systems utilize best-in-class components driven by incredibly reliable and accurate AI-based vehicle recognition software, capturing not just the plate number and state, but also vehicle attributes such as make, model, type, color, and direction of travel.

Rekor believes in transparency and clear communication. Within the body of this proposal you will gain an understanding of how Rekor's technology can provide vehicle recognition technology benefits to the Sheriff's Department, not just to meet current needs, but to support future needs without relying on antiquated or obsolete equipment and software. We are proposing our proven law enforcement solutions for fixed/portable, trailer, and mobile environments. While our mobile solution may be different from what the Sheriff Department has been used to with your legacy ALPR provider, we urge you to consider our revolutionary two-camera and four-camera solutions that capture up to five lanes of traffic with cameras mounted inside the windshield of the vehicle.

The combination of Rekor's advanced technology with our commitment to extreme customer satisfaction will position the San Diego County Sheriff's Department as a leader with respect to effective and ethical ALPR deployment.

We are prepared to provide any additional information requested and appreciate the opportunity to share our solution with the Sheriff's Department.

Sincerely,

Rodney Hillman, Chief Operating Officer
rhillman@rekor.ai; Office (410) 762-0800 x301; Cell 443-615-1548



A. Required Documents

Checklist

Failure to submit the following items may result in your Bid being declared non- responsive.

- ☒ Cover Page (PC 600 Form)
- ☒ Representations and Certifications Form
- ☒ Indemnification Agreement



LICENSE PLATE READERS
SECTION A: COVER PAGE (P&C 600 FORM)

RFB 10684 – Submitted 12/31/2020
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A.2 Representations and Certifications Form

County of San Diego
Department of Purchasing and Contracting

REPRESENTATIONS AND CERTIFICATIONS

The following representations and certifications are to be completed, signed and returned with the offer (the term "offer" includes a bid, proposal, quote, statement of qualifications, or any other submission to provide goods and/or services).

- BUSINESS TYPE**
☒ For-profit ☐ Non-profit ☐ Government
- INTERLOCKING DIRECTORATE**
 In accordance with Board of Supervisors Policy A-79, if Offeror is a non-profit and will be subcontracting with a related for-profit entity where an interlocking directorate, management or ownership relationship exists, Offeror must list all such entity(ies) on an attached separate sheet, and authorization must be sought from Board of Supervisors. If Offeror is a non-profit and does not submit such a list, Offeror certifies it has not entered into a subcontract relationship with a related for-profit entity.
 List Attached? Yes ☐ Not Applicable ☒
- BUSINESS REPRESENTATION**
 Offeror represents as a part of this offer the following information regarding the ownership, operation, and control of its business: 3.1. Are you a local business with a physical address within the County of San Diego? Yes ☐ No ☒
 - Are you certified by the State of California as a:
 - Disabled Veteran Business Enterprise (DVBE)
 Certification #: _____
 Not Applicable ☒
 - Small Business Enterprise (SBE)
 Certification #: _____
 Not Applicable ☒
 - Are you certified by the U.S. Dept Of Veterans' Affairs as:
 - Veteran Owned Small Business (VOSB)
 Certification # _____
 Not Applicable ☒
 - Service Disabled Veteran Owned Small Business (SDVOSB)
 Certification # _____
 Not Applicable ☒
 - Estimated percentage of work in this offer to be performed or fulfilled locally (within the geographic boundaries of the County of San Diego): 100 %
- DEBARMENT, SUSPENSION, AND RELATED MATTERS**
 - Offeror certifies to the best of its knowledge that neither it nor any of its officers:
 - Are presently debarred, suspended, declared ineligible, or voluntarily excluded from covered transactions by any state, local, or federal department or agency.
 - Have within a three (3) year period preceding this agreement been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - Except as allowed for in Section 4.2.5, Offeror hereby certifies to the best of its knowledge that neither it nor any of its officers:
 - Are presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with the commission of any of the offenses enumerated in paragraph 4.1.2 of this certification;
 - Have within a three (3) year period preceding this agreement had one or more public transactions (federal, state or local) terminated for cause or default;
- Are presently the target or subject of any investigation, accusation or charges by any federal, state or local agency or law enforcement, licensing, certification, ethics, or compliance body;
- Are proposed for debarment by any state, local, or federal department or agency.
- If Offeror is unable to certify Sections 4.2.1, 4.2.2, 4.2.3, or 4.2.4, it certifies that it has disclosed and attached to this Representations and Certifications the reason(s) it cannot do so. The disclosure must include the Section(s), specific relevant facts including dates, contracts, individuals involved, status of actions, and any other relevant information that prevent it from making the requested certification(s). The County reserves the right to disqualify an Offeror based upon information disclosed.
 Disclosure Attached? Yes ☐ Not Applicable ☒
- RELATED WORK**
 Offeror certifies to the best of its knowledge that, other than as disclosed in an attached separate sheet, it and its proposed subcontractors, agents, and consultants have not previously contracted with the County to perform work on or related to this project (e.g. preparing related studies or recommendations, components of the statement of work, or plans and specifications).
 Disclosure Attached? Yes ☐ Not Applicable ☒
- CURRENT COST OR PRICING**
 Offeror certifies to the best of its knowledge that cost and/or pricing data submitted with this offer, or specifically identified by reference if actual submission of the data is impracticable, are accurate, complete, and current as of the date signed below.
- INDEPENDENT PRICING**
 Offeror certifies that in relation to this offer:
 - The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with other offerors, with any competitors, or with any County employee(s) or consultant(s) involved in this or related procurements;
 - Unless otherwise required by law, the prices that have been quoted in this offer have not been knowingly disclosed by the Offeror and will not knowingly be disclosed by the Offeror prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other Offeror or to any competitor or with any County employee(s) or consultant(s) involved in this or related procurements; and
 - No attempt has been made or will be made by the Offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.
- ADDITIONAL DISCLOSURES**
 Offeror shall report in writing to the County Department of Purchasing and Contracting within five business days of discovering or having any reason to suspect any change in status as certified in the preceding paragraphs. Upon County's request, Offeror shall provide additional information supporting Offeror's Representations and Certifications. Offeror's obligations under this Section 8 shall continue until Offeror is no longer under consideration for award of a contract, or until termination or expiration of any resulting contract(s).

CERTIFICATION

The information furnished in Paragraphs 1 through 8 and in the accompanying offer is certified to be factual and correct as of the date submitted and this certification is made under penalty of perjury under the laws of the State of California.

Name: Rodney Hillman Signature: _____

Title: Chief Operating Officer Date: 12/31/2020

Company/Organization: Rekor Recognition Systems, Inc.

SUBMIT THIS FORM AS DIRECTED IN THE REQUEST FOR SOLICITATION DOCUMENTS OR WITH THE OFFER

Revised 05-02-17



A.3 Nondisclosure Indemnification Agreement

COUNTY OF SAN DIEGO NONDISCLOSURE INDEMNIFICATION AGREEMENT

IF OFFEROR SUBMITS EXHIBIT CONFIDENTIAL/PROPRIETARY, THE FOLLOWING NONDISCLOSURE INDEMNIFICATION AGREEMENT MUST BE COMPLETED, SIGNED AND RETURNED WITH THE OFFER

This indemnification agreement ("Agreement") is made and entered into by and between the County of San Diego

("County") and Offeror Company/Organization Name: Rekor Recognition Systems, Inc.

("Offeror") with reference to the following facts: _____

WHEREAS the County may receive a request for disclosure of Offeror's submission under the California Public Records Act, Government Code Section 6250, et seq.; and

WHEREAS, Offeror has included in its submission an exhibit entitled "*EXHIBIT – CONFIDENTIAL/PROPRIETARY*" containing records that Offeror has determined to constitute trade secrets or other proprietary information exempt from disclosure under the California Public Records Act; and

WHEREAS the County requires defense and indemnity from Offeror for the County's ongoing non-disclosure of Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*;

NOW, THEREFORE, for good and valuable consideration and the mutual promises contained herein, the parties agree to the following:

1. The above recitals are incorporated herein by this reference.
2. Except as otherwise provided herein, the County will not release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* based on Offeror's representation that the records contained therein are proprietary and exempt from disclosure under the California Public Records Act and/or are trade secrets as that term is defined in Government Code Section 6250, et seq. Notwithstanding the foregoing, however, the County may release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* in the event of any of the following:
 - a. Offeror fails to comply with the terms and conditions of this Agreement; or
 - b. Offeror provides the County with written notice that some or all of the records may be released; or
 - c. A court of competent jurisdiction orders the County to release the records and the County has exhausted or waived its appeal rights.
3. To the fullest extent allowed by law, the County shall not be liable for, and Offeror shall defend and indemnify County and its Board of Supervisors, officers, directors, employees and agents of County (collectively "County Parties"), against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees (whether incurred by County attorneys or attorneys employed by County) and court costs (hereinafter collectively referred to as "Claims"), related to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.
4. Offeror waives any and all claims in law or equity and hereby releases the County Parties from any and all claims, deductibles, self-insured retentions, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs, which arise out of or are in any way connected to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.

TO BE COMPLETED BY AN AUTHORIZED REPRESENTATIVE OF THE OFFEROR

Offeror Company/Organization Name: Rekor Recognition Systems, Inc.

Authorized Representative Name: Rodney Hillman

Authorized Representative Title: Chief Operating Officer

Signature: [Signature] Date: 12/31/2020



B. Pricing Schedule

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10864)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE
Rekor Recognition Systems, Inc.
December 31, 2020

INITIAL TERM: Date of Award through January 31, 2022				
DESCRIPTION	MFG & MODEL	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle. <i>Per Section C.3.2.3.1, non-IR cameras will be accepted upon demonstration and verification of its equivalency.</i>	Rekor Finder-4	4	\$ 6,265.00	\$ 25,060.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle.	Rekor Edge 300	10	\$ 4,865.00	\$ 48,650.00
LPR Camera Mounting Brackets for Light Bar	NA for in-vehicle installation	4	\$ -	\$ -
LPR Mounting for Portable system	Included with Edge 300	10	\$ -	\$ -
LPR Processor	Included with systems	14	\$ -	\$ -
Modem	Included with systems	14	\$ -	\$ -
LPR Software	Watchman License (1 year)	14	\$ 336.00	\$ 4,704.00
LPR Speed Trailer complete package. List all items included in price quoted. <i>This price includes Speed Trailer with radar, electronic speed indicator, speed limit sign, Edge 300x2 cameras with digital zoom, batteries, communications and solar power conversion equipment, start-up, configuration, commissioning and a 1-year ALPR software license.</i>	Rekor ALPR Speed Trailer & Watchman License (1 year)	1	\$ 27,300.00	\$ 27,300.00
LPR Speed Trailer crating & shipping		1	\$ 1,200.00	\$ 1,200.00
Start-up, configuration, and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Included with Edge 300, Finder-4 and LPR Speed Trailer	14	\$ -	\$ -
Installation	Edge 300 and Finder-4	14	\$ 500.00	\$ 7,000.00
Covert Installation in vehicle	Included with Finder-4 installation	1	\$ -	\$ -
Installation "Kit", Includes all hardware, wiring and software for "do it yourself" standard installations (on poles & trailers)	Included with systems	5	\$ -	\$ -
Training per hour	Included	8	\$ -	\$ -
Shipping Mobile LPR 1 camera system	Included with Finder-4	4	\$ -	\$ -
Shipping Portable LPR 1 camera system	Included with Edge 300	10	\$ -	\$ -
			BASE YEAR SUBTOTAL	\$ 113,914.00

**Quantities are estimates only and not guaranteed

- All software is priced on a 12-month basis. Renewal pricing will be offered at the same rate in follow-on years.



COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10864)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE
Rekor Recognition Systems, Inc.
December 31, 2020

OPTION YEAR 1 -- February 1, 2022 through January 31, 2023				
DESCRIPTION	MFG & MODEL	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle. <i>Per Section C.3.2.3.1, non-IR cameras will be accepted upon demonstration and verification of its equivalency.</i>	Rekor Finder-4	4	\$ 6,265.00	\$ 25,060.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle	Rekor Edge 300	10	\$ 4,865.00	\$ 48,650.00
LPR Camera Mounting Brackets for Light Bar	NA for in-vehicle installation	4	\$ -	\$ -
LPR Mounting for Portable system	Included with Edge 300	10	\$ -	\$ -
LPR Processor	Included with systems	14	\$ -	\$ -
Modem	Included with systems	14	\$ -	\$ -
LPR Software	Watchman License (1 year)	14	\$ 336.00	\$ 4,704.00
LPR Speed Trailer complete package. List all items included in price quoted. <i>This price includes Speed Trailer with radar, electronic speed indicator, speed limit sign, Edge 300x2 cameras with digital zoom, batteries, communications and solar power conversion equipment, start-up, configuration, commissioning and a 1-year ALPR software license.</i>	Rekor ALPR Speed Trailer & Watchman License (1 year)	1	\$ 27,300.00	\$ 27,300.00
LPR Speed Trailer crating & shipping		1	\$ 1,200.00	\$ 1,200.00
Start-up, configuration, and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Included with Edge 300, Finder-4 and LPR Speed Trailer	14	\$ -	\$ -
Installation	Edge 300 and Finder-4	14	\$ 500.00	\$ 7,000.00
Covert Installation in vehicle	Included with Finder-4 installation	1	\$ -	\$ -
Installation "Kit", Includes all hardware, wiring and software for "do it yourself" standard installations (on poles & trailers)	Included with systems	5	\$ -	\$ -
Training per hour	Included	8	\$ -	\$ -
Shipping Mobile LPR 1 camera system	Included with Finder-4	4	\$ -	\$ -
Shipping Portable LPR 1 camera system	Included with Edge 300	10	\$ -	\$ -
			OPTION YEAR 1 SUBTOTAL:	\$ 113,914.00

**Quantities are estimates only and not guaranteed

- All software is priced on a 12-month basis. Renewal pricing will be offered at the same rate in follow-on years.



COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10864)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE
Rekor Recognition Systems, Inc.
December 31, 2020

OPTION YEAR 2 -- February 1, 2023 through January 31, 2024				
DESCRIPTION	MFG & MODEL	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle. <i>Per Section C.3.2.3.1, non-IR cameras will be accepted upon demonstration and verification of its equivalency.</i>	Rekor Finder-4	4	\$ 6,265.00	\$ 25,060.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle	Rekor Edge 300	10	\$ 4,865.00	\$ 48,650.00
LPR Camera Mounting Brackets for Light Bar	NA for in-vehicle installation	4	\$ -	\$ -
LPR Mounting for Portable system	Included with Edge 300	10	\$ -	\$ -
LPR Processor	Included with systems	14	\$ -	\$ -
Modem	Included with systems	14	\$ -	\$ -
LPR Software	Watchman License (1 year)	14	\$ 336.00	\$ 4,704.00
LPR Speed Trailer complete package. List all items included in price quoted. <i>This price includes Speed Trailer with radar, electronic speed indicator, speed limit sign, Edge 300x2 cameras with digital zoom, batteries, communications and solar power conversion equipment, start-up, configuration, commissioning and a 1-year ALPR software license.</i>	Rekor ALPR Speed Trailer & Watchman License (1 year)	1	\$ 27,300.00	\$ 27,300.00
LPR Speed Trailer crating & shipping		1	\$ 1,200.00	\$ 1,200.00
Start-up, configuration, and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Included with Edge 300, Finder-4 and LPR Speed Trailer	14	\$ -	\$ -
Installation	Edge 300 and Finder-4	14	\$ 500.00	\$ 7,000.00
Covert Installation in vehicle	Included with Finder-4 installation	1	\$ -	\$ -
Installation "Kit", Includes all hardware, wiring and software for "do it yourself" standard installations (on poles & trailers)	Included with systems	5	\$ -	\$ -
Training per hour	Included	8	\$ -	\$ -
Shipping Mobile LPR 1 camera system	Included with Finder-4	4	\$ -	\$ -
Shipping Portable LPR 1 camera system	Included with Edge 300	10	\$ -	\$ -
			OPTION YEAR 2 SUBTOTAL	\$ 113,914.00
**Quantities are estimates only and not guaranteed				
GRANDTOTAL (BASIS OF AWARD):			\$	341,742.00

Additional System Options				
DESCRIPTION	MFG & MODEL	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Rekor Finder-2	2-Camera In-Vehicle System	1	\$ 4,865.00	\$ 4,865.00
Rekor Edge 300x2	2-Camera Fixed/Portable System	1	\$ 5,565.00	\$ 5,565.00
Solar Kit	Solar Panel and supplies for renewable power source	1	\$ 3,150.00	\$ 3,150.00
Trailer Camera Set Only - Rekor Edge 300x2	2-Camera System	1	\$ 5,565.00	\$ 5,565.00

- Additional System Options listed immediately above include shipping, installation "kit", startup, configuration and commissioning. Installation of each unit is \$500 per the Unit Price in the Initial Term.

- All software is priced on a 12-month basis. Renewal pricing will be offered at the same rate in follow-on years.



COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

1. PRICING

1.1. Enter unit prices and extended prices for each line item, Base Term Period, 1st Option Period, and 2nd Option Period page for each line item.

1.2. The aggregate total for each term period combined (Grand Total) will be used as the basis of award.

1.3. The Pricing Schedule table should not be tampered with or altered in any way.

1.4. Bids must meet specifications provided.

1.5. ALL items MUST be priced to be considered responsive.

2. GENERAL REQUIREMENTS

2.1. A specifications sheet with pictures and operations manual for the product shall be submitted with the bid.

COMPANY: Rekor Recognition Systems, Inc.

REPRESENTATIVE NAME: Rodney Hillman

REPRESENTATIVE EMAIL: rhillman@rekor.ai

REPRESENTATIVE PHONE: (410) 762-0800 extension 301

December 31, 2020



C. Statement of Work / Technical Response

C.1 Why Rekor is Ideally Suited for the San Diego Sheriff Department's ALPR Needs

The San Diego County Sheriff's Department ("Sheriff's Department") has requested quotes for Automatic License Plate Reader (ALPR) camera systems. Rekor understands that the Sheriff's Department currently uses ALPR technology from vendors that is OCR-based and thus not state-of-the-art with respect to camera performance in accurately reading license plates consistently with high confidence in varying lighting and weather. Furthermore, older technology tends to use cameras that are limited to covering one lane of traffic.

Rekor has ALPR cameras (Rekor "Finder") that can be placed inside a vehicle with the windows up, and we welcome the opportunity to demonstrate to the Sheriff's Department our Finder camera's accuracy and reliability. When combined with our fixed/portable and trailer solutions, this represents an ALPR ecosystem that is unmatched with respect to high performance and reliability.

Our Finder cameras are in use by law enforcement agencies who have recognized the systems' superior performance in almost all conditions outweighs certain limitations in absolute darkness due to lack of infrared ("IR") illumination. In very low light conditions, provided by headlights, streetlights, or moonlight, the systems perform quite well in comparison to IR-based technology. While we can't publicly disclose the name of a California-based law enforcement group that effectively uses Finder due to the nature of their operations, with your permission, we can ask them if they would be willing to contact your offices directly. In addition, law enforcement agencies at Cal State Fullerton, Vacaville and Suisan City are some California users of our Watchman ALPR software and the Stanislaus County Sheriff's Office uses our pole-mounted "Edge 300" camera and Finder cameras.

Beyond law enforcement in California, other state and local agencies that use our Watchman ALPR software include the California Air Resources Board, the San Diego County Air Pollution Control and the California Bureau of Automotive Repair. The first two agencies also use our Forensic Plate Finder servers that allow agency personnel to post-process videos for license plate and vehicle data. Because this RFP does not request a service like the Forensic Plate Finder, we will not address it at this time and would certainly respond to any questions on this capability, if the Sheriff's Department has further interest.

Rekor can bring significant value to the Sheriff's Department with the following benefits:

- **With just one Rekor camera, the Sheriff's Department can capture multiple lanes (up to 3 or 4 depending on model)** and can read license plates at extreme angles.
- **Because our software is hardware-agnostic, the Sheriff's Department can leverage "best in class" continuously evolving hardware technology.** Our software



can accept video streams from nearly any IP camera. Unlike legacy OCR-based systems with purpose-built cameras, we are not restricted to utilizing proprietary equipment and peripherals which get quickly outdated and can offer the Sheriff's Department "latest and greatest" component mixture.

- **Each license plate read also provides Sheriff's Department with the make, model, color, direction of travel, and body type of the vehicle, identified natively in real time by the software** as opposed to using a motor vehicle registration database lookup, like many ALPR vendors. Our native determination of critical vehicle attributes is superior in all situations.
- **Even at night and in dim-lighting situations, our cameras provide Sheriff's Department a high-read accuracy.** Rekor's ALPR solution accurately captures license plate data in some of the most extreme lighting and weather conditions.
- **Our included SD card provides Sheriff's Department with 30 days of continuously recorded video at each camera, enabling historical review of environmental video feeds,** based on reported incidents within the view of the cameras. Unlike competitors, video monitoring and recording are NOT disabled when used for ALPR purposes.
- **Rugged enclosures provide Sheriff's Department unprecedented protection against rain ingress during tropical storms and hurricanes.** Our Edge 300 camera enclosures are hardened National Electrical Manufacturer Association ("NEMA") 6-rated with an Ingress Protection rating of IP67 (submersion) suitable for extreme weather with much greater protection than NEMA IP66 (rainstorm) enclosures used by competitors.
- **Our hardware and software meet the industry's highest security standards, ensuring the protection of Sheriff's Department's data.** All hardware provided by Rekor is of current design and technology, and none of the camera systems (hardware and software) are prohibited by Federal or state law, policy, or regulation. Further, all the camera systems are Trade Agreement Act ("TAA") compliant.
- **Rekor's ALPR system is infinitely scalable and flexible to accommodate Sheriff's Department future needs.** Video processing takes place at the ALPR system level (the "Edge"), reducing the need to transfer massive amounts of data. We use cellular communications and store data locally in cameras for later transmission should communications be interrupted. Cameras are remotely controlled and configured, allowing for rapid configuration and firmware updates. Cameras are also automatically monitored by our proprietary watchdog software designed to identify potential problems before they result in an equipment failure. Fixed cameras take less than two hours to install and configure. And, we can power any of our fixed cameras by solar power eliminating the need for costly and time-consuming power infrastructure.

Our proposal not only substantiates that we can meet all the Sheriff Department's requirements but also provides detail about our features and benefits and value-added services and products. We hope that you will find the following information about how Rekor can enhance the Sheriff's Department informative, interesting and warranting a deeper review.



C.2 General Requirements

Rekor is pleased to provide the Sheriff's Department a responsive and compliant proposal that clearly demonstrates how our proposed solution meets or exceeds all requirements. In this section, Rekor addresses where within our proposal we provide product operations manuals (or their equivalent document) as well as specification sheets with pictures and detailed information describing how our product offerings meet the requirements. We also provide a requirements compliance matrix that demonstrates how our proposal is compliant with all specifications.

C.2.1 Specifications Sheets, Pictures and Operations Manual

C.2.1.1 Specification Sheets

Rekor is pleased to provide specification sheets with pictures, and detailed information on how our products meet the requirements. The table below lists the specification sheets provided and hyperlinks to their location within this proposal:

Hyperlink to Specification Sheet	Description of Specification Sheet
E.1	Rekor Edge 300 Specifications Sheet
E.2	Rekor Finder In-Vehicle Specification Sheet
E.3	Mobile ALPR Speed Trailer Camera Specification Sheet

Detailed information on how our products meet the requirements is contained in Section C.3 – How Rekor Products Meet Specifications. Section C.2.2 contains a compliance matrix that individually lists all specifications with hyperlink to the respective section and paragraph number within our proposal where each requirement is addressed.

C.2.1.2 Operations Manuals

Incorporated into this proposal by reference as four separate attachments, Rekor is pleased to provide the following operations manuals (or their equivalent document): Rekor Cloud Dashboard Tutorial for Edge 300, Rekor In-Vehicle Mobile ALPR System (Finder) User Guide, Rekor Trailer Mounted Portable LPR User Guide, and Wanco Radar – Speed Trailer Owner's Manual. The operations manual for Open ALPR Watchman open source software is available in digital format at the following location: <http://doc.openalpr.com/watchman.html#>.

C.2.2 Compliance with All Specifications

Presented below is a complete compliance matrix that lists compliance with all specifications and provides hyperlinks to relevant proposal sections which contain descriptions of how Rekor products meet the requirements.



Specification Reference to How Rekor Complies	Specification	Compliance
2. GENERAL REQUIREMENTS		
C.2.1	Specifications sheets with detailed information on how the product meets the requirements, pictures and operations manual for the product shall be submitted with quote.	Comply
C.2.2	Offeror shall explain in bid response how they are compliant with all specifications in order to be considered responsive.	Comply
3. SPECIFICATIONS		
3.1 SECURITY		
C.3.1.1	Must be compliant with California Senate Bill 34 (SB34)a compliance process .	Comply
C.3.1.2	Single Sign-On (SSO) implementation options	Comply
C.3.1.2.1	Security Assertion Markup Language (SAML) 2.0 compliance	Comply
C.3.1.2.2	Other SSO methods, such as Active Directory and Office 365	Comply
C.3.1.3	User and Entity Based Behavioral Analytics (UEBA)	Comply
C.3.1.4	Distributed Denial of Service (DDoS) protection	Comply
C.3.1.5	Data sanitization and anti-malware prevention. Minimizing attack vectors throughout the LPR solution using a multi-layered approach	Comply
C.3.1.5.1	Anti-malware scanning and threat prevention with up to date signatures	Comply
C.3.1.5.2	Alerts and notifications	Comply
C.3.1.5.3	Input sanitization: All data coming into the system from users or application programming interfaces (API's)	Comply
C.3.1.5.4	White list of file types for attaching/uploading for all purposes	Comply
C.3.1.5.5	File Contents Disarm and Reconstruction (CDR)	Comply
C.3.1.6	Disaster Recovery	Comply
C.3.1.6.1	Data protection, backup, and recovery strategy	Comply
C.3.1.6.2	Disaster recovery liability in case of catastrophic event	Comply
C.3.1.7	California Consumer Privacy Act (CCPA) compliance	Comply
C.3.1.8	Contractor shall provide a secure, database encrypted and web-based system that provides real-time access to uploaded data	Comply
C.3.1.9	Contractor shall allow authorized users access to LPR data in a number of LPR-specific dashboards	Comply
C.3.1.10	Dashboard will show LPR vehicle scans in an easy to read graphical format	Comply
C.3.1.11	LPR dashboard will show vehicle location, images captured and provide the ability to search using the license plate	Comply
C.3.1.12	Contractor shall provide an option to purge data at specified intervals or dates	Comply
C.3.1.12.1	Will have a notification process to assure compliance	Comply
C.3.1.12.1.1	Provide notification of purge date	Comply
C.3.1.12.1.2	Provide confirmation and notification that specified data was purged	Comply
C.3.1.13	Data uploaded will only be shared at the discretion of an administrator designated by the San Diego County Sheriff's Department	Comply



Specification Reference to How Rekor Complies	Specification	Compliance
3.2 LPR CAMERAS		
C.3.2.1	Vendor shall have LPR systems capable of being installed on a fixed object (i.e. light pole), marked patrol vehicles, covert vehicles and speed	Comply
C.3.2.2	Unless internally mounted, Marked patrol vehicle camera mounting brackets must be compatible with Whelen, Code3, TOMAR, Federal Signal, Arjent S2 light bars	Comply – Internally mounted
C.3.2.3	Cameras shall be self-illuminating Infrared (IR) for effective license plate image capture in a variety of weather and lighting conditions	Comply – Non-IR camera subject to demonstration and verification
C.3.2.3.1	Non-IR cameras will be accepted upon demonstration and verification of its equivalency	Comply
C.3.2.4	LPR cameras shall be water-resistance with few moving parts that can be damaged	Comply
C.3.2.5	LPR cameras shall have the ability to automatically capture all variations of California license plates, to include California dealer issued plates (paper plates)LPR cameras shall have the ability to automatically capture all variations of California license plates, to include California dealer issued plates (paper plates)	Comply
C.3.2.6	Cameras shall have a dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle for verification purposes	Comply – Non-IR camera subject to demonstration and verification
C.3.2.7	Cameras shall be sealed to NEMA 6 (IP67) standards	Comply
C.3.2.8	Dual lens cameras shall be capable of capturing up to 60 frames per second	Comply
C.3.2.9	Cameras shall have the ability to adjust shutter, brightness, and gain settings to ensure a high-quality image regardless of weather or lighting conditions	Comply
C.3.2.10	The cameras shall be able to have a fixed focal point or target distance from the camera to the vehicle's license plate from 9 ½ feet to 30 feet	Comply
C.3.2.11	The camera shall be capable of various configurations to capture plates in any of the following modes depending on the configuration:	Comply
C.3.2.11.1	An adjacent lane on either side of the vehicle while driving through traffic and/or parking lots	Comply
C.3.2.11.2	Traffic in an adjacent lane while parked on the side of the shoulder of a roadway	Comply
C.3.2.11.3	Parked vehicles in parking lots	Comply
C.3.2.12	Each camera shall have the ability to read more than one lane.	Comply



Specification Reference to How Rekor Complies	Specification	Compliance
3.3 LPR PROCESSOR		
C.3.3.1	Processor shall have a “self-trigger” mode to detect the presence of correctly mounted vehicle license plates in the camera's field of view for image capture from the camera	Comply – Rekor cameras monitor field of view on a continuous basis
C.3.3.2	Processor's installed in vehicles shall be equipped with an intelligent Power Supply Unit (PSU) that provides for a safe start and shut-down each time the vehicle's ignition is turned on and turned off	Comply
C.3.3.3	Processor controls the power supplied to the cameras and provides video connection points for simplified system wiring	Comply
C.3.3.4	Processor shall have at least four (4) LPR camera connections and multiple USB ports	Comply
C.3.3.5	Vehicle mounted processors shall meet the environmental conditions associated with being mounted in a trunk	Comply
3.4 LPR SOFTWARE		
C.3.4.1	Application software shall be capable of running on a Windows based mobile computer	Comply
C.3.4.2	There shall be no Java programming or Java derivatives	Comply
C.3.4.3	LPR system shall have real time alerting and the ability to program custom hotlist	Comply
C.3.4.4	There shall be a secure login and password function on the LPR software; The user's access shall be controlled by an administrator designated by the San Diego County Sheriff's Department	Comply
C.3.4.4.1	API capable of integrating user defined active directory	Comply
C.3.4.5	The software shall provide live, simultaneous display of all the following data:	Comply
C.3.4.6	Software shall capture Global Positioning System (GPS) coordinates for every recorded license reads	Comply
C.3.4.7	Software shall have the ability to GPS stamp all the reads	Comply
C.3.4.8	Software will give a unique audible and visible alert when a wanted license plate is discovered	Comply
C.3.4.9	The Alert Screen remains displayed until acknowledged by the user, and, while displayed, the system continues to process license plate data in the background	Comply
4. LPR SPEED TRAILER – COMPLETE PACKAGE		
C.4.1	Solar LPR Trailer with Speed Sign	Comply
C.4.2	Solar LPR Trailer shall be able to operate at least three (3) days.	Comply
C.4.3	Speed sign will be radar equipped	Comply
C.4.4	Trailer chassis	Comply
C.4.5	GPS antenna and minimum of 3 Generation (G)/4G or Long-Term Evolution (LTE) multiband antenna	Comply
C.4.6	Two (2) ALPR cameras IR (or its equivalent) and color	Comply
C.4.7	Extended battery	Comply
C.4.8	Everything needed to transmit LPR data, such as data processor, modem, computer, power inverter.	Comply



Specification Reference to How Rekor Complies	Specification	Compliance
5. DEMONSTRATION OR SAMPLE		
C.5.1	The San Diego County Sheriff's Department reserves the right to request an on-site demonstration of the LPR camera system being quoted or a sample be sent to determine if it meets the requirements stated. All specifications listed in the General Requirements shall be confirmed. All travel, demonstration supplies and/or shipping expenses shall be at the vendor's expense.	Will Comply If Sheriff's Department Requests
6. INSTALLATION		
C.6.1	Contractor shall provide the option to purchase systems as a "kit" that includes all hardware, wiring and software for standard installations	Comply
C.6.2	Contractor shall provide installation and warranty repair options on vehicles within San Diego County	Comply
C.6.3	Contractor shall provide a technician or representative to visit customer site for system start-up, configuration and commissioning of LPR system	Comply
7. CUSTOMER SUPPORT		
C.7.1	The Contractor shall provide timely (withing 72 business hours) and accurate technical advice and sales support.	Comply
8. TRAINING		
C.8.1	The County reserves the right to request up to eight (8) hours of training at a San Diego County Sheriff's Department facility within 30 days of delivery at no additional charge.	Comply

Additional details that substantiate compliance are provided in sections below.

C.3 How Rekor Products Meet Specifications

C.3.1 Security

C.3.1.1 *Must be compliant with California Senate Bill 34 (SB34)*

Rekor places a high priority on privacy, security and ethics. Our system will allow the Sheriff's Department to set retention policies adhering to the 60-day retention limit on personal information, log all activity and secure the content in order to be compliant with state and local standards such as California Senate Bill SB34. We are also aware of the Automated Regional Justice Information System (ARJIS) Acceptable Use Policy for the Regional License Plate Reader System.

Pre-existing law authorizes Law Enforcement Agencies to retain license plate data captured by license plate recognition (LPR) technology for not more than 60 days unless the data is being used as evidence or for the investigation of felonies. It also prohibits the department from selling the data or from making the data available to an agency that is not a law enforcement agency or an individual that is not a law enforcement officer.



The law authorizes the department to use LPR data for the purpose of locating vehicles or persons reasonably suspected of being involved in the commission of a public offense, and requires the department to monitor the internal use of the data to prevent unauthorized use and to submit to the Legislature information on its LPR practices and usage.

SB34 endeavors to protect the information utilized by further imposing specified requirements on an “ALPR operator (in this case a hosted ALPR service)” (as well as the “ALPR End User” – Law Enforcement Agency). These include maintaining reasonable security procedures and practices to protect ALPR information and implementing a usage and privacy policy with respect to that information, as specified. It further requires all accesses and uses be logged and that the ALPR information is used only for the aforementioned authorized purposes.

Through our work with ALPR data and other law enforcement agencies, we are well versed in ensuring that our systems are fully compliant with state and local requirements. As we mentioned above, we do work with law enforcement elsewhere in California.

In the event of a data breach, Rekor would immediately notify California residents or customers of the breach, pursuant to CA SB34 § 1798.29(d)(1). In Rekor’s Notice of Data Breach communication the following headings: “What Happened,” “What Information Was Involved,” “What We Are Doing,” “What You Can Do,” and “For More Information”, shall be used to communicate the specific nature of the breach. Additionally, notice of the breach will be provided in written, electronic or substitute notice forms pursuant to CA SB34 § 1798.29(d)(1). See below for a sample breach notification document.


	
NOTICE OF DATA BREACH	
Date	
What Happened?	
What Information Was Involved ?	
What We Are Doing.	
What You Can Do.	
Other Important Information.	
For More Information	Call (410) 762-0800, or visit https://www.rekor.ai/

Figure 1 Sample Breach Notification



C.3.1.2 Single Sign-On (SSO) implementation options

C.3.1.2.1 Security Assertion Markup Language (SAML) 2.0 compliance

Rekor supports secured communications required to enable cross application web authentication using languages such as SAML (v2.0) and others.

C.3.1.2.2 Other SSO methods, such as Active Directory and Office 365

Our system also supports integration with an agency's Active Directory system (and thus Office 365) so as to streamline account management.

C.3.1.3 User and Entity Based Behavioral Analytics (UEBA)

Rekor's current software contains certain UEBA analytics that are required for CJIS Security Policy compliance including geo-location of user logins with historical comparisons and repeated failed login attempts. Should the Sheriff's Department need additional UEBA, we will work with the Sheriff's Department to provide them.

C.3.1.4 Distributed Denial of Service (DDoS) protection

All standard threats, such as DDoS, are addressed within our Watchman back-office. We leverage static threshold DDoS protection, including always-on network flow monitoring, which inspects incoming traffic and its source, and apply a combination of traffic signatures, anomaly algorithms, as well as other analysis techniques, to detect malicious traffic in real-time.

Our Watchman back-office protects against common, frequently occurring infrastructure attacks. Automatic mitigations are applied inline and in real-time for added protection so that there is no latency impact. Rekor also uses techniques including deterministic packet filtering, and priority-based traffic shaping to automatically mitigate basic network layer attacks.

C.3.1.5 Data sanitization and anti-malware prevention. Minimizing attack vectors throughout the LPR solution using a multi-layered approach

C.3.1.5.1 Anti-malware scanning and threat prevention with up to date signatures

Rekor protects our servers and applications through a multi-layered approach with advanced security controls, such as an intrusion prevention system ("IPS"), integrity monitoring, machine learning, and application control. We can detect and block threats in real-time, and we can detect and block unauthorized software execution with multiplatform application controls and anti-malware scanning.



C.3.1.5.2 Alerts and notifications

Part of our security offering includes security alerts and notifications of potential concerns. Beyond just sending alerts, our system triggers proactive prevention upon the detection of suspicious or malicious activity.

C.3.1.5.3 Input sanitization: All data coming into the system from users or application programming interfaces (API's)

Rekor uses defined, controlled and versioned APIs which ensure all data coming into the system conforms to specifications.

C.3.1.5.4 White list of file types for attaching/uploading for all purposes

All APIs which accept file inputs only accept our defined whitelist of data types and file formats.

C.3.1.5.5 File Contents Disarm and Reconstruction (CDR)

Rekor places a high priority on data security and has the ability to filter, restrict and remove portions of potentially malicious file types (CDR).

C.3.1.6 Disaster Recovery

C.3.1.6.1 Data protection, backup, and recovery strategy

Our system contains standard backup and recovery processes and procedures allowing for point-in-time recovery, in the event of a disaster.

C.3.1.6.2 Disaster recovery liability in case of catastrophic event

The Rekor service maintains catastrophic loss insurance that includes cyber insurance.

C.3.1.7 California Consumer Privacy Act (CCPA) compliance

Rekor places a high priority on privacy, security and ethics. Our system allows our clients to set retention policies, and logs all activity and secures content (in order to be in accordance with privacy regulations, such as the CCPA). Rekor does not sell or disclose any personal data collected to third parties. Having other California clients, Rekor understands the unique data privacy requirements the must be followed.



C.3.1.8 Contractor shall provide a secure, database encrypted and web-based system that provides real-time access to uploaded data

Our system provides encrypted and secure, real time, access through a web interface where all agency data is encrypted at rest and in-transit for security.

C.3.1.9 Contractor shall allow authorized users access to LPR data in a number of LPR-specific dashboards

Our system provides secure, real time, access through a web interface and several LPR-specific dashboards that are tailored for the specific mission.

C.3.1.10 Dashboard will show LPR vehicle scans in an easy to read graphical format

Our system provides secure, real time, access through a web interface and several LPR-specific dashboards that are tailored for the specific mission. User access to the web interface is controlled by a Sheriff's Department administrator empowering the Department to control who can assess the application.

C.3.1.11 LPR dashboard will show vehicle location, images captured and provide the ability to search using the license plate

The provided dashboards provide an easy to read graphical presentation of the data including license plate read, vehicle and location information, as well as accompanying images. Data is searchable by a number of metrics including license plate number, vehicle characteristics, location, date/time, etc.

Additional information about Rekor's Watchman dashboard is provided in Section [C.3.4](#).

C.3.1.12 Contractor shall provide an option to purge data at specified intervals or dates

Our Watchman back-office is easily configured to automatically purge data after specified retention periods or intervals. Purging data on specific dates is a manual process and automating such a feature would require additional discussions with the Sheriff's Department, since typical protocol is to define a retention time period that then triggers automatic purging. Our system logs all purges and deletions to provide audit reporting.



C.3.1.12.1 Will have a notification process to assure compliance

C.3.1.12.1.1 Provide notification of purge date

Our system allows the Sheriff's Department to set retention policies. The system follows the retention rules as defined by the client/agency and this retention policy is recorded and retrievable. Logs are generated and can be parsed to assure the adherence to policy. The system currently is not configured to provide individual purge notices for each record since this is an ongoing and daily process that is rules based.

C.3.1.12.1.2 Provide confirmation and notification that specified data was purged

All activities, including purging, are tracked and logged, and reporting is provided to document these activities, thus providing a confirmation and notification process.

C.3.1.13 Data uploaded will only be shared at the discretion of an administrator designated by the San Diego County Sheriff's Department

All accounts, including Administrative, can be defined and restricted, as needed by the Sheriff's Department. As further discussed in Section [C.9.2](#), data collected by the Sheriff's Department can easily be shared with collaborating agencies, as determined by the Sheriff's Department, using a real-time API.

C.3.2 LPR Cameras

C.3.2.1 Vendor shall have LPR systems capable of being installed on a fixed object (i.e. light pole), marked patrol vehicles, covert vehicles and speed trailers

C.3.2.1.1 Types of ALPR Cameras

Rekor's ALPR System is comprehensive and includes cameras and all associated hardware, as well as storage and management software, installation as needed, training, maintenance, and support and warranty of products provided. It is our understanding that the Sheriff's Department would like three types of cameras:

1. **Portable** – are camera systems that will be stationary. These are slightly different than “fixed” systems that are generally seen as a more permanent installations that are hard-wired and not easily moved. Any ALPR camera that operates off of AC power will require a connection to an electrical source. Our AC-powered ALPR cameras can be installed in one hour, if AC power is available at the supporting structure, and they can be removed in about 45 minutes. Alternatively, our solar-powered ALPR cameras are also easy to



install and because two pieces of equipment (ALPR camera unit and solar panel) need to be mounted to the supporting structure, we can install a solar-powered unit on a supporting structure in about 1.5 hours, and the removal time is about one hour. If the Sheriff's Department intends on temporarily installing an ALPR camera, our solar-powered ALPR units can operate for about five days without connecting the solar panel. The unit's battery pack could be easily replaced, if the Sheriff's Department wanted the ALPR camera to be in place longer without a solar panel. Our portable systems are easily moveable and can be deployed for single events. Should we mention a "fixed" camera in any of our graphics or videos, please consider this to be in reference to a "portable" camera solution.

2. **Mobile** – are camera systems that can be installed either in a vehicle and we also refer to these as "**in-vehicle**" systems.
3. **Trailer-mounted** – are camera systems are attached to speed sign trailer with an integrated speed radar and digital speed sign.

Rekor believes our system will provide significant advantages compared to the Sheriff Department's existing system and those of competitors. For example, Rekor's key system features, as listed below, would provide significant differentiators that include:

- Superior read performance and accuracy provided by our Watchman software
- Full video edge processing for superior ALPR read speed and scalability
- Robust remote supportability
- Smartphone mobile application
- Portable and trailer-mounted solutions provide automatic switching between day and night, with color in daytime and IR at nighttime, enabling the highest quality plate capture in both daylight and darkness

These and other features are described in more detail below.

Rekor understands the law enforcement objectives that should be supported by a robust ALPR System, such as the ability to be an affordable force multiplier that integrates with multiple law enforcement hotlist databases and/or ALPR sources, provides fast and efficient license plate reads often in challenging light and weather conditions across multiple lanes of traffic, and providing easy-to-use search capabilities that quickly provide results across multiple databases to aid in finding vehicles of interest to combat crime, including drug and human trafficking.

C.3.2.1.2 Technology Overview

Rekor's ALPR technology platform consists of a finely tuned ecosystem of portable and mobile (trailer and in-vehicle) cameras that operate with full edge processing and integrate seamlessly with our back-office application. Our Edge (portable and trailer) and Finder (mobile) camera



solutions are driven and managed by our AI-based machine learning Watchman software, enabling a comprehensive approach to any ALPR program. **All cameras provide color overview images for vehicle identification, as well as video clips for enhanced verification**, and all cameras except our in-vehicle mobile cameras are supported by IR illumination. Each of our camera solutions and our software platform are described in more detail below.

SOLUTION ADVANTAGES

Unrivalled system features

Rekor offers unique system features which enhance the public safety mission and provide each agency with a technology infrastructure that meets their deployment, sharing, and investigative needs.

- ✓ **Built for diverse public safety needs**
Self-contained, turn-key solution that can [accommodate every roadway environment](#) from Main Street to major highways.
- ✓ **Flexible, policy-driven data management**
Data retention and sharing controls are built with flexibility and customization to allow each agency to select the appropriate levels to match legislative, agency policy, and/or community mandates.
- ✓ **Open architecture and vendor agnostic**
An [open platform that allows agencies to share their data](#) with any other agency, including ones using a different ALPR vendor.
- ✓ **Video streaming and recording**
A distributed video management system provides the unique ability to save and retrieve full-frame motion video records of any read or timeframe, as well as live video surveillance.




Figure 2 Rekor's differentiators provide agencies with unparalleled performance and massive system flexibility.

While Rekor is not aware of current ALPR camera locations used by the Sheriff's Department, we do believe given the variety of roadways in San Diego County that there could be many locations requiring coverage over multiple lanes of traffic. Typical legacy systems provided by our competitors require a single camera to provide maximum effectiveness for each lane, thus requiring multiple cameras for each direction monitored for multiple lanes. Rekor understands that this can be problematic as systems that do not cover more than one or two lanes require greater infrastructure build-out, power consideration, and can unnecessarily increase costs.



Our system, regardless of the hardware model, captures and reads a license plate regardless of its position in the field of view. Thus, we can achieve the client's vision for installation and operation on a more economical basis. We have systems that capture multiple lanes (up to three or four depending on model), using a single camera—regardless of the vehicle's position. Furthermore, our application has a broader range of distance and positioning options with the capability to read information at extreme viewing angles.



Figure 3 One Rekor camera can capture vehicle reads over multiple lanes of travel.

A significant advantage of Rekor's Watchman software is that it can accept video streams from nearly any IP camera making it **hardware agnostic**. Unlike legacy OCR-based systems with costly purpose-built cameras, Rekor is able to leverage continuously evolving hardware technology. By fusing the power of machine learning and artificial intelligence, parallel processing capabilities, and best-in-class hardware, our solution captures license plate data and vehicle characteristics at extremely high vehicle speeds with a high degree of accuracy, even in unusually difficult conditions, such as low lighting, poor weather, extreme camera viewing angles, and obstructions.



CITY OF LAUDERHILL, FLORIDA

Installing comprehensive Rekor Edge protection

City of Lauderdale selected Rekor to roll out 167 Rekor Edge systems to provide law enforcement an additional public safety resource. Rekor was selected after a rigorous review period in which its industry-leading LPR technology outscored several well-known competitors. 73 locations for fixed cameras have been identified to provide the best possible coverage and protect the entire City of Lauderdale community.

Figure 4 167 cameras in 73 locations covering 260+ lanes.

C.3.2.1.3 Portable Cameras

Rekor's camera systems have been able to successfully reduce crime, while our installations have had minimal impact on traffic flow during easy and fast installation to existing structures. We offer in this proposal cameras that can achieve the desired capture results without requiring additional physical infrastructure. We can provide cameras that work on your infrastructure, or if necessary, we can provide a fully off-grid solution that includes solar power. Due to our proprietary compression techniques, we can operate seamlessly via 3G or 4G wireless communication protocols.

INCREDIBLE READ ACCURACY

Recognize vehicles at long distance and across lanes

Because all Rekor Edge systems are built using the best available hardware and packaged with our incredibly accurate **Watchman** software, they are able to capture license plates and vehicles that other companies miss. Plus, since all processing is performed on the unit itself, users are provided with alerts exactly when they need them -- in real-time!

Figure 5 See how one Edge camera captures license plates across multiple lanes.

For portable camera locations, Rekor offers real-time edge processing based on ALPR program needs with respect to lane coverage, power availability and mounting options. Our Edge 300 camera, which is recommended for both residential areas and highways and speeds up to 120 miles per hour, covers up to four lanes at 300 feet. We also offer an Edge 300x2 which includes



two cameras on a single system, for up to five lanes of coverage (same travel direction) or bi-directional coverage (opposite travel directions).

When evaluating the product options available from Rekor versus others, it is important to point out that capabilities and performance in a law enforcement environment represent a key differentiator for Rekor's technology. Our Edge 300 roadside product offers full video streaming plate capture with real-time edge processing, which is not interrupted when communications are down. When viewing an ALPR "hit", the user can access the video clip to look for additional evidence about the vehicle of interest. Certain competitors offer a residential product performing low-speed image capture with full-cloud processing, which dramatically extends the alert time and is inoperable when communications are interrupted. Other legacy competitors offer purpose-built cameras that perform only one lane of coverage, thus requiring multiple cameras for multiple lanes. In most law enforcement implementations, the vast majority of locations require coverage of up to three lanes at highway speeds, so a "residential" or "one-lane" system would not suffice.



Figure 6 Edge 300 cameras.

All of our portable and trailer-mounted camera solutions include IR for excellent night and poor weather capture, with near 100% capture rates on the lane counts specified for each model. Read accuracy exceeds 99% in benchmark testing, and greater than 95% in live environments. In addition, our cameras read license plates from all 50 states and U.S. Territories, the District of Columbia, Canada, Mexico and over 85 countries, including vanity plates, and half-height characters. **In addition to the plate, each read contains make, model, color, direction of travel, and body type of the vehicle, identified natively in real time by the software, as opposed to using a motor vehicle registration database lookup like many ALPR vendors.** Our native determination of these critical vehicle attributes is superior in all situations, especially where nefarious actors swap license plates to different vehicles in furtherance of the commission of a crime. Additionally, our cameras have high read accuracy at night and in dim



lighting situations, with no additional external lighting required other than lighting that is integrated within the hardware.

Rekor combines the best-of-breed cameras and ALPR-related peripherals into our single, comprehensive, turnkey solution. As such, we bring to the Sheriff's Department a hardened application with the peace of mind that comes from the combined expertise of market leaders for each component. All proposed cameras are seamlessly integrated, controlled and managed through our proprietary ALPR application and back-office Watchman software application.

Because our software is hardware agnostic, we are not restricted to utilizing proprietary equipment and peripherals which often are quickly outdated. Rather, Rekor remains on the cutting-edge by integrating our ALPR engine into best-in-class commercially available equipment that exceeds resolution, processing, communications, and environmental requirements. This allows us to offer to our customers the perpetual "latest and greatest" component mixture. Our solution to the Sheriff's Department brings together Axis Communications video cameras, Nvidia GPU graphics processors, and Sierra Wireless modems, all representing best-in-class components in the industry for their respective function. We work with leading engineering firms to design integrated circuit boards and other peripherals that optimize the interaction between these commercial components to provide the highest quality equipment for our clients. We don't rest on our laurels and continue to work with hardware manufacturers to improve on our products based on experience with law enforcement agencies that want better solutions than those that they have had to accept over the past decade and to keep our prices affordable for cash-strapped municipalities.

A critical added benefit to our solution is that security and surveillance features (e.g. video monitoring and recording) are NOT disabled when used for ALPR purposes. **With an included SD card, we provide 30 days of continuously recorded video at each camera, enabling historical review of environmental video feeds, based on reported incidents within the view of the cameras.**



Performance Measure	Rekor Capabilities for Fixed and Trailer-Mounted Cameras
Cameras' ability to read all readable license plates, including digitally printed plates, from all fifty (50) states including vanity plates, multiple plates and half-height characters, in both daylight and darkness	All portable and trailer-mounted cameras read all types of license plates (digitally printed, vanity, multiple and half-height characters plates) from all 50 states, the District of Columbia and U.S. Territories, and over 85 countries, including Canada and Mexico, in both daylight and darkness
Speed at which the camera captures readable license plates	Up to 120 MPH
Accuracy at which the camera captures readable license plates	99% in controlled test environments and 95% in typical field trials
Performance under varying (dim or bright) light conditions	Excellent
Performance under varying weather conditions.	Excellent
Range capabilities	300 feet daytime; 150 feet nighttime

Detailed specifications for the Rekor Edge 300 camera system and its operations manual are provided in our product sheet in Appendix [E.1.](#)

C.3.2.1.4 Mobile In-Vehicle Cameras

Our vehicle mobile cameras are mounted inside of vehicles and provide a “stealth” mode that does not signal to others that license plate and vehicle data are being recorded. These cameras rely on ambient light illumination from other vehicles, streetlights and even the moon. Because IR illuminators cannot transmit their signal through glass, our vehicle mobile cameras can experience a degradation of read accuracy in extremely dark conditions – a tradeoff with stealth that many law enforcement agencies have welcomed. The agencies that we have worked with saw the advantages of our system over having the ability to read a license plate in absolute darkness.

While the RPF specified self-luminating IR cameras, which we have for our portable and trailer solutions, **Rekor has a differentiated vehicle-mounted ALPR that has its ALPR cameras mounted inside the vehicle.** Most law enforcement agencies are accustomed to seeing trunk-mounted or light bar-mounted ALPRs that scream “We are reading your license tag”, take longer to install, are subject to weather, and may have challenges going through a car wash. These systems are equipped with cameras that provide a good read when there is absolutely no ambient light. Because our Finder cameras are mounted inside of vehicles, they provide a “stealth” element that keeps an unmarked or covert vehicle looking much more like a civilian vehicle. An inside-vehicle mount also keeps the camera out of the elements. Since IR illumination does not work through glass, our Finder ALPR systems include high-quality color cameras that provide superior, multi-lane coverage during daylight and rely on ambient light for



nighttime ALPR captures. Ambient light can come from the vehicle's headlights, other vehicle headlights, street lighting and moonlight. The main situation when a pure IR-illuminated vehicle system performs better is when a vehicle is sitting on the side of the road with all of its lights off on a completely dark road. Please ask yourself how often that's a situation in which your Sheriffs will want to read license plates. Our interactions with law enforcement indicate that they prefer a higher performing solution and are not concerned with the narrow use case when IR illumination works well. We have plenty of law enforcement and federal agencies that have found our in-vehicle ALPR cameras to provide a better overall solution to those vendors that mount their ALPR cameras on trunks or light bars.

Our mobile in-vehicle camera installation has four (4) cameras which operate independently and simultaneously. Two cameras are mounted between the rear-view mirror and the front windshield in such a way that an individual's field of view is not obstructed. The other two cameras are mounted with a field of view looking out of the back window. A failure of one (1) camera will not prevent normal operation of the other cameras. The four-camera system is equipped with a ruggedized graphics processing unit that has six (6) USB ports. Our two-camera system is equipped with two (2) USB ports.

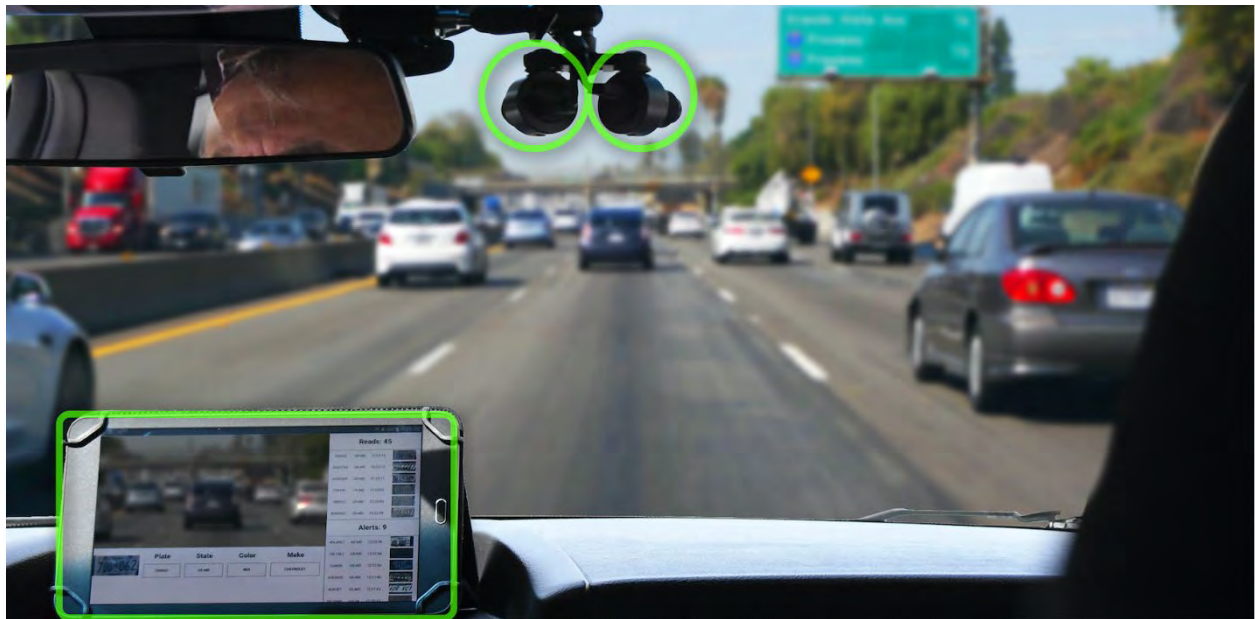


Figure 7 Example of two ALPR cameras located above the mirror and the ALPR system interface.



The rear panel of the ECU features a black plastic housing with a silver heat sink on top. The panel includes the following connectors and components from left to right:

- LAN 3 / LAN 4:** A dual RJ45 port for network connectivity.
- COM 1, COM 2, COM 3, COM 4:** Four DB9 serial communication ports arranged in a 2x2 grid.
- SS:** A Super Serial connector for additional serial communication.
- DIO:** A 20-pin Digital Input/Output connector.
- DC-IN:** A DC power input section with a 3-pin terminal block for V+ and V- (marked with a triangle warning symbol), a 4-pin terminal block for IGN (marked with a plus sign), and a power switch labeled "IGN On / Off" and "Power Switch".

San Diego County Sheriff's Department
License Plate Reader Camera System Subscription



Figure 10 Mobile in-vehicle two-camera solution.

The mobile in-vehicle camera system is capable of capturing license plates in any of the following scenarios:

- An adjacent lane on either side of the patrol vehicle while driving through traffic and/or parking lots;
- Traffic in an adjacent lane while parked on the side or shoulder of a roadway;
- Any parking application from parallel to perpendicular parked car orientation with respect to the movement of the patrol vehicle, and
- An adjacent lane to capture the rear license plate of the vehicle as it passes the patrol vehicle or vice versa.



Performance Measure	Rekor Capabilities for In-Vehicle Cameras
Cameras' ability to read all readable license plates, including digitally printed plates, from all fifty (50) states including vanity plates, multiple plates and half-height characters, in both daylight and darkness	In-vehicle cameras read all types of license plates (digitally printed, vanity, multiple and half-height characters plates) from all 50 states, the District of Columbia and U.S. Territories, and over 85 countries, including Canada and Mexico, in both daylight and darkness
Speed at which the camera captures readable license plates	Up to 120 MPH closing speed
Accuracy at which the camera captures readable license plates	99% in controlled test environments and 95% in typical field trials
Performance under varying (dim or bright) light conditions	Variable dependent on ambient light
Performance under varying weather conditions.	Excellent
Range capabilities	40-50+ feet, adjacent <u>two</u> lanes on either side of the patrol vehicle



The chart below provides an overview of the Rekor solution in comparison to more traditional in-vehicle ALPRs:

Feature	Rekor Mobile ALPR	Traditional ALPR Systems
Portable ALPR Operability	<ul style="list-style-type: none">• Ruggedized four-camera system hard-wired or two-camera system plugged into vehicle's 12-volt outlet for immediate installation or removal• Embedded wireless communication eliminates need to use vehicle's WiFi or cellular connection	<ul style="list-style-type: none">• Portable product not available• Installed cameras only
Integration	<ul style="list-style-type: none">• Rekor provided tablet• Portable solution requires NO additional install	<ul style="list-style-type: none">• Does not provide option for external tablet
Configurations	<ul style="list-style-type: none">• Four-camera or two-camera configurations• Fully installed in vehicle• Parallel (bidirectional) or perpendicular enforcement• Easy setup• Uses ambient lighting	<ul style="list-style-type: none">• Limited lane capture and configuration options
Weather Consideration	<ul style="list-style-type: none">• Cameras installed INSIDE the vehicle, which provides full protection from elements• Inside position systems offer the most optimal image resolution	<ul style="list-style-type: none">• Systems affected by external conditions; downtime significant due to repairs
Installation	<ul style="list-style-type: none">• No special installation required for two-camera system and simple installation for ruggedized four-camera system	<ul style="list-style-type: none">• Requires 2 to 8 hours installation per vehicle
Maintenance & repair	<ul style="list-style-type: none">• Immediate unit replacement option results in no downtime (2-camera)• Rapid repair/replace with limited downtime (4-camera)	<ul style="list-style-type: none">• Vehicle needs to be removed from service for repair






INCREDIBLE READ ACCURACY

Recognize vehicles on-the-go at high rates of speed

Because Rekor Finder is easily mounted and movable from vehicle to vehicle, you are able to recognize license plates and vehicles whenever and wherever you need. Additionally, you receive both visual and audio alerts the moment a vehicle of interest is detected on one of your hotlists.

Figure 11 See our in-vehicle camera in action.



Rekor Finder

Mobile Vehicle Recognition System

Rekor Finder is an in-vehicle license plate capturing and processing system. The system accurately identifies license plates and vehicles in real-time, at high rates of speed, and at extreme viewing angles. The unique mount is portable to any vehicle in the fleet.

- ✓ Detect vehicles on-the-go with a 120 mph max closing speed
- ✓ Recognize vehicles and license plates up to 50 feet away
- ✓ Capture high definition video up to 1280x720px

Figure 12 Unique interior mount provides a "stealth" element and protects equipment from damage.

Detailed specifications for the Rekor Finder in-vehicle cameras and their operations manual are provided in our product sheets in Appendix [E.2](#).



C.3.2.1.5 Mobile ALPR Speed Trailer Camera

Rekor's mobile trailer-mounted ALPR camera is integrated into a traditional speed warning sign trailer to provide an element of stealth. Two dome cameras with optical zoom capability can provide coverage for up to 6 lanes of traffic.

The trailer features a large portable speed awareness sign and can be strategically placed in dangerous, high-risk areas to improve motorist and pedestrian safety. The ALPR camera can help law enforcement to cover major city or localized access points for wanted vehicles, receive AMBER and Silver alerts, and accelerate investigations.

Designed to withstand the rigors of a small trailer bouncing, the dome cameras are equipped with an easy-to-adjust manual slewing capability to set the camera for optimal lane coverage, irrespective of the trailer's orientation to the roadway. While competitor dome cameras may require removing the dome to adjust the camera slew angle, our camera is can be adjusted without removing the dome cover.

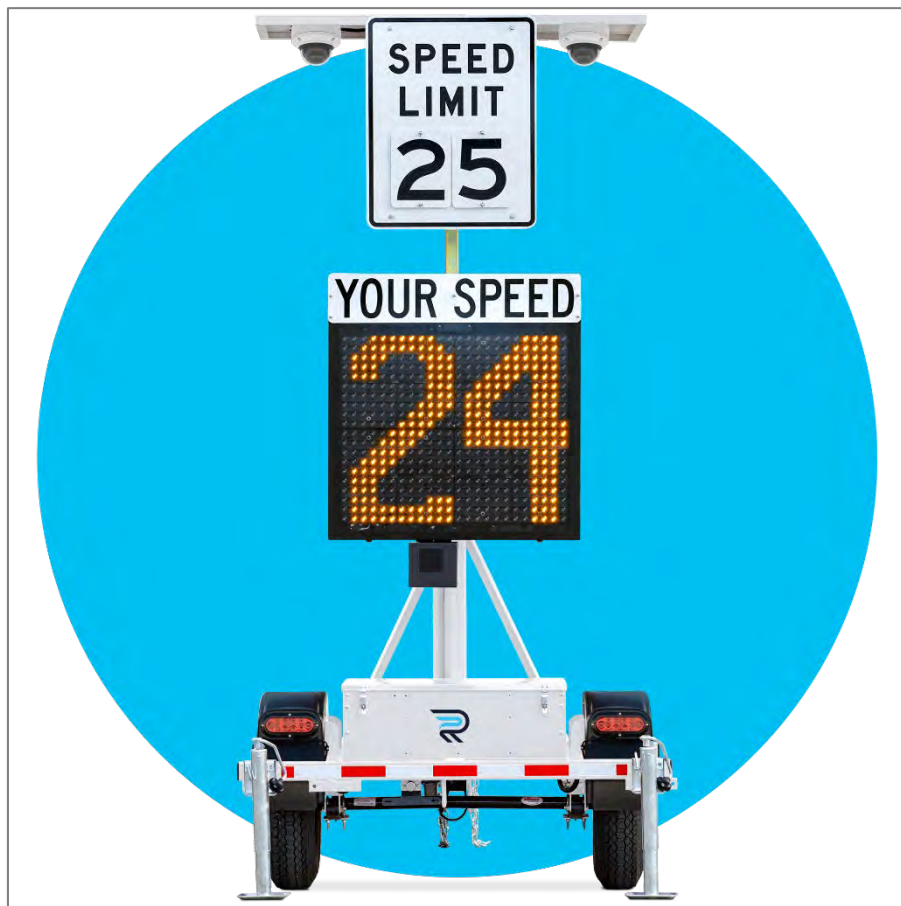


Figure 13 Domed ALPR cameras mounted under the solar panel.



The trailer is US and California Department of Transportation approved and equipped with IP67-rated, lockable enclosures that protect equipment from the elements and theft or tampering. Well suited for highway and residential use, the trailer's compact design is easily portable and can be set up in five (5) minutes. As an added feature, the trailer's see-through design keeps pedestrians and road workers in view.

The FCC/CE compliant radar captures vehicle speeds up to 120 miles per hour. The integrated GPS ensures all ALPR read locations are accurately documented and the 3G/4G wireless modem is FirstNet-ready.

The 300-watt solar array provides plenty of power to run the system and charge batteries that can provide up to 15-day backup. Furthermore, our trailers are equipped with AGM (absorbed glass-mat) batteries that are designed to be more effective in colder temperatures. These heavier batteries help to lower the trailer's center of gravity for better stationary and moving stability. When operating in warmer climates, cooling fans protect equipment from overheating. Our trailer weighs approximately 870 pounds and can be towed by a small vehicle and easily maneuvered into operating positions.

Detailed specifications for the Rekor trailer-mounted cameras and its operations manual are provided in our product sheets in Appendix [E.3](#).

C.3.2.2 Marked patrol vehicle camera mounting brackets must be compatible with Whelen, Code3, TOMAR, Federal Signal, Arjent S2 light bars

As discussed above, Rekor's current in-vehicle ALPR systems are mounted within the vehicle and as such do not require light bar mounting. In our effort to provide more flexibility to our customers, Rekor's next generation vehicle-mounted ALPR camera system (expected release in Q1 2021) is being designed to be placed on the exterior of a vehicle and will not require mounting to the lightbar or trunk. Since Rekor spent many years in the law enforcement vehicle upfitting business, we are very familiar with light bar manufacturers including Whelen, Code3, TOMAR, Federal Signal, and Arjent S2, and should the County want to have our next-generation ALPR cameras on a light bar, we will be able to do so, but we believe that law enforcement agencies will welcome a more streamlined external ALPR camera.

C.3.2.3 Cameras shall be self-illuminating Infrared (IR) for effective license plate image capture in a variety of weather and lighting conditions

The Rekor portable and trailer-mounted ALPR cameras are self-illuminating IR for superior night operating and the mobile systems operate effectively in many low light conditions without the need for IR illumination. They have excellent read capability in a variety of weather conditions.



C.3.2.3.1 Non-IR cameras will be accepted upon demonstration and verification of its equivalency

As discussed above, our in-vehicle mobile cameras do not rely on IR illumination and we invite the Sheriff's Department to test and verify our non-IR equipment.

C.3.2.4 LPR cameras shall be water-resistance with few moving parts that can be damaged

All Rekor ALPR cameras that are not located inside of a vehicle are rated for water resistance and contain few moving parts that can be damaged. Our mobile systems, which operate from within the vehicle, are naturally protected from wet weather by the vehicle.

C.3.2.5 LPR cameras shall have the ability to automatically capture all variations of California license plates, to include California dealer issued plates (paper plates)

All Rekor ALPR camera systems can read all variations of California license plates, including the dealer issued (paper) plates. Our systems also can read all types of license plates (digitally printed, vanity, multiple and half-height characters plates) from all other 49 states, the District of Columbia and U.S. Territories, and over 85 countries, including Canada and Mexico, in both daylight and darkness. Since all ALPR reads are not 100% accurate, Rekor provides a bonus for its clients by providing a video clip along with each ALPR license plate hit. **Our system also captures a video of each ALPR read, thereby providing additional visual evidence should it be necessary for more detailed investigation.**

C.3.2.6 Cameras shall have a dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle for verification purposes

The Rekor portable and trailer-mounted cameras provide complete capability to capture the IR image for night LPR plate reading as well as the color overview image (during the day) without the need for a dual lens configuration. The mobile systems operate effectively in many low light conditions without the need for a dual lens configuration (they also capture the color overview image of the target vehicle).

We hope that the Sheriff's Department will be open to ALPR solutions that achieve its ALPR goals without unnecessarily requiring a dual-lens configuration. ALPR state-of-the-art solutions have advanced beyond dual-lens solutions.

Unlike most ALPR vendors, Rekor delivers true "vehicle recognition" software, not simply



license plate recognition capabilities. **Reads include, but are not limited to, the vehicle's make, model, type, color, state, and direction of travel.** By fusing the power of machine learning, parallel processing capabilities and best-in-class hardware, our solution captures license plate data and vehicle characteristics at extremely high vehicle speeds with an exceptional degree of accuracy, even in unusually difficult conditions, such as low lighting, poor weather, extreme camera viewing angles, and obstructions. **Why would a law enforcement agency not want to have this capability? Wouldn't your Sheriffs and investigators like to search for a vehicle based on make, model, color, exclusive of license plate?**

C.3.2.7 Cameras shall be sealed to NEMA 6 (IP67) standards

The Rekor portable and trailer-mounted ALPR cameras are IP67-rated and the in-vehicle mobile systems operate from within the vehicle and as such the vehicle itself provides water protection.

C.3.2.8 Dual lens cameras shall be capable of capturing up to 60 frames per second

Rekor's cameras are capable of operating at 60 frames per second for superior high-speed capture. Please note that our cameras are capable of reading license plates of vehicles travelling up to 120 miles per hour. The speed of a vehicle may be an easier metric to evaluate when testing an ALPR systems' capabilities, and our experience is that a frame rate of 25-30 frames per second provides a sufficient number of camera reads for the AI-algorithm to yield a high-confidence result.

C.3.2.9 Cameras shall have the ability to adjust shutter, brightness, and gain settings to ensure a high-quality image regardless of weather or lighting conditions

Rekor cameras have the ability to adjust all critical image capture metrics (e.g. shutter, brightness, gain, etc.) to ensure superior image quality in a broad range of environmental conditions. These characteristics can be monitored and adjusted remotely.

C.3.2.10 The cameras shall be able to have a fixed focal point or target distance from the camera to the vehicle's license plate from 9 ½ feet to 30 feet

Rekor's mobile in-vehicle cameras can support short-range operation as low as 9.5 feet as well target distances well beyond 30 feet. In order to give our clients the flexibility to place cameras in convenient locations, our fixed and portable ALPR cameras can capture license plates at distances up to 300 feet. In addition, our ALPR solutions can cover multiple lanes with one camera. Thus, the Sheriff's Department can cover more lanes of traffic at a lower overall cost when considering that many competitor systems have cameras that are limited to one lane of coverage.



C.3.2.11 The camera shall be capable of various configurations to capture plates in any of the following modes depending on the configuration:

As introduced above, all of Rekor's ALPR solutions can support the specifications listed below.

C.3.2.11.1 An adjacent lane on either side of the vehicle while driving through traffic and/or parking lots

Our in-vehicle cameras can support reading license plates in the adjacent lanes on either side of the vehicle while driving through traffic as well as all expected parking environments.

C.3.2.11.2 Traffic in an adjacent lane while parked on the side of the shoulder of a roadway

Our in-vehicle mobile cameras read license plates in adjacent lanes (left or right) while parked on the side of the shoulder of a roadway.

C.3.2.11.3 Parked vehicles in parking lots

Rekor's in-vehicle mobile cameras can support reading license plates of parked vehicles in parking lots and in all expected parking environments.

Our four-camera system rear-facing cameras read the rear license plates of vehicles traveling in the opposite direction in an adjacent lane, as well as the front license plate (if there is one) of a vehicle passing the law enforcement vehicle.

C.3.2.12 Each camera shall have the ability to read more than one lane

All Rekor portable or trailer-mounted ALPR cameras can read three or more lanes. We have camera configurations that can read up to five lanes. Our in-vehicle mobile cameras can read two or more lanes.

C.3.3 LPR Processor

C.3.3.1 Processor shall have a "self-trigger" mode to detect the presence of correctly mounted vehicle license plates in the camera's field of view for image capture from the camera

Unlike some traditional ALPR systems that rely on a "self-trigger" mode to detect the presence of a correctly-mounted vehicle license plate in the camera's field of view, Rekor cameras **monitor their field of view on a continuous basis** and our software is designed to recognize license plates and identify a vehicle's characteristics using AI and machine learning. Our system



does not just take one picture per license plate seen. Instead, it takes a series of images and retains the one that the system determines to be the highest quality read. As mentioned above, our systems also retain a video clip of the license plate “hit” in order to provide additional information or evidence. In fact, our system does not require that a license plate be correctly mounted on a vehicle, or even present on a vehicle, for our system to capture an image of the vehicle.

In addition to the license plate, each read contains make, model, color, direction of travel, and body type of the vehicle, identified natively in real time by the software, as opposed to using a motor vehicle registration database lookup like many ALPR vendors. Our native determination of these critical vehicle attributes is superior in all situations, especially where nefarious actors swap license plates to different vehicles in furtherance of the commission of a crime.

C.3.3.2 Processor's installed in vehicles shall be equipped with an intelligent Power Supply Unit (PSU) that provides for a safe start and shut-down each time the vehicle's ignition is turned on and turned off

The Rekor in-vehicle mobile systems are configured to robustly and safely support the expected on/off conditions from the vehicles ignition circuit. Our Finder is equipped with a power conditioning box between the CPU and the ignition circuit to handle power surges at on/off.

C.3.3.3 Processor controls the power supplied to the cameras and provides video connection points for simplified system wiring

Rekor system processors provide power to cameras via a POE power distribution, and a central wiring point is provided for simplified installation.

C.3.3.4 Processor shall have at least four (4) LPR camera connections and multiple USB ports

Our in-vehicle mobile four-camera system can connect four (4) ALPR cameras and has six (6) USB ports, and our in-vehicle two-camera system can connect two (2) ALPR cameras and has two (2) USB ports. Our portable and trailer-mounted systems can connect two (2) ALPR cameras and are equipped with one (1) USB port. All camera and system configuration and data transfer can be achieved via Wi-Fi or cellular connection, and therefore our systems do not require multiple USB ports.

C.3.3.5 Vehicle mounted processors shall meet the environmental conditions associated with being mounted in a trunk



Our four-camera mobile in-vehicle system is equipped with a ruggedized graphic processing unit that is well suited for the environmental conditions associated with being mounted in the trunk of a vehicle. Our two-camera mobile in-vehicle system does not require equipment to be mounted in a trunk. All of its components are mounted within the passenger compartment and are designed to withstand normal passenger compartment environmental conditions.

C.3.4 LPR Software -- Watchman Software Application and Back Office

Overview

Watchman is full-featured AI-based software package that reads live video and provides real-time license plate and vehicle recognition results. By running on existing IP, traffic, and security cameras, Watchman provides a comprehensive ALPR solution that can be deployed in the Cloud without the need for costly proprietary server hardware. Once installed, the Watchman agent recognizes vehicles and license plates with the results being searchable in our highly secure AWS GovCloud environment that is currently operational for other California customers. Watchman also integrates and operates seamlessly with all Rekor manufactured hardware products. A key feature of Watchman that differentiates Rekor from our competitors is the fact that it is true “vehicle recognition” software and not just a license plate reader. Reads include but are not limited to the vehicle’s make, model, type, color, state, and direction of travel. By fusing the power of machine learning, parallel processing capabilities and best-in-class hardware, our solution captures license plate data and vehicle characteristics at extremely high vehicle speeds with an exceptional degree of accuracy, even in unusually difficult conditions, such as low lighting, poor weather, extreme camera viewing angles, and obstructions.

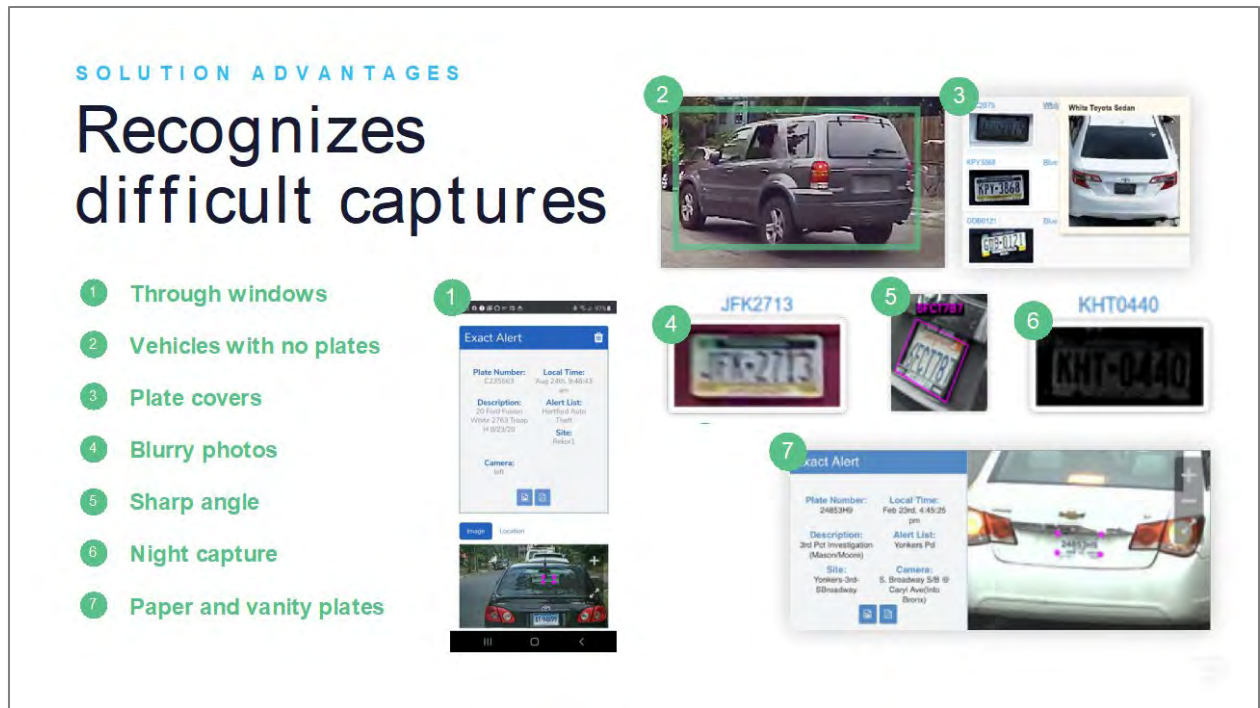


Figure 14 Rekorr's ALPR solution can accurately capture license plate data in some of the most extreme conditions.

Our system also captures a video of each ALPR read, thereby providing additional visual evidence should it be necessary for more detailed investigation. This video link would be available for ALPR program users.



SOLUTION ADVANTAGES

Surpassing the competition


	 REKOR	Competition
Lanes of traffic covered from a single camera	Up to 3 lanes (options out to 5 lanes)	Max 2 lanes
Camera range	300 feet (day), 100 feet (night)	60-70 feet
Retention policy on data	Flexible / Automated; defined by the agency	Rigid; limited to 30 days
Data control	Agency	Vendor
Time from read to alert	< 10 seconds	30-60 seconds
Video attached to read records	✓	✗
Remote support of devices	✓	✗
Suitable for extreme environmental conditions	✓	✗
Mobile ALPR app	✓	✗

Figure 15 Rekor's AI-driven technology is unmatched in terms of accuracy, data control and client support.

Hotlist Integration

With Rekor's system, the Sheriff's Department can import law enforcement "hotlist" databases to provide real-time alerts for vehicles of interest and maintain historical vehicle recognition information for investigatory purposes. Our in-house engineers and CJIS specialists work in tandem with the client's law enforcement team to simultaneously commence integration activities with hotlist download authorization, as well as inter-agency agreements, if necessary. All approvals and transmission testing for each installed ALPR camera are completed in parallel to prevent any downtime beyond site construction. ALPR reads will be processed in real time at the source, followed by transmission of cropped images and data for hotlist matching or exporting to tracking databases. This all occurs within 1-2 seconds.

Plate reads are transmitted to our hosted CJIS-ready AWS GovCloud server where alerts are generated from the NCIC or state hotlists, or even from supplementary (optional) local hotlists created by your agency (e.g. vehicles of interest that may not necessarily be in state or national databases). Our machine learning Watchman software operates with a benchmark 99% accuracy on plate reads, and also captures state, make, color, and vehicle type in real time. Alerts can be configured for viewing within the backend software, or via text or email forwarding to specified authorized personnel.



Cloud Hosting

Part of our implementation plan will include configuration of the Sheriff's Department secure AWS GovCloud environment, with customizable data retention periods that are policy-driven. Before the system goes live, users can be seamlessly added, according to Sheriff's Department policy and authorization. All data access is via web browser, so users will not require downloadable software to reside on their laptop or desktop.

Dashboard

Watchman's easy-to-use and intuitive dashboard provides the central control point for end users. It allows end users to view ALPR camera read activity in list form (as shown below) or in a map-centric display. The dashboard supports the ability to comprehensively search for wanted plates in several functional modes.

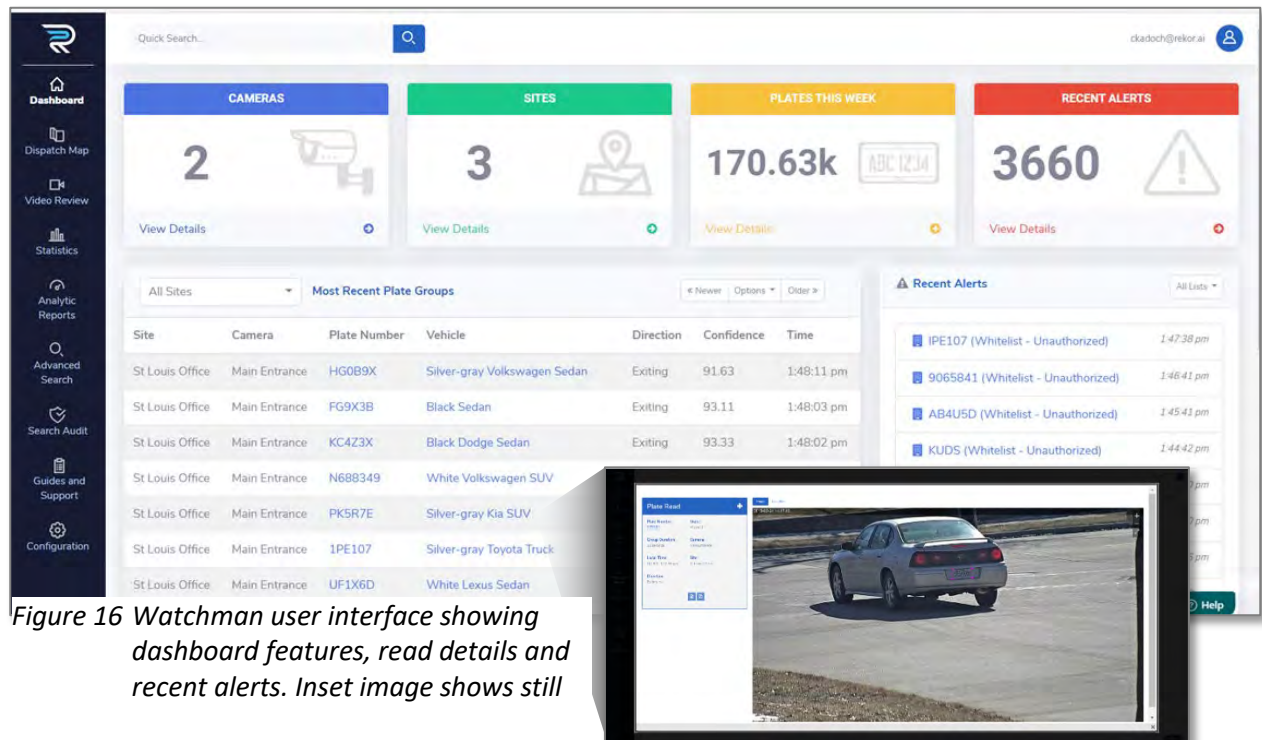


Figure 16 Watchman user interface showing dashboard features, read details and recent alerts. Inset image shows still

Searches

Watchman's search capabilities are extensive and allow for searching ALPR camera hits based on:

- License tag characters, using an exact or "fuzzy" search
- License tag state



- Vehicle make
- Vehicle body type
- Vehicle color
- Vehicle travel direction

Searches can also be filtered by camera geographic location, and date and time ranges.

Site	Camera	Plate Number	Vehicle	Direction	Confidence	Time
Sales-II	Axis P1435-LE	[blurred]	Orange	Orange Ford Truck	93.19	Jan 26 2:30:56 pm
Sales-I	Axis P1435-LE	[blurred]	Mitsubis		93.27	Jan 24 1:41:11 pm
Sales-II	Axis P1435-LE	[blurred]	Orange		86.42	Jan 24 1:23:12 pm
Sales-II	Axis P1435-LE	[blurred]	Orange		90.59	Jan 24 10:19:11 am
Sales-II	Axis P1435-LE	[blurred]	Orange		80.79	Jan 23 2:13:28 pm
Sales-II	Axis P1435-LE	[blurred]	Orange		82.43	Jan 23 1:21:33 pm
Implementation	Axis Q1700	[blurred]	Orange		92.63	Jan 22 10:13:15 am
Sales-I	Axis P1435-LE	[blurred]	Jeep Tractor/Trailer		92.03	Jan 21 5:01:21 pm
Sales-I	Axis P1435-LE	[blurred]	Orange Jeep SUV		92.66	Jan 21 4:55:29 pm
Implementation	Axis Q1700	[blurred]	Tractor/Trailer		93.18	Jan 21 7:58:31 am
Implementation	Axis Q1700	[blurred]			89.28	Jan 20 3:01:00 pm
Sales-II	Axis P1435-LE	[blurred]	Orange Seat Compact Sedan		87.97	Jan 20 2:27:46 pm

Figure 17 Locate vehicles of interest using Watchman's advanced search functionality.

Rekor has also defined and automated several common investigative search analytics including the following:

- Interdiction -- vehicles traveling on a defined path.
- Convoy Analysis -- vehicles commonly associated with each other.
- Common Vehicle Analysis -- vehicles associated with one or more locations of interest such as a crime location a certain day and/or time.
- Bulk Search Analysis -- vehicles associated with a defined list.
- Vehicle Speed Analysis -- speed estimated by time between two know locations.

Reports

Rekor will provide a system capable of producing a variety of mutually agreed upon standard and customized reports operational reports for the System as a whole and each of its functionalities, as well as the consumption of all consumables for all System hardware as



described in this proposal. The reports will include at minimum: Hits; license plate images and associated data; and license plate searches performed by the officer indicating the date and time the search was conducted.

Access to, and delivery of, all reports will meet the following minimum requirements:

- Sheriff's Department designated personnel will have the ability to access all reports from a centralized location.
- Rekor will work with the Sheriff's Department to replicate reports currently utilized by the Sheriff's Department.
- The Sheriff's Department will have the ability to create customized reports based on parameters determined by the Sheriff's Department.
- Sheriff's Department designated personnel will have the ability to perform real-time ad-hoc reports through Sheriff's Department-approved tools with Sheriff's Department-designated personnel having access to only those data fields permitted based on their roles/security classes.
- Reports and results of queries will be downloadable in multiple formats, including tab-delimited, Microsoft Excel, Microsoft Word, and PDF.
- The System will be capable of sending all reports to paper, screen, or file (i.e., Print, View, Save as).
- Rekor will collaborate with the Sheriff's Department to establish the scheduling parameters and retention periods for reporting. Scheduling parameters and retention periods for reporting must be approved in writing by the Sheriff's Department prior to implementation.

Ability to Integrate with Other Third-Party ALPR Systems

Rekor routinely integrates with third-party vendors and their databases, and we can seamlessly provide customized solutions and move quickly to integrate with other authorized databases or to migrate authorized data. The biggest risk with any third-party integration is ensuring full cooperation in a timely manner from the third-party.

C.3.4.1 Application software shall be capable of running on a Windows based mobile computer

Rekor's in-vehicle mobile ALPR system can integrate with any standard Windows-based mobile computer. In addition, since our back-office Watchman software is cloud-based, it can be run from any authorized computer with internet connectivity.

C.3.4.2 There shall be no Java programming or Java derivatives

Rekor's systems do not use any Java programming or Java derivatives.



C.3.4.3 LPR system shall have real time alerting and the ability to program custom hotlist

Rekor's system allows for a hotlist hit to be optionally triggered on an "exact" or "fuzzy" match against a hotlist as a Sheriff's Department definable setting. Rather than a limited (N-1 or N-2) mismatch, an ALPR industry standard, our Watchman system matches against a definable number of closely matched license plates based on their relative recognition confidence values. This assures that the alert is against the holistically closest values rather than a simplistic one- or two-character mismatch.

Hotlists can be custom defined and created and enabled within the Watchman back-office. Select lists are pushed to mobile systems for tailored enforcement.

C.3.4.4 There shall be a secure login and password function on the LPR software; The user's access shall be controlled by an administrator designated by the San Diego County Sheriff's Department

Rekor's Watchman software provides for secure login and password functions and user access is controlled by a designated administrator within the Sheriff's Department.

Logging into Rekor's applications requires users to have a unique username and password. Configurable policies require the user to have a complex password and password exhaustion schedule. Optionally, two-factor authentication can be enabled for additional security. Highly configurable user management capabilities allow for an administrator to grant and revoke access to the application. The administrator can have fine-grained controls over the application modules to which a user has access.

All customer data is logically separated from other clients' data to ensure that a single customer can only see their data.

All users are required to have unique user accounts with a complex password. Password policies are in place to enforce password complexity, rotation, and prevent reuse of previous passwords. Where desired multi-factor authentication is implemented to add additional protection from unauthorized access.

User permissions are granted based on a principle of least privilege, meaning that a user is only granted access to the system resources necessary to do their job. If a user's role changes, access permissions will be adjusted to fit their new role.

Timestamped audit logs are maintained for Rekor's network environment and applications. Logs can be retained to meet compliance or customer requirements. Log entries are protected



from unauthorized access and from deletion or modification. Designated Rekor staff will review logs for abnormalities.

We understand that while supporting the Sheriff's Department ALPR program we will have access to, process, store and/or transmit sensitive data including, but not limited to:

- Vehicle plate and location information;
- Infrastructure information (camera locations, etc.); and
- Information relating to the Sheriff's Department computers to vendor software and other state systems.

Through our services provided to the Sheriff's Department, we provide ALPR systems that enable CJIS compliance that can be fully integrated and compliant for hotlist processing.

Security is paramount when constructing all of our products and services. Rekor offers end-to-end encryption, using an industry standard AES-256 encryption algorithm to encrypt data at rest (inactive data that is stored physically in any digital form). We also use SSL/TLS for encryption during transport. Data is only used to provide our services and we do not share personally identifiable information.

SOLUTION ADVANTAGES

Unrivalled privacy and security

Rekor uses industry leading security technologies to protect license plate and personal data from unauthorized access or use.

- ✓ **DATABASE SECURITY**
Data is stored in secure databases where only authorized system admins have access
- ✓ **DATA ENCRYPTION**
End-to-end encryption, using AES-256 algorithm to encrypt data at-rest and SSL/TLS encryption during transport
- ✓ **DATA ACCESS**
Data is accessible 24/7 until it is purged after 5 or 60 days, depending on subscription plan
- ✓ **CJIS COMPLIANCE**
Hosted on AWS GovCloud, we offer an optional CJIS compliant platform to handle info securely
- ✓ **DATA PRIVACY**
Data is only used to provide our services; we do not share Personally Identifiable Information (PII)
- ✓ **PAYMENT ENCRYPTION**
Credit card information is never stored, and we utilize a certified PCI Service Provider Level 1 merchant

Figure 18 Security is paramount at Rekor.

Because we work with law enforcement agencies and are a publicly-traded, Nasdaq-listed company, the Rekor team is accustomed to working with sensitive information and treating



customer non-public data and personal data from unauthorized dissemination and use with a high degree of care. For further information, our Privacy Policy is located [here](#).

Our systems are hosted in highly secure environments (AWS GovCloud and Nlets) that have been accepted by law enforcement agencies throughout the United States. Our ALPR systems and software comply with CJIS policy as a prerequisite to operating law enforcement ALPR programs.

Rekor requires that all personnel who maintain, have physical access to, or the responsibility to configure computer systems and network devices that provide ALPR access within Rekor, must have their identification, state of residency and national fingerprint-based record checked within 30 days upon initial employment. “Authorized personnel” are those persons who have passed a state and national fingerprint-based record check and have been granted access. Support personnel, contractors, and custodial workers who access computer terminal areas shall be subject to a state of residency and national fingerprint-based record check, unless these individuals are escorted by authorized personnel at all times. As an added measure, Rekor recently increased its security protocols and requires all employees to have their identification, state of residency and national fingerprint-based record checked.

In addition, all required Rekor staff complete Level IV CJIS Security Awareness Training after hire in accordance with the FBI CJIS Security Policy version 5.9. Identified Rekor staff review and sign a CJIS Security Addendum with the expectation this the agreement is applicable to all Rekor clients that create, store, or transmit data identified as criminal justice information with Rekor.

As mentioned above, Rekor employs technical specialists who focus on protocols and compliance measures with respect to CJIS. Although commercial vendors are not technically required to comply with CJIS policy, we believe it is important to ensure the utmost security standards with respect to all data where we are the custodian on behalf of a law enforcement agency or municipal government. We recently conducted a rigorous audit process to identify all areas of CJIS policy that apply to our business. Although much of it is tangential, we have adopted a policy to meet or exceed all CJIS policy requirements with respect to our overall business operations.

All hardware provided by Rekor will be of current design and technology, and none of the camera systems (hardware and software) are prohibited by Federal or state law, policy, or regulation. Furthermore, all camera systems are Trade Agreement Act (“TAA”) Compliant.

Rekor’s ALPR System provides for system administrator-defined data retention periods that ensure data and records are stored in accordance with federal and state laws, rules, and regulations.



Physical Security

To protect customer data, Rekor uses the highly secure data centers of Amazon Web Services (“AWS”) and the Nova hosting solution from Nlets. When hosting information that is deemed Criminal Justice Information (“CJI”), as defined by the FBI’s CJIS Security Policy, Rekor will utilize Nova or AWS GovCloud. These hosting environments have been optimized to comply with the CJIS Policy requirements. Both datacenter offerings are equipped with redundant power and internet, environmental controls, and security staff and systems for 24/7 monitoring.

Network Security

Rekor’s web applications are deployed in a three-tiered architecture. Web, application, and persistence tiers are separated by highly restrictive firewall rules. Only necessary ports and protocols are allowed through the firewall.

Secure Network Connections

All access to Rekor’s web applications take place over HTTPS to protect customer data while in transit. Connections to the application terminates in Rekor’s secure server environment to prevent man-in-the-middle attacks.

All remote system access by Rekor’s system administrators takes place over encrypted tunnels and flow through a controlled access point for monitoring.

Data Protection

Rekor encrypts all customer data. Customer data in transit is secured by industry standard SSL/TLS encryption. Data at rest is protected by drive encryption using 256-bit AES encryption. Rekor works to ensure that all cryptographic algorithms in use meet all compliance requirements.

Scheduled backups are in place to be able to protect customer data. Controls are in place to be able to protect customer backups. Rekor’s backup and restore procedures are periodically tested.

Antivirus and Malware Protection

All Rekor servers and workstations are deployed with advanced, real-time antivirus and malicious code protection deployed. These tools are set to automatically keep threat definitions up-to-date. Rekor uses of scheduled and real-time scanning to protect against malware.



Vulnerability Management

Real-time tools, as well as scheduled external vulnerability scans, are in place throughout the Rekor network to assess for network and application vulnerabilities. When vulnerabilities are discovered, they are assessed by Rekor's security team and assigned to the appropriate team for remediation.

Patch Management

Rekor has necessary patch management processes and procedures in place to ensure that security patches are implemented in a timely manner.

Change Management

Rekor follows a change management process for all changes that take place in the production environment. This process ensures that all proposed changes to the environment are reviewed, approved, and monitored.

C.3.4.4.1 API capable of integrating user defined active directory

Rekor's software can support integration with an agency's Active Directory system so as to streamline password management.

C.3.4.5 The software shall provide live, simultaneous display of all the following data:

As described above, our Watchman software provides a full complement of information to identify hotlist "hits", supporting information, and live, simultaneous display for all of the specifications listed below.

- The IR license plate image
- The license plate interpretation or system read
- A corresponding color overview of the vehicle displaying the captured IR license plate
Our cameras provide automatic switching between day and night, with color in daytime and IR at night – this enables the highest quality plate capture in both daylight and darkness.
- The date and time stamp
- Identification of the camera capturing the image

Rekor's derived read record contains an image of the license plate for verification. In addition, our system provides a daytime color image from all Rekor cameras and a night-time IR (portable and trailer mounted) black and white (in-vehicle mobile) image of the vehicle and a video clip of the vehicle of interest to provide additional information or evidence.



C.3.4.6 Software shall capture Global Positioning System (GPS) coordinates for every recorded license reads

All Rekor ALPR cameras capture the GPS location for every recorded license plate read and this data is recorded in the Watchman software.

C.3.4.7 Software shall have the ability to GPS stamp all the reads

All GPS location information related to a license plate read is recorded in the Watchman software.

C.3.4.8 Software will give a unique audible and visible alert when a wanted license plate is discovered

Our system provides a unique audio and visual alert when a vehicle of interest licence plate is identified by the Watchman system. When the system identifies a hotlist match, it displays a hit “Alert” screen and generates an audio alert to queue the user to the presence of the vehicle of interest. The Alert screen contains all the information necessary to allow the user to validate the hit including the following:

- License plate number and state
- Hotlist that triggered the alert
- Vehicle make, model, color, body style
- Date and time
- Location
- Direction of travel
- Image of the license plate
- Color overview image of the vehicle

The User is thereby queued to confirm the hit or dismiss. A video clip of the vehicle is also available for user review.

C.3.4.9 The Alert Screen remains displayed until acknowledged by the user, and, while displayed, the system continues to process license plate data in the background

When the Rekor system detects a vehicle associated with a defined watchlist, the Watchman system alerts the operator and the alert remains displayed until acknowledged. The system remains operational and continues reading all license plate without interruption during the alert time.



C.4 LPR Speed Trailer – Complete Package

C.4.1 Solar LPR Trailer with Speed Sign

The solar-powered Rekor ALPR Speed Trailer enables the Sheriff's Department to combine the power of Rekor's automated vehicle and license plate recognition technology with radar-speed detection. The trailer features one of the largest portable speed signs available today. With Rekor ALPR technology you can cover major city or localized access points for wanted vehicles, receive AMBER and Silver alerts and accelerate investigation.

Rekor's mobile trailer-mounted ALPR camera is integrated into a traditional speed warning sign trailer to provide an element of stealth. Two dome cameras with optical zoom capability can provide coverage for up to six lanes of traffic.

The trailer features a large portable speed awareness sign and can be strategically placed in dangerous, high-risk areas to improve motorist and pedestrian safety. The ALPR camera can help law enforcement to cover major city or localized access points for wanted vehicles, receive AMBER and Silver alerts, and accelerate investigations.

Designed to withstand the rigors of a small trailer bouncing, the dome cameras are equipped with an easy-to-adjust manual slewing capability to set the camera for optimal lane coverage, irrespective of the trailer's orientation to the roadway. While competitor dome cameras may require removing the dome to adjust the camera slew angle, our camera is can be adjusted without removing the dome cover.

C.4.2 Solar LPR Trailer shall be able to operate at least three (3) days

The Rekor ALPR Speed Trailer has 300-watt solar array and is able to operate for 15 days on battery backup without any solar charging. Our power system provides energy-efficient operation for extended run times.

C.4.3 Speed sign will be radar equipped

Our trailer's FCC/CE compliant radar captures speeds up to 120 miles per hours. With standard speed display and customizable alerts and notification the trailer allows the Sheriff's Department to strategically place the sign in dangerous, high risk areas to improve motorist and pedestrian safety.

C.4.4 Trailer chassis

The trailer is US and California Department of Transportation approved and equipped with IP67-rated, lockable enclosures that protect equipment from the elements and theft or



tampering. Well suited for highway and residential use, the trailer's compact design is easily portable and can be set up in five (5) minutes. As an added feature, the trailer's see-through design keeps pedestrians and road workers in view.

Our compact trailer is 106 long and 61 inches high, with a parked operating height of 123 inches and travel height of 91 inches. The speed display cabinet is 26 x 38 inches and its speed display font size is 26 inches. The speed the limit sign size is 24 x 30 inches .

C.4.5 GPS antenna and minimum of 3 Generation (G)/4G or Long-Term Evolution (LTE) multiband antenna

The integrated GPS ensures all ALPR read locations are accurately documented and the 3G/4G wireless modem is FirstNet-ready.

C.4.6 Two (2) ALPR cameras IR (or its equivalent) and color

Our trailer contains two ALPR cameras with integrated Rekor AI-driven ALPR technology, advanced vehicle recognition with plate, make, type and color, accuracy in daylight and all-weather conditions. Rekor's Edge 300 portable ALPR cameras are self-illuminating for superior night operation, and operate effectively in many low-light conditions with excellent read capability in a variety of weather conditions.

C.4.7 Extended battery

The 300-watt solar array provides plenty of power to run the system and charge batteries that can provide up to 15 days of runtime without a solar charge. Our automatic charging systems shuts down when batteries are fully charged, preventing damage, and a colling fan protects the battery charger from overheating. Additionally the battery box can be locked to prevent unauthorized access. Furthermore, our trailers are equipped with AGM (absorbed glass-mat) batteries that are designed to be more effective in colder temperatures. These heavier batteries help to lower the trailer's center of gravity for better stationary and moving stability. When operating in warmer climates, cooling fans protect equipment from overheating.

C.4.8 Everything needed to transmit LPR data, such as data processor, modem, computer, power inverter.

Our trailer is provided as a fully-functioning, self-contained unit with all equipment to process ALPR data, transmit and store data, and manage power inversion.



C.5 Demonstration or Sample

C.5.1 The San Diego County Sheriff's Department reserves the right to request an on-site demonstration of the LPR camera system being quoted or a sample be sent to determine if it meets the requirements stated. All specifications listed in the General Requirements shall be confirmed. All travel, demonstration supplies and/or shipping expenses shall be at the vendor's expense.

If the County wants to ensure that it is getting an ALPR system that will provide it with useful features that provide a force multiplier and high performance, Rekor would be honored to provide an on-site demonstration of our ALPR cameras, at no cost to the Sheriff's Department. We understand that the Sheriff's Department would like to move quickly, and we will do all that we can to accommodate the Department's schedule. In addition, we recently completed a pilot program of our ALPR trailer unit with the City of Greenwood Village, Colorado Police Department that will result in them purchasing their first ALPR trailer. They have offered to serve as a reference regarding the success of their recent pilot. Contact information is provided in Section [C.10.3](#).

C.6 Installation

C.6.1 Contractor shall provide the option to purchase systems as a "kit" that includes all hardware, wiring and software for standard installations

All Rekor ALPR systems are provided with all hardware, wiring, software, and instructions for standard installation.

C.6.2 Contractor shall provide installation and warranty repair options on vehicles within San Diego County

As described previously, installation of the in-vehicle mobile ALPR systems is a straight-forward process. We would initially have our personnel install the equipment and depending on the number of units desired by the Sheriff's Department, we may coordinate with one of our partners in San Diego to further support installations within the Department's schedules.

Due to the limited downtime, efficient operation, and remote maintenance capabilities of our systems, technical and maintenance support requires minimal resources. Nonetheless, we also will deploy support and warranty repair locally, within San Diego County, whenever needed. Our attention to equipment uptime, using our comprehensive Rekor Vision monitoring application (further described in Section [C.9.4](#)), is a key differentiator versus our competitors.



Rekor's systems are all modular and specifically designed for rapid, easy in-field servicing. Additionally, we only use best-in-class manufactured hardware and peripherals, so each component is readily available. We maintain sufficient spare parts inventory locally to ensure timely support; however, the consistency and reliability of our Edge systems translates to minimal on-site maintenance or repair.

All proposed equipment supplied by Rekor is optimized to meet the demands for reliable high-definition surveillance cameras with best-in-class hardware and software components for peak performance. To further safeguard system uptime, the products offered by Rekor can include a full turnkey program management package, where Rekor literally installs, monitors, maintains, and optimizes all software and in-field hardware on behalf of the client.

All equipment provided by Rekor is covered by a 5-year repair or replace warranty.

C.6.3 Contractor shall provide a technician or representative to visit customer site for system start-up, configuration and commissioning of LPR system

As stated immediately above, Rekor personnel will be involved with system start-up, configuration and commissioning of ALPR systems. Our team is well versed in large scale commissioning projects with federal, state and municipal-level agencies.

We have internal and subcontractor teams that are experienced with large-scale ALPR rollouts of fixed-pole cameras and equipment. Because of our previous experience running a large regional upfitting operation that served federal, state and local law enforcement agencies around the Washington, DC metropolitan area, we have deep and broad technical experience in how to install ALPR equipment in law enforcement vehicles. All equipment provided to the Sheriff's Department will be new and unused. Summaries for the installation procedures for portable, in-vehicle and trailer-mounted systems are provided below.

As part of the overall rollout, Rekor will work with the Sheriff's Department to determine Watchman software roles, rights, reporting, data integration, testing and user training.

The Rekor Watchman ALPR application is an installed turnkey solution. The system will come completely integrated with a Rekor Edge camera system, that can be fully installed by our highly skilled technicians. We will be responsible for all integration and processes necessary to be fully operational.

C.6.3.1 Portable ALPR Camera Installation

Extreme accuracy, attention to detail, and rapid installation are hallmarks of our implementation projects. As such, Rekor and our partners always anticipate that time will be of the essence with regard to final implementation. We take all critical steps to avoid scheduling



delays and unexpected supply-chain issues. Rekor places pre-order holds on an inventory of systems necessary to complete installs for awarded projects. Upon notification of award, Rekor will quickly complete the notification of the order to our suppliers and be able to get all the equipment in a matter of weeks.

For Rekor's portable-camera installations, we offer several options for installation. Whether on existing customer infrastructure, or mounted in a manner comingled with other existing utility infrastructure, we accommodate a wide variety of installation options, including AC or solar-powered alternatives. We can provide, where necessary, a completely "off-grid" solution powered by solar and wireless 3G/4G transmission. Where feasible, from a time and cost standpoint, we will use AC power (generally, when the source is within 20 feet of the pole and within the jurisdictional easement).

All systems offered by Rekor have the ability for their sole power source to be solar, further reducing overall operating costs. Using "green" technology systems, Rekor has turned to a more responsible and energy efficient solar-based solution.

Where power infrastructure is available, we can accomplish full installations in an extremely short timeframe due to flexible pole placement and less burden with respect to permitting and power or communication pulls. It is important to keep in mind that these can be, at times, major factors affecting most vendors' ability to move rapidly toward full implementation.

Our Watchman application provides the end-user with the capability to configure each camera manually (by editing its configuration files) or remotely from the Watchman back-office. We provide step-by-step instructions to assist customers with configuring their applications to fit their specific needs.

All work will be conducted to provide the least possible interference to the activities of the responsible parties, commercial traffic, and public use of roadways. We will supply the appropriate traffic signage and gain all required permissions for access to adjacent properties, as required, to maintain safe, continuous vehicular and pedestrian traffic through all installation areas. All work will be conducted within the public right-of-way. We will protect adjacent public and private property from damage. Where damage occurs, we will restore the damaged area to a condition equivalent to the pre-construction condition before continuing to the next installation location. All ALPR equipment will be installed in the right-of-way with no encroachments onto private properties.

To ensure maximum installation efficiency and accuracy, Rekor employs a systematic and well documented approach to executing implementation projects. Our engineering and contractor teams and our internal personnel adhere to the execution plan in order to complete the installation on time and on budget.



C.6.3.2 Mobile In-Vehicle ALPR Camera Installation

Rekor offers four-camera and two-camera mobile in-vehicle ALPR systems. The four-camera system is integrated into the vehicle with its ruggedized processing unit and cameras hard-wired into a vehicle. Wiring is tucked neatly inside the vehicle's 'A' and 'C' pillars as the control units are affixed under the rear deck in the trunk. Rekor also offers a completely portable in-vehicle mounted, mobile two-camera ALPR solution that can be optionally fully vehicle-integrated (embedded) in the vehicle at the customer's request. Through our many years of servicing police departments and installing other available ALPR systems, we have listened to their concerns and have developed, tested and implemented a portable camera solution that addresses the many draw-backs experienced by agencies using mobile ALPR cameras mounted on the exterior of the vehicle. We have heard from clients using competitor ARLP cameras in covert vehicles and because they are IR illuminated, they have to roll down a window for the camera to work at night. Our innovative two-camera solution that features our state-of-the-art Watchman AI mobile application while accentuating portability and ease-of-use.

Due to its portability, "installation" of the two-camera system is virtually unnecessary and the system can be moved from vehicle to vehicle in a few minutes – a bonus for covert vehicles. Installation requires a mere attachment of two camera sensors to the interior of the front and plugging the power cord into the vehicle's 12-volt outlet. At the client's option, we can also permanently mount a two-camera unit within any vehicle.



Figure 19 Forward-looking in-vehicle cameras.

Rekor will provide all cables, mounting components, and hardware required for Installation. If applicable, all System equipment shall be shipped to the Sheriff's Department at no additional charge.



C.6.3.3 Mobile Trailer-Mounted ALPR Camera Installation

Our trailers are manufactured on an OEM-basis by nationally recognized and US DOT certified trailer manufacturer and will be shipped to directly to the Sheriff's Department. They will then be configured by Rekor personnel or an approved local contractor depending on timing and purchase volume, in full coordination with the Sheriff's Department. While we typically have trailers in inventory, our manufacturer currently has a six-week lead time, which can vary based upon demand.

C.7 Customer Support

C.7.1 The Contractor shall provide timely (withing 72 business hours) and accurate technical advice and sales support.

In addition to providing maintenance and support services located in the United States, our customer support center will be available during normal weekday business hours of 8 a.m. to 6 p.m. Eastern Time, excluding holidays. We also provide 24/7 monitoring and support to address the needs of our West Coast customers, any critical problems that may arise outside of business hours.

C.8 Training

C.8.1 The County reserves the right to request up to eight (8) hours of training at a San Diego County Sheriff's Department facility within 30 days of delivery at no additional charge.

Rekor will provide initial and ongoing training for our products and services, including all hardware, peripherals, and Watchman software. The initial training sessions can be held at either the Sheriff's Department facility or by video conference, at the Sheriff's Department's sole discretion. The initial training sessions combine classroom instruction with hands-on application, equipping trainees with practical knowledge and real-world experience.

Rekor offers various training types, including system administrator, equipment operation, web-portal navigation, web-portal operation, managing hotlist, and reporting. Ongoing training can be provided on a monthly, scheduled basis or as needed. Each training level will be tailored to the specific audience, specific job duties, and cover each component of the overall system. Training levels shall include but not be limited to: System Administrator; Account Administrator; Train the Trainer; and End-User Training.



Training sessions are typically 4-hour classes, however, Administrative training is typically comprised of two 4-hour classes.

C.9 Summary – How Rekor Brings Significant Value to Sheriff's Department

In the prior sections we described how Rekor meets or exceeds all RFB requirements. In this section, we detail what makes Rekor different and how Rekor's solutions provide significant value to the Sheriff's Department.

C.9.1 Industry Experts in AI-Driven ALPR

We provide real-time roadway intelligence through AI-driven decisions. The company initially operated as Brekford, Inc. but changed its name to Brekford Traffic Safety, Inc. to better reflect its growing portfolio of core public safety technology solutions delivered to state, local, and federal customers. We continued to expand our footprint with government clients, and in 2019 we acquired OpenALPR, our vehicle and license plate recognition technology platform that now powers solutions such as Watchman. At the time of the acquisition, we rebranded to Rekor Recognition Systems, Inc. to signify our focus on AI-driven image and video recognition analytical solutions.



The banner features a light blue background with a white central text area. On the left, there is an illustration of a blue and white camera on a yellow base. On the right, there is an illustration of a blue car with a yellow location pin and a yellow signal wave above it. The text 'ABOUT REKOR' is in small blue capital letters above the main title. The main title 'Providing revolutionary intelligence' is in large, bold, dark blue font. Below the title, there are two paragraphs of text in a smaller, dark blue font. Under the paragraphs are five social media icons: Facebook, Twitter, Instagram, LinkedIn, and YouTube. At the bottom, there are three white boxes with blue and yellow text and icons: '6+ Years Machine Learning', '85+ Countries Supported', and '9k+ Lanes Covered'.

ABOUT REKOR

Providing revolutionary intelligence

Rekor (Nasdaq: REKR) is a Maryland-based company providing both commercial and government sectors with actionable, real-time vehicle insights and roadway intelligence. By enabling faster, better informed decisions, Rekor is transforming industries worldwide with smarter, quicker, cost-competitive solutions for security, public safety, electronic toll collection, brand loyalty, parking operations, logistics, and traffic management.

To accomplish this, Rekor's proprietary OpenALPR software analyzes videos streams from nearly any IP camera and transforms these streams into powerful vehicle recognition data that helps protect lives, increase brand loyalty, and enhance operations and logistics, without the need to install expensive new infrastructure.

f t i in y

6+ Years Machine Learning

85+ Countries Supported

9k+ Lanes Covered

Figure 20 Revolutionary intelligence for smarter, quicker, cost-competitive public safety solutions.

Our Vision

Rekor's vision is to enable organizations and agencies to make "AI Driven Decisions" to solve complex real-world roadway and vehicle challenges. We harness the power of machine vision data and analytics to deliver solutions which help make governments more efficient, communities safer and organizations solve business challenges.



The video [Rekor - AI Driven Decisions](#) in the image below provides a brief summary of Rekor.

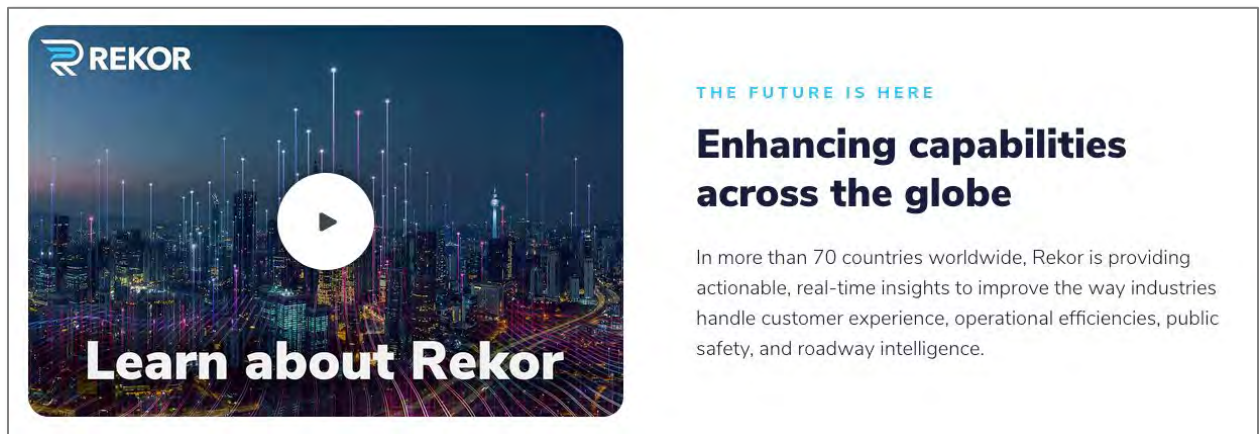


Figure 21 AI based vehicle intelligent solutions that help make cities smarter, people safer and commerce more efficient.

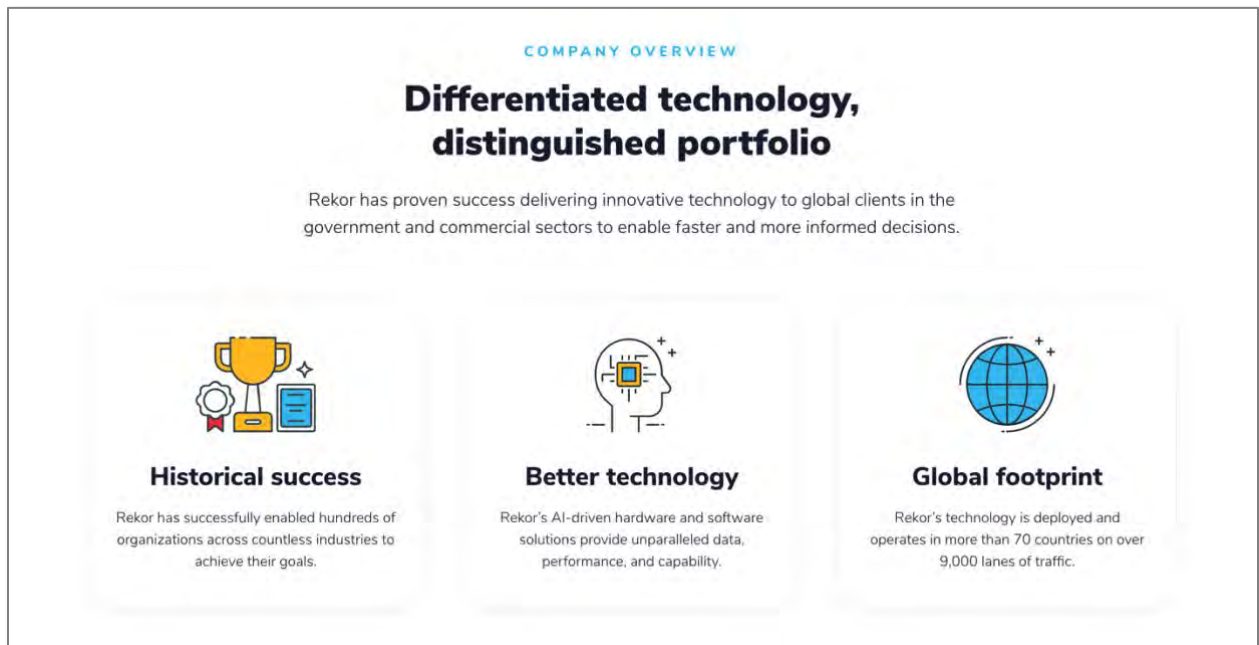



Figure 22 Rekor has proven success delivering industry-leading vehicle recognition technology across the globe.

Our Core Competencies

At its core, Rekor's technology centers around image processing and analytics, which is quite simply the ability to take video or still images, analyze them and provide valuable insights related thereto. Rekor employs both machine learning and machine vision in its software algorithms, two features of AI that result in more accurate results. Rekor's software is camera agnostic, and therefore can be deployed on nearly any IP surveillance or security camera. In



situations where the camera infrastructure is not optimized for Rekor's software, Rekor is able to complement its software with industry leading cameras to produce highly accurate results.



REKOR'S VISION

Advancing past legacy solutions

Rekor, in conjunction with its OpenALPR suite of solutions, strives to be the leading company providing cutting-edge technology using artificial intelligence, machine learning, and data to solve complex problems in public safety, smart cities, and customer experience.

Figure 23 Law enforcement deserves cutting-edge ALPR technology.

HISTORY OF OPENALPR

Developing AI with a purpose

OpenALPR was originally built as open source software by Rekor's Chief Science Officer, Matt Hill, who launched it as a free download in late 2015. In March 2016, a paid Cloud API service launched and in February 2017, the OpenALPR agent for Axis cameras was released. In March 2018, ProgrammableWeb added OpenALPR to its list of Recognition APIs, and in 2019, Rekor acquired OpenALPR to complement its hardware offerings.




Figure 24 Our Chief Science Officer developed the OpenALPR technology and continues to improve it.

Our Experience and Expertise

Rekor has provided modern ALPR solutions for five years for both commercial and law enforcement customers worldwide. These solutions typically include hardware and software configuration and installation, testing, quality assurance, training, documentation, program management, maintenance, and customer service.

Rekor's leadership team brings decades of innovation, experience, strategic vision and exceptional results across commercial and public sectors.

- Members of our executive team have built and led teams at companies such as L3 Communications, Axon Enterprise, Motorola Solutions, and LexisNexis.



- Our Chief Science Officer developed the core technology that is employed in our vehicle and license plate recognition solutions and he remains integral in the algorithmic evolution that continues to provide our clients with expanded capabilities in their technology deployments.
- Two exceptional leaders from our original traffic safety and enforcement business currently serve as officers of the company.

Rekor has over 1,000 clients, representing 70 countries, using our ALPR software and over 70 public safety agencies use our ALPR systems. In addition, our ALPR cameras are used to cover over 9,000 lanes, for public safety and commercial purposes.

Our Core Values

Rekor maintains company core values that guide both our external and internal relationships.


Integrity

Rekor is a trusted partner of individual clients, companies, and government agencies of all sizes. We also partner with a broad range of technology vendors to help achieve greater outcomes by combining our solutions. Our technology was built on the principal of “openness” and transparency, and we maintain those principles in the way we communicate and work with our clients, our employees and our technology partners.

AGENCIES LEVERAGING REKOR


Trusted by departments of all sizes

Don't take it from us, take it from those that are using our solutions every single day to make their communities safer.




"Rekor has become the new standard in LPR technology for Westchester, NY."

Lt. Brian Hess
Westchester County, New York PD



"Rekor continues to assist in the apprehension of our community's most violent offenders."

Cmdr. Kevin Levy
Mobile Alabama PD Technology & Cyber-Intelligence



"Rekor's solutions fit the needs of our department both now and for the future."

Chief James Hambrick
Mt. Juliet, Tennessee PD

Figure 25 Our commitment to integrity is reflected in our longstanding relationships, testimonials and referrals.



Customer Centric

We believe in listening to the “voice of the customer” and allow it to drive our innovation. We seek to understand the needs and challenges of our clients and collaborate with them to develop solutions that best fit their needs and help them achieve in their missions.

- [Video: Rekor’s Law Enforcement Donation Program \(or https://www.openalpr.com/donation\)](https://www.openalpr.com/donation)

Public Safety Software Donation Program

Receive two licenses for full-featured, no-cost ALPR software!

What is it?

By registering for this donation, your agency is eligible to **receive two Watchman licenses** to be used with new or existing cameras. Watchman upgrades nearly any IP, traffic, or security camera into a vehicle recognition solution. Search for vehicles of interest by **plate, partial plate, make, model and color**. You can upload existing hotlists, manually enter plates, and conduct forensic searches.

Figure 26 Rekor's community focus.

Determined to Deliver

Rekor is driven to exceed customer expectations in the way we innovate, in the products we deliver and the service we provide. We do not allow external forces to hold us back from delighting our customers and we are motivated to overcome adversity and challenges. For example, amid the COVID-19 pandemic, we stood by our commitment to install one of the largest camera deployments to-date and stayed ahead of schedule, despite the significant challenges the pandemic presented. Helping fulfil the client’s mission drives all facets of our business.

- [Video: Installation at Lauderhill, Florida](#)

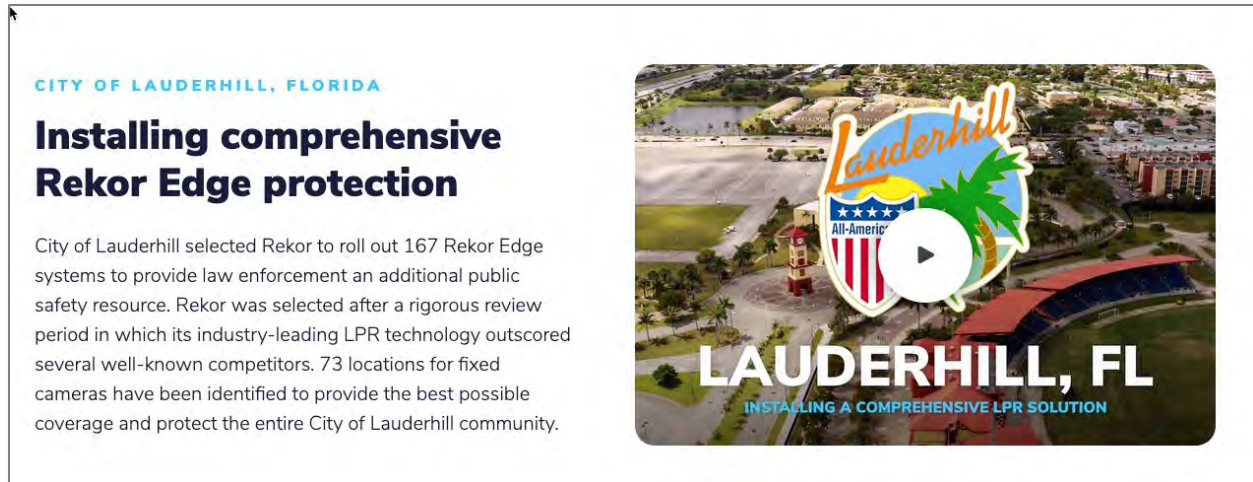


Figure 27 167 cameras in 73 locations covering 260+ lanes.

Commitment to Sharing Best Practices with Public Safety Agencies

Rekor regularly hosts “lunch and learn” sessions for public safety agencies, which involve members of the Rekor team presenting to law enforcement personnel on best practices related to vehicle and license plate recognition technology. Recently, due to COVID-19 restrictions on travel, we have hosted online events, such as two webinars related to law enforcement’s use of vehicle and license plate recognition technology.

- Webinar: [Improving Your Crime Reduction Strategy with LPR, June 4, 2020](#)
- Webinar: [Navigating Community Concerns about Your LPR Program, July 23, 2020](#)

Members of our executive team have also been contributing members to public sector technology task forces, such as the IJIS/IACP Law Enforcement Imaging Task Force and IACP In-Car Video Task Force.

Currently, Rekor manages a robust discussion [forum](#) for users of our OpenALPR software suite. The blog has over 220 discussion topics, over 1,400 posts with over 380 active users.

Finally, we recently launched Rekor Academy, a series of videos intended to enhance client’s and potential client’s understanding of our technology and its features. The Academy currently hosts 15 videos and access to the Academy is offered at no-cost. Below is an example of one of the videos.

- Rekor Academy: [What is Vehicle Recognition Software?](#)



What is vehicle recognition software?

Vehicle recognition is no longer just license plate recognition. With Rekor's powerful suite of vehicle recognition tools, users are now able to identify a multitude of vehicle characteristics and behaviors. These variables include vehicle make, model, body type, color, direction of travel, and more. Additionally, these technological breakthroughs allow Rekor to surpass overly expensive and outdated ALPR systems that utilize optical character recognition and provide real-time actionable insights for customers.

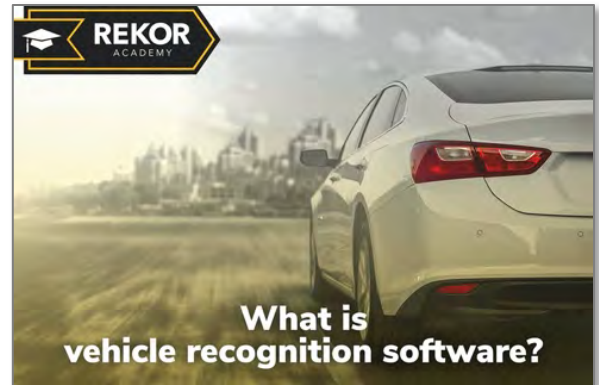


Figure 28 Find out more about vehicle recognition software.

The Sectors We Serve

Rekor provides both commercial and government customers with actionable, real-time vehicle recognition data to enable informed decisions to be made faster and with greater outcomes. Through its innovative image and video analytics technology, Rekor is transforming industries in the public and commercial sectors in more than 70 countries across the globe with smarter, quicker, cost-competitive vehicle recognition solutions. Applications for these solutions include security, revenue discovery and recovery, public safety, electronic toll collection, brand loyalty, frictionless restaurant and retail transactions, parking operations, logistics, and traffic management. To learn more please visit our website: <https://rekor.ai>.



Figure 29 Providing actionable, real-time insights for commercial and government clients.



Rekor has delivered ALPR technology, in both software and hardware form, to law enforcement and municipal agencies over the past decade. As a result, Rekor has gained excellent insight into the challenges of these agencies and how the technology must continue to evolve to help overcome these challenges. Rekor is a trusted partner of these agencies not only for the quality of the technology it provides, but also for the customer service which is offered prior to, during and after the client's purchase. As Rekor has developed these meaningful agency relationships, it has helped inform our technology development roadmap. A recent evolution in that roadmap includes Rekor One:

Figure 30 A single source for multiple purposes.

Rekor One is Rekor's AI-driven technology platform which serves as single source of roadway intelligence for government entities. Cities, counties and state agencies can derive actionable vehicle insights from the Rekor One platform to enable their agencies to more efficiently and effectively fulfill their missions. With Rekor One, governments can fractionalize costs by leveraging and expanding their sensor infrastructure and maximize their intelligence to maintain a safe and smart roadway network.

Roadway and Community Safety

Rekor One is the company's platform that improves citizens' safety by detecting and alerting to unsafe roadway conditions. Whether a vehicle is driving the wrong way, traveling erratically or at a dangerous speed, or encounters an obstruction, Rekor One delivers real-time alerting to allow for efficient action and correction, thus minimizing the risk of accidents and injury.



PUBLIC SAFETY

Creating safer and smarter communities

With a client-base that includes the United States Department of Defense, Swedish Customs, major metropolitan cities, local law enforcement agencies, and more, Rekor's real-time intelligence helps municipalities and communities become smarter and more efficient while deterring and solving crimes.

- ✓ Law enforcement license plate & vehicle recognition
- ✓ Unsafe speed & hazardous object detection
- ✓ Real-time AMBER & Silver alerting



Figure 31 An effective and efficient solution for safer and smarter communities.



SAFETY FOR ALL

Building safer communities, together

Rekor strengthens safety and security efforts for agencies, neighborhoods, and corporate & educational campuses with advanced real-time vehicle intelligence. Enhanced security is made more effective and efficient with actionable data from across the entire connected public safety network.

Figure 32 Advanced, real-time vehicle intelligence-based actionable data from a broad network.

Enhanced Policing

Additionally, Rekor One makes policing more effective and efficient. Officers can access the law enforcement module on the Rekor One platform to leverage actionable license plate and vehicle recognition data captured from fixed, mobile and handheld sensors across the Rekor One network. Critical alerts based on the license plate, vehicle make, model, color and type of vehicle help accelerate investigations, the apprehension of criminals, and the recovery of AMBER and Silver alerts.



LAW ENFORCEMENT

Accurate, affordable license plate recognition

By ensuring law enforcement agencies receive actionable real-time intelligence, our suite of LPR software allows officers to accelerate investigations and close more cases, faster.



Figure 33 Accurate, affordable license plate recognition.

Traffic Monitoring and Management

Rekor One provides transportation agencies with extensive traffic monitoring capabilities. Traffic flow is improved by the ability to count vehicle totals, analyze congestion patterns, and generate detailed traffic reports. Insights regarding historical volume counts, vehicle class and type, and tonnage calculations can further infrastructure planning and budgeting efforts. Rekor One can also provide electronic vehicle counts and related data for emissions calculations.

REKOR ONE BENEFITS

Building smarter roadways and cities

Rekor is committed to creating a safer future for everyone by providing invaluable information for the betterment of states, cities, and communities.



Improves infrastructure

Traffic flow and emissions are improved by Rekor One's ability to count vehicle totals, analyze congestion patterns, and generate detailed traffic reports.



Increases safety

By detecting if a vehicle is driving the wrong way, the subject of a criminal investigation or AMBER alert, or traveling at a dangerous speed, Rekor One provides life-saving data.




Generates revenue

By analyzing all aspects of the roadway, Rekor One can help enable congestion pricing, licensing & registration compliance, and scofflaw enforcement.

Figure 34 Creating value through improved infrastructure, increased safety and generating revenue.

The Rekor One platform is representative of our commitment to create a safer future for everyone by enabling AI-driven decisions for the betterment of states, cities, and communities.



SOLUTION ADVANTAGES

Building a data ecosystem

The Rekor Network will allow law enforcement, municipalities and commercial entities to share vehicle recognition data across jurisdictional boundaries.

- Platform to share actionable intelligence to make cities safer and smarter
- Constantly growing ecosystem provides exponentially more valuable data
- Metadata can be extracted from the platform and anonymized to allow metadata to feed marketing insights

Figure 35 As more cameras are added to a network, its effectiveness and value increase.

C.9.2 Data Sharing

We do not facilitate or provide any sharing of customer data without express written permission. Rekor fully understands and commits to the ALPR program requirement that data obtained by the ALPR program is not to be shared externally without written authorization. Rekor adheres to the highest possible security protocols relative to safeguarding of customer data.

To supplement the cameras that we will install throughout San Diego County, we also have the ability to enhance the ALPR program in two additional ways:

1. Our “open architecture” system design described above is capable of ingesting ALPR reads from other third-party platforms, if the hosting agency is willing to share their data with the ALPR program. Thus, with Sheriff’s Department’s approval, we could contact law enforcement agencies that have ALPR cameras and ask if they would be willing to share their data, thereby increasing the number of vehicle reads. We are currently implementing this feature in two major projects in Collierville, Tennessee and Lauderhill, Florida. This option would apply to any agency regardless of which vendor operates the system and assumes vendor compliance with the agency’s request to share the data.



2. We are currently undergoing a wide-scale national expansion in our law enforcement channel and have established relationships with law enforcement agencies nationwide. All agencies we add with new Rekor cameras, or software on their current cameras, will be eligible and encouraged to opt into sharing data with the ALPR program, as the overall system cost could be fractionalized based on multi-agency participation.

C.9.3 System Scalability and Flexibility

C.9.3.1 System Scalability

Rekor provides an ALPR system that is infinitely scalable. Our system has this capability because of:

- **Edge-Based Processing** -- Our cameras are edge-based, meaning that video processing takes place at the ALPR camera, thereby reducing the need to transfer massive amounts of data.
- **Cellular Data Transfer** -- We use cellular communications and don't rely on the need to run hardwired data communications cables. All cameras store data locally for later transmission should communications be interrupted.
- **Remote Control** -- Our cameras are remotely controlled and configured, thereby allowing for rapid configuration and firmware updates.
- **Automatic Monitoring** -- Our cameras are automatically monitored by a system that is designed to identify potential problems before they result in an equipment failure.
- **Easy and fast installation** -- Our portable cameras typically take about 1-2 hours to install and configure.
- **Solar Powered** -- We can power any of our portable cameras by solar power (all trailer-mounted cameras are solar powered), thereby eliminating the need for costly and time-consuming power infrastructure.

Our ALPR System is also configurable and its open design allows for customizable architecture designed to allow incremental changes in capacity and functionality.

C.9.3.2 Full Video Edge Processing for Speed and Scalability

Rather than being dependent on communications infrastructure, which can result in lost data in adverse conditions and/or limit expansion, Rekor processes data collected via the sensor network on the "edge" (at the camera) for a robust infinitely scalable solution and near real-time alerting. Certain competitors' systems that are entirely dependent on cloud computing are unable to create or retain ALPR reads, and thus lose a tremendous amount of critical data when communications are interrupted. Rekor's Edge systems do not miss any reads during a communications outage, and are automatically synced to the back-office once communication is restored.



Rekor understands that the Sheriff's Department will provide network resources used by the ALPR System. Because all of our cameras use full video edge processing, the data transmitted via cellular communications or over the Sheriff Office's infrastructure is negligible and would not negatively impact other Sheriff's Department systems.

C.9.3.3 System Flexibility

Rekor's system is flexible in its ability to work with and integrate data from other ALPR systems and to migrate. As more thoroughly discussed above, our Watchman system is an easy-to-use system that gives the user the ability to run a variety of reports and our staff is available to develop custom features needed by the Sheriff's Department.

Because our Watchman software is capable of operating on nearly any IP camera, the Sheriff's Department will have significant flexibility for expansion by leveraging existing camera infrastructure, and simply purchasing and deploying software licenses for those cameras.

C.9.4 Remote Monitoring of Equipment

SOLUTION ADVANTAGES

Maximum reliability

Rekor stands behind its durable hardware and state-of-the-art remote monitoring capabilities to ensure that agencies have exceptional system performance and maximized up-time.

- ✓ **Ability to withstand extreme environmental elements**
Rekor's systems are built to endure dust, wind, and water penetration, over time and in the most severe events.
- ✓ **Impervious of communication interruptions**
By processing at the edge, Rekor enables infinite scalability and avoids communication vulnerabilities that are often found with streaming video deployments.
- ✓ **Remote monitoring and management of systems**
Rekor monitors the health and performance of all camera deployments and configures updates to address any concerns.
- ✓ **Backed by 24/7 customer support**
Our Customer Care team is available around the clock to provide prompt support and address any urgent issues that arise.

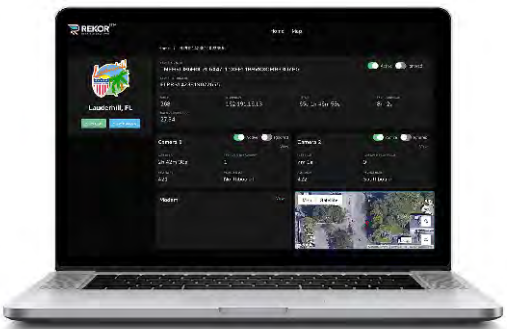


Figure 36 Through its state-of-the-art remote monitoring and round-the-clock support, Rekor offers clients proactive management of the sensor network to ensure up-time is maximized.

Rekor believes operational oversight and monitoring of our deployed equipment and systems is critical to ensuring ALPR systems meets our client's mission-critical objectives. With this in mind, we developed Rekor Vision. This continuous monitoring application leverages AWS



GovCloud to send and receive MQTT messages (MQTT is an extremely lightweight publish/subscribe messaging transport that is ideal for connecting remote devices with a small code footprint and minimal network bandwidth) through web socket tunnels directly to our edge-based ALPR cameras. This bi-directional communication allows for receiving live operation data from every ALPR camera as well as pushing updates and configurations to ALPR cameras.

Rekor Vision allows our team to control all ALPR camera configurations remotely via groups that makes sense for our clients. From defining small groups to test updates, to single-click fleet-wide updates, we handle all stages of software deployment, firmware updates and configuration management.

Rekor Vision also allows technical support and maintenance personnel to detect any read anomalies or system issues (low battery, communication outage) and receive alerts in real time whenever a device is not operating efficiently or inactive. Through this monitoring and alerting, technicians can proactively address any issues to ensure system performance optimization.

The video link below provides a 3.5-minute user experience of the Ops Vision dashboard detailing how we monitor the status and health of all deployed devices. Some of the dashboard data include:

- Uptime
- battery voltage
- “heartbeat”
- last ALPR read
- number of reads in the last hour
- Communications information
- A real-time camera view
- CPU fan RPM
- CPU temperature
- Battery current
- Panel voltage
- CPU utilization
- Current load.
- Video: [Rekor’s Remote Monitoring](#)

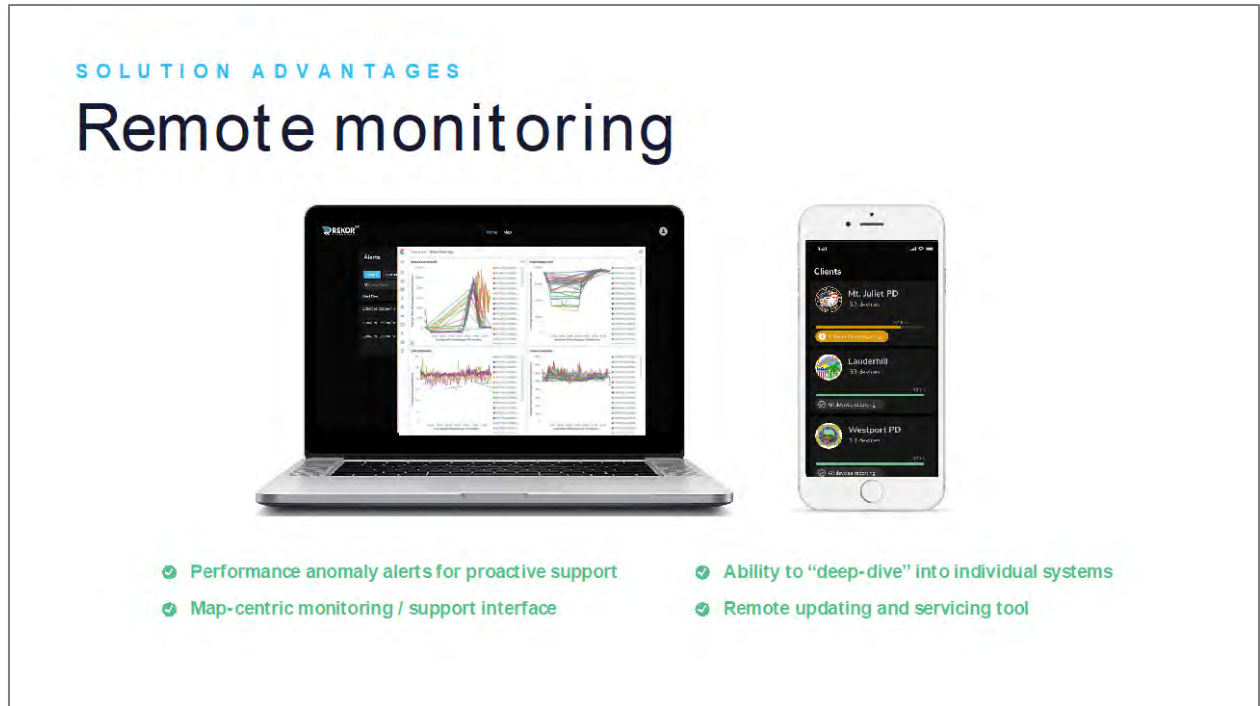


Figure 37 Rekro monitors and receives alerts on key performance indicators to more efficiently address issues or service needs.

C.9.5 Experienced ALPR Project Team

Rekor is organized on a functional basis to provide key expertise and leadership within each of our major areas of operation. For each of our implementations, we identify a dedicated implementation manager along with key individuals from each functional area to provide direct support to the implementation manager. These individuals have ultimate accountability to the implementation manager in relation to the specific programs to which they are assigned.

The Sheriff's Department ALPR implementation would be managed by David Tindall, our Rekor's VP of Implementation, who brings 15 years of ALPR program implementation experience. He will be the primary contact for all aspects of the ALPR program, including business rules, implementation, engineering, field support, configuration management, quality control, customer service, maintenance, and accounting. Mr. Tindall will have full authority on behalf of Rekor for all decisions related to program implementation and support.

Although we prefer to designate a single point of contact for simplicity and accountability, we offer direct access as requested by our clients to program support personnel as well as management personnel, including our officers.



Issue escalation beyond the program manager, although rarely required, will involve the following management personnel:

- VP of Operations – Brad Schaeffer
- VP of Program Development – Maurice Nelson
- Chief Technology Officer – Chris Kadoch
- Chief Operating Officer – Rod Hillman

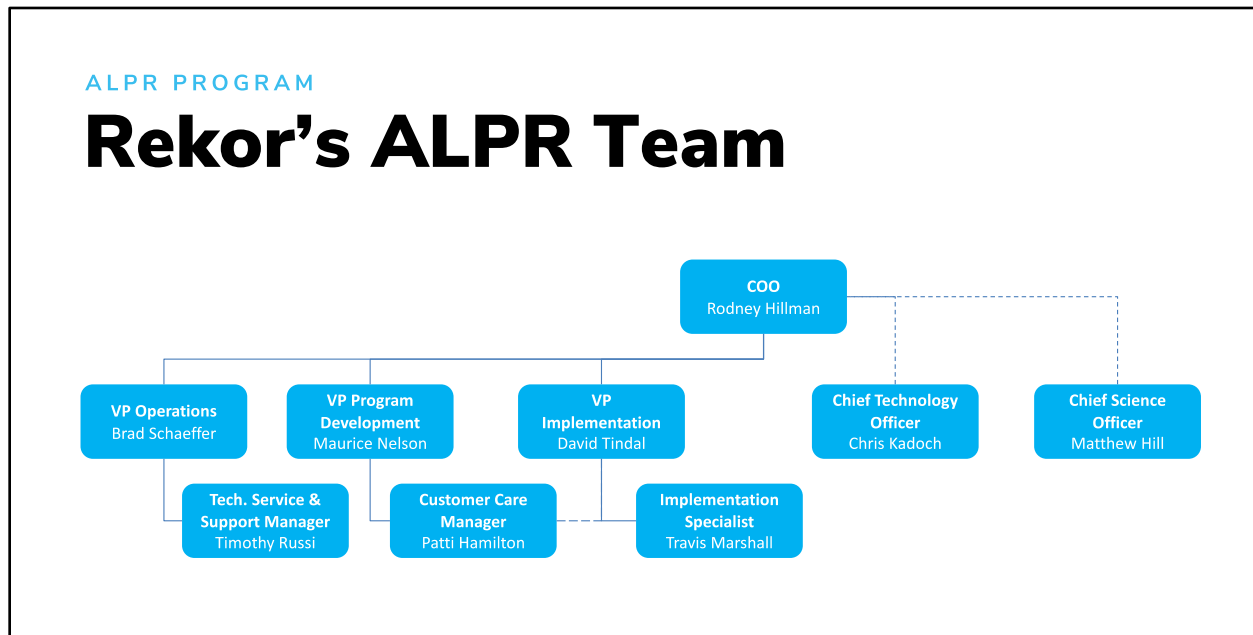


Figure 38 Rekor's ALPR Program Team, showing key functional leadership.

Brief biographies of management and operational personnel that will support the ALPR program are presented below.

C.9.5.1 Project Team Bios

C.9.5.1.1 Program Management – David Tindall, VP Implementation

Mr. Tindall is a proven leader with more than 15 years of experience in public safety, pre-sales engineering, and project management. He has extensive experience working with AI and video camera technologies, including his previous role at AnyVision and prior roles with WatchGuard Video and L-3 Communications, where he managed and executed millions of dollars' worth of public safety projects. Mr. Tindall has a Bachelor of Arts in Radio/Television from the University of Central Florida.

C.9.5.1.2 Operations – Brad Schaeffer, VP of Operations

Mr. Schaeffer has been with Rekor since 2012 and serves as our VP of Operations. He oversees all aspects of program implementation and operations including field support,



citation/notification processing, customer service, collections, and adjudication support. Mr. Schaeffer has personally managed multiple speed enforcement programs and he was instrumental in implementing one of the largest ALPR programs in Mexico. Mr. Schaeffer holds a Bachelor of Science in Business Administration from York College of Pennsylvania and is working towards his MBA from the University of Maryland.

C.9.5.1.3 Program Management – Patti Hamilton, Customer Care Manager

Ms. Hamilton manages Rekor's ALPR programs. She has extensive experience in both implementation and ongoing program oversight and is able to draw upon internal resources, both technical and administrative, to accomplish complete client satisfaction. She has over 20 years' experience in training, implementing, supervising, and managing citation processing and permit management back-office operations, vendors, and customer service centers for city, county and state highway administration programs.

C.9.5.1.4 Technical Support & Maintenance – Timothy Russi, Technical Service & Support Manager

Mr. Russi is one of our customer service and technical support professionals responsible for providing hardware and cloud products support and building and managing support teams for our clients. In this role, he is responsible for managing all field work orders, ensuring timely resolution and SLA compliance. Mr. Russi has over 30 years of technical customer support experience. He holds a Master of Arts in Communications from the New York Institute of Technology and Bachelor of Science in Media Studies / Communications from Sacred Heart University.

C.9.5.2 Rekor Management Team Bios

C.9.5.2.1 Chris Kadoch, Chief Technology Officer

Mr. Kadoch has served as our Chief Technology Officer since February 2020. Prior to joining Rekor, he served for 12 years as Vice President and Chief Scientist at L3 Communications and was CTO of an APAC AI/video analytics company. Most recently Mr. Kadoch provided strategic guidance to Axon Enterprises. Mr. Kadoch holds Bachelor of Science degrees in physics and mathematics from San Jose State University and pursued graduate studies in optics and physics at Michigan Technology University, Georgia Institute of Technology and San Jose State University. He also holds several patents, two of which are related ALPR and high-speed communications.

C.9.5.2.2 Rodney Hillman, Chief Operating Officer

Mr. Hillman has served as our Chief Operating Officer since May 2019. From December 2013 to May 2019, Mr. Hillman served as President and Chief Operating Officer of Rekor Recognition



Systems. Prior to joining Rekor, Mr. Hillman served in various executive level capacities in other companies and industries. From 2003-2012 he held the positions of Chief Operating Officer and Chief Financial Officer at Game Trading Technologies, Inc. (GTTI), a publicly traded company that he co-founded. Prior to his tenure at GTTI, Mr. Hillman was Vice President of Product Development at InterAct Accessories, Inc. and held various management positions at both Baltimore Gas & Electric and Constellation Energy Group. Mr. Hillman holds a Master of Science in Finance from Loyola College in Baltimore, Maryland, an MBA from the University of Baltimore, and a Bachelor of Science in Electrical and Computer Engineering from The Johns Hopkins University.

C.10 Rekor Current Reference Projects

Past performance is a great indicator of future project success. Rekor is proud of our proven track record serving law enforcement. Below we provide recent and relevant ALPR program references for similar projects.

C.10.1 City of Lauderhill, FL Police Department

Client	City of Lauderhill, FL Police Department
Project Name	Lauderhill ALPR Program
Description/Scope of Work	Supply, install, maintain and warranty solar-powered ALPR systems to include poles, processors, telecommunications, storage and backend application. Assist with hotlist and other external connections, programming and systems training.
Completion Date	95% complete; "Live" system has already been handed over to Lauderhill. Expected final completion in November 2020
Number of Locations	73 locations; 101 Edge systems; 160 cameras;
Contact Name and Title	Doug Downs, City Director IT
Phone	954-730-3099
Email	d downs@lauderhill-fl.gov



C.10.2 Town of Mount Juliet, TN Police Department

Client	Town of Mount Juliet, TN Police Department
Project Name	Mount Juliet ALPR Program
Description/Scope of Work	Supply, install, maintain and warranty AC and solar-powered ALPR systems to include poles, processors, telecommunications, storage and backend application. Assist with hotlist and other external connections, programming and systems training.
Completion Date	Completed October 23, 2020.
Number of Locations	39 locations
Contact Name and Title	Captain Tyler Chandler
Phone	615-754-2550
Email	tchandler@mtjuliet-tn.gov



MT. JULIET *Tennessee*

How we help Mt. Juliet PD apprehend criminals and make their community safer

Before selecting Watchman, MJPD and IT professionals conducted rigorous testing and an extensive review of Rekor and other leading license plate recognition systems. After testing was completed, Watchman clearly outperformed competitors.

Figure 39 Click on the above image and see how Rekor is creating a safer community in Mt. Juliet.

"Our number one priority is maintaining the safety of our community, and we are always looking for robust tools and technologies that can help us to do so. Rekor's Edge and Watchman vehicle recognition technology provided better results than its competition during our trial period."

Chief James Hambrick, MJPD



C.10.3 Greenwood Village, CO Police Department

Client	Greenwood Village, CO Police Department
Project Name	Greenwood Village ALPR Trailer Program
Description/Scope of Work	Provide an ALPR Mobile Trailer for Demo Project and Purchase.
Completion Date	Completed December 21, 2020.
Number of Trailers	One trailer
Contact Name and Title	Scott Jones, Commander Traffic Operations
Phone	303-773-2525
Email	sjones@greenwoodvillage.com



D. Offer of Value-Added Products and/or Services

In addition to the factors described above that demonstrate how Rekor's solutions provide significant value to the Sheriff's Department, two additional value-added products and features are described below.

D.1 Rekor Smartphone Mobile Application

Rekor recently announced [Rekor Go](#), an application that brings the power of accurate vehicle recognition to the mobile devices of a broad array of commercial users. As a follow-on product, similar to Rekor Go but with advanced security and CJIS requirements for law enforcement use, we will be releasing Rekor Blue in the first quarter of 2021.

The app turns a smartphone into a handheld tool that identifies vehicles and license plates. The user receives instant confirmation when the data matches a customer generated "hotlist" record. Rekor Blue does not need to continuously connect and stream to the cloud, enabling operations in areas where Wi-Fi or cellular service is limited or unreliable. It captures data on the move, operating in real-time on a live video stream. Identified plates are instantly compared to a user-generated list, shortening the time from capture to insight and issuing an audible and haptic alert. The Rekor Blue app comes with a number of additional features, including:

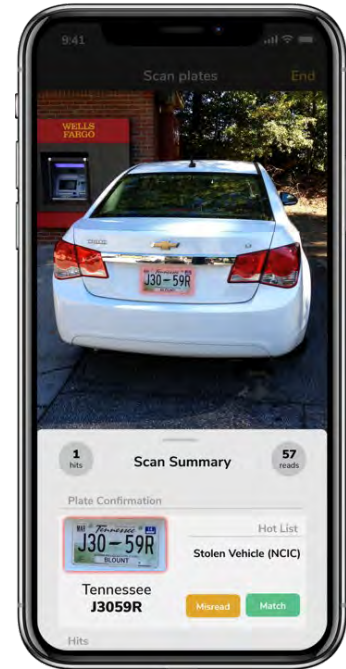


Figure 40 Example of Rekor Go finding a hotlist match.

- **On device management** – Users can manage alerts directly through the mobile app by entering license plate information directly or uploading a list. Within the application, users can also capture and review images of all reads and export data using native phone capabilities.
- **On device storage** – Rekor Blue stores 30 days of images and metadata and gives users full and complete access to the data.
- **Export capability** – The export tool creates a .csv read file that can be downloaded and shared.
- **Alerts for license plates of interest** – Manage alerts directly through the mobile app, entering license plate information or by uploading a list through the application or companion website.
- **Rekor Watchman Integration** – Rekor Blue integrates with Rekor Watchman back office software for user management, hotlist management, and posting of reads within the main Cloud database for investigative searching and retrieval.



Available to both iOS and Android users, Rekor Go is available for purchase and download through both the [App Store](#) and [Google Play](#).

As a no-cost, value-added service, Rekor offers to integrate Rekor Blue with the Sheriff's Department's ALPR program system for law enforcement use with their mobile devices (one Rekor Blue license issued for each for each ALPR system licenses or hardware systems purchased as a supplemental and flexible means to read additional license plates. Potential law enforcement use cases include parking lot patrol, event management, and crime scene scanning.

D.2 Rekor One – A Single-Camera Sensor with Multiple Missions

Legacy OCR-based ALPR technology was designed decades ago for a single role. Over time, advances in hardware and software technology, including Artificial Intelligence ("AI") and machine learning, have significantly enhance ALPR capabilities. Today, state-of-the-art ALPR equipment provides vastly improved read performance, and a camera used for ALPR has multiple possible uses for other municipal agencies to increase public safety and convenience.

At its core, Rekor's technology centers around image processing and analytics, which is quite simply the ability to take video or still images, analyze them and provide actionable information. Rekor employs both machine learning and machine vision in its software algorithms, two features of AI that not only deliver more accurate results compared to legacy OCR-based ALPR technology currently in use by the County, but also enable the camera sensor to serve other County purposes.








ABOUT REKOR

Providing revolutionary intelligence

Rekor (Nasdaq: REKR) is a Maryland-based company providing both commercial and government sectors with actionable, real-time vehicle insights and roadway intelligence. By enabling faster, better informed decisions, Rekor is transforming industries worldwide with smarter, quicker, cost-competitive solutions for security, public safety, electronic toll collection, brand loyalty, parking operations, logistics, and traffic management.

To accomplish this, Rekor's proprietary OpenALPR software analyzes videos streams from nearly any IP camera and transforms these streams into powerful vehicle recognition data that helps protect lives, increase brand loyalty, and enhance operations and logistics, without the need to install expensive new infrastructure.

6+
Years Machine Learning

85+
Countries Supported

9k+
Lanes Covered

Figure 41 Revolutionary intelligence for smarter, quicker, cost-competitive public safety solutions.

Rekor's vision is to enable organizations and agencies to make "AI Driven Decisions" to solve complex real-world roadway and vehicle challenges. We harness the power of machine vision data and analytics to deliver solutions which help make governments more efficient, communities much safer and organizations better equipped to solve business challenges.

REKOR'S VISION

Advancing past legacy solutions

Rekor, in conjunction with its OpenALPR suite of solutions, strives to be the leading company providing cutting-edge technology using artificial intelligence, machine learning, and data to solve complex problems in public safety, smart cities, and customer experience.

Vehicle Data:

- TOYOTA SUV BLACK NORTHBOUND AT 255PM 7CR7 334
- CHEVY SUV GREY SOUTHBOUND AT 258PM 1APN 283
- MAZDA SEDAN BLACK NORTHBOUND AT 258PM 1RC 1822
- BUICK SEDAN SILVER SOUTHBOUND AT 261PM 8GY 601

Figure 42 Law enforcement deserves cutting-edge ALPR technology.



The video [Rekor - AI Driven Decisions](#) in the image below provides a brief summary of Rekor.

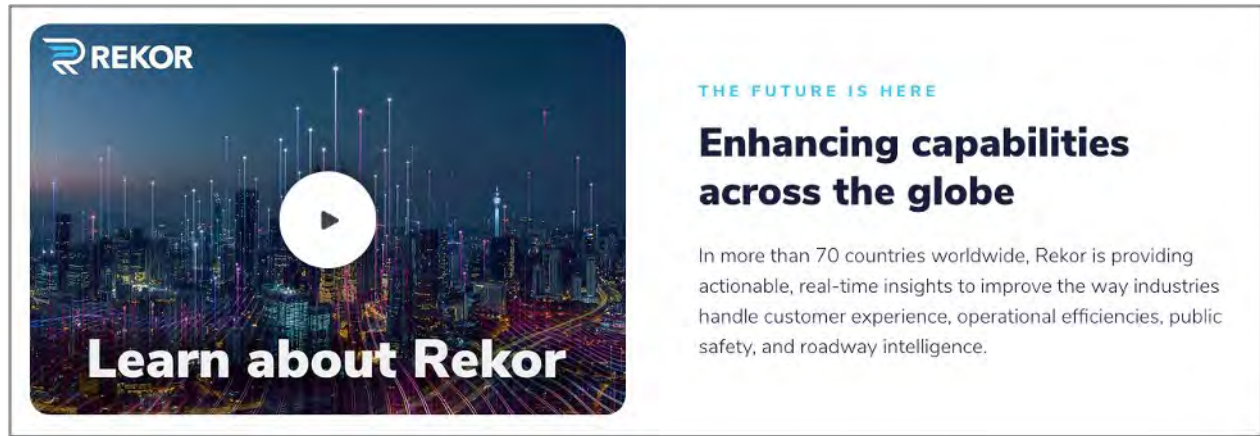


Figure 43 AI-based vehicle intelligent solutions that help make cities smarter, people safer and commerce more efficient.

Over the past decade, Rekor has delivered ALPR technology in both software and hardware form to numerous law enforcement and municipal agencies. To date over 1,000 clients representing 70 countries use our ALPR software, and over 70 public safety agencies use our ALPR systems. Our ALPR cameras cover over 9,000 lanes. As a result, Rekor has gained excellent insight into the challenges these agencies face and how the technology must continue to evolve to help overcome these obstacles. Rekor is a trusted partner of these agencies not only for the quality of the technology it provides, but also for the customer service which is offered prior to, during and after the client's purchase. As Rekor has developed these meaningful agency relationships, it has helped inform our technology development roadmap. A recent evolution in that roadmap includes Rekor One:



The advertisement features a night-time aerial view of a multi-lane highway with cars. A circular icon with a blue and white road curve is positioned above the highway, with blue lines radiating from it to various points along the road, symbolizing a single system serving multiple missions. The text 'SINGLE SYSTEM. MULTIPLE MISSIONS.' is at the top left. The Rekor One logo and name are at the top right, followed by a descriptive paragraph. Below this, three categories are listed with icons: Infrastructure (traffic flow, emissions, tonnage), Safety (license plate recognition, speed detection, alerting), and Revenue (congestion pricing, licensing, parking, UVED).

SINGLE SYSTEM. MULTIPLE MISSIONS.

REKOR ONE
ROADWAY INTELLIGENCE

Rekor One is a single source for roadway intelligence. It provides actionable data that helps cities, counties and states improve infrastructure, increase safety and generate revenue.

INFRASTRUCTURE

- Traffic flow & congestion monitoring
- Vehicle emissions data
- Tonnage calculations
- Infrastructure improvement studies

SAFETY

- Law enforcement license plate & vehicle recognition
- Unsafe speed & hazardous object detection
- AMBER & Silver alerting

REVENUE

- Congestion pricing
- Licensing & registration compliance
- Parking management & scofflaw enforcement
- Uninsured Vehicle Enforcement Diversion Programs (UVED)

Figure 44 A single source for multiple purposes.

Rekor One is Rekor’s AI-driven technology platform which serves as single source of roadway intelligence for government entities – one cameras sensor serving multiple purposes. Cities, counties and state agencies can derive actionable vehicle insights from the Rekor One platform to enable their agencies to more efficiently and effectively fulfill their missions. With Rekor One, governments can fractionalize costs by leveraging and expanding their sensor infrastructure and maximize their intelligence to maintain a safe and smart roadway network.

D.2.1.1.1 Roadway and Community Safety

Rekor One is our platform that improves citizens’ safety by detecting and alerting to unsafe roadway conditions. Whether a vehicle is driving the wrong way, traveling erratically or at a dangerous speed, or encounters an obstruction, Rekor One delivers real-time alerting to allow for efficient action and correction, thus minimizing the risk of accidents and injury.



PUBLIC SAFETY

Creating safer and smarter communities

With a client-base that includes the United States Department of Defense, Swedish Customs, major metropolitan cities, local law enforcement agencies, and more, Rekor's real-time intelligence helps municipalities and communities become smarter and more efficient while deterring and solving crimes.

- ✓ Law enforcement license plate & vehicle recognition
- ✓ Unsafe speed & hazardous object detection
- ✓ Real-time AMBER & Silver alerting




Figure 45 An effective and efficient solution for safer and smarter communities.



SAFETY FOR ALL

Building safer communities, together

Rekor strengthens safety and security efforts for agencies, neighborhoods, and corporate & educational campuses with advanced real-time vehicle intelligence. Enhanced security is made more effective and efficient with actionable data from across the entire connected public safety network.

Figure 46 Advanced, real-time vehicle intelligence-based actionable data from a broad network.

D.2.1.1.2 Enhanced Policing

Additionally, Rekor One makes policing more effective and efficient. Officers can access the law enforcement module on the Rekor One platform to leverage actionable license plate and vehicle recognition data captured from fixed, mobile and handheld sensors across the Rekor One network. Critical alerts based on the license plate, vehicle make, model, color and type of vehicle help accelerate investigations, the apprehension of criminals, and the recovery of America's Missing: Broadcast Emergency Response ("AMBER") and Silver alerts.



LAW ENFORCEMENT

Accurate, affordable license plate recognition

By ensuring law enforcement agencies receive actionable real-time intelligence, our suite of LPR software allows officers to accelerate investigations and close more cases, faster.

Figure 47 Accurate, affordable license plate recognition.

D.2.1.1.3 Traffic Monitoring and Management

Rekor One provides transportation agencies with extensive traffic monitoring capabilities. Traffic flow is improved by the ability to count vehicle totals, analyze congestion patterns, and generate detailed traffic reports. Insights regarding historical volume counts, vehicle class and type, and tonnage calculations can further infrastructure planning and budgeting efforts. Rekor One can also provide electronic vehicle counts and related data for emissions calculations.

REKOR ONE BENEFITS

Building smarter roadways and cities

Rekor is committed to creating a safer future for everyone by providing invaluable information for the betterment of states, cities, and communities.

Improves infrastructure

Traffic flow and emissions are improved by Rekor One's ability to count vehicle totals, analyze congestion patterns, and generate detailed traffic reports.

Increases safety

By detecting if a vehicle is driving the wrong way, the subject of a criminal investigation or AMBER alert, or traveling at a dangerous speed, Rekor One provides life-saving data.

Generates revenue

By analyzing all aspects of the roadway, Rekor One can help enable congestion pricing, licensing & registration compliance, and scofflaw enforcement.

Figure 48 Creating value through improved infrastructure, increased safety and generating revenue.

The Rekor One platform is representative of our commitment to create a safer future for everyone by enabling AI-driven decisions for the betterment of states, cities, and communities.



SOLUTION ADVANTAGES

Building a data ecosystem

The Rekor Network will allow law enforcement, municipalities and commercial entities to share vehicle recognition data across jurisdictional boundaries.

- ✓ Platform to share actionable intelligence to make cities safer and smarter
- ✓ Constantly growing ecosystem provides exponentially more valuable data
- ✓ Metadata can be extracted from the platform and anonymized to allow metadata to feed marketing insights

Figure 49 As more cameras are added to a network, its effectiveness and value increase.

D.2.1.1.4 Enforcing Motor Vehicle Insurance Laws

In addition to enhancing roadway and community safety, policing, and traffic monitoring and management, Rekor One also includes the ability to automatically enforce motor vehicle insurance laws by identifying vehicles being operated without insurance and offering their owners to enter into a “diversion” program that reduces potential punitive action, if the owner pays a lesser fee and maintains insurance going forward. The added benefits of such a diversion program are that it can reduce the number of uninsured vehicles on the road, reduce insurance premiums, increase state taxes from insurance premiums, and generate revenue for states. Rekor is currently implanting such a program for the State of Oklahoma.

D.2.1.1.5 Rekor One – Multipurpose Solution

The Rekor One platform, as described above, is representative of our commitment to create a safer future for everyone by enabling AI-driven decisions for the betterment of states, cities, and communities. As a single source of roadway intelligence for government entities, Rekor One can fractionalize costs by leveraging and expanding sensor infrastructure to maintain a safe and smart roadway network. ALPR cameras are not just cameras – they are sensors that can serve multiple useful purposes to a variety of state and local agencies beyond law enforcement including the Department of Motor Vehicles, Department of Transportation, the Department of Revenue, and the Department of Insurance.

Because our system can evolve with hardware technology improvements and is not dependent on hardware that becomes obsolete, it has the capability to provide long-term and new



solutions for the Sheriff's Department and the County. If the Sheriff's Department or County are interested in evaluating any features of Rekor One, we can make them available for testing.

D.2.1.2 A Learning Resource

If County personnel would like to learn more about ALPR best practices, we invite them to Rekor Academy, a series of on-line videos intended to enhance client's and potential client's understanding of our technology and its features. The Academy currently hosts over 20 videos and access to the Academy is offered at no-cost. Below is an example of one of the videos.

- Rekor Academy: [What is Vehicle Recognition Software?](#)

Vehicle recognition is no longer just license plate recognition. With Rekor's powerful suite of vehicle recognition tools, users are now able to identify a multitude of vehicle characteristics and behaviors. These variables include vehicle make, model, body type, color, direction of travel, and more. Additionally, these technological breakthroughs allow Rekor to surpass overly expensive and outdated ALPR systems that utilize optical character recognition and provide real-time actionable insights for customers.



Figure 50 Find out more about vehicle recognition software.



E. Appendix – Specification Sheets

In this section, Rekor provides specification sheets with pictures, and detailed information on how our products meet the requirements.

The following matrix contains information on how our Rekor Edge 300, Rekor Finder and Rekor ALPR Speed Trailer, described in the specification sheets contained herein, meet the requirements. All required specifications are listed in the center column. The left column contains a hyperlink to the respective section and paragraph number within our proposal where each requirement is addressed in detail. The right column contains a summary of how our products meet the specification.



Specification Reference to How Rekor Complies	Specification	Compliance Status and How We Meet the Requirements
3.2 LPR CAMERAS		
<u>C.3.2.1</u>	Vendor shall have LPR systems capable of being installed on a fixed object (i.e. light pole), marked patrol vehicles, covert vehicles and speed trailers	Comply – Rekor’s Edge 300 can be easily mounted to a stationary fixed object (building or pole) and these cameras are mounted on our speed trailer. Rekor’s Finder mobile ALPR cameras are installed in a vehicle.
<u>C.3.2.2</u>	Unless internally mounted, Marked patrol vehicle camera mounting brackets must be compatible with Whelen, Code3, TOMAR, Federal Signal, Arjent S2 light bars	Comply – Internally mounted – Rekor’s Finder mobile in-vehicle ALPR cameras are mounted within the vehicle and as such do not require light bar mounting.
<u>C.3.2.3</u>	Cameras shall be self-illuminating Infrared (IR) for effective license plate image capture in a variety of weather and lighting conditions	Comply – Rekor’s Edge 300 portable and trailer-mounted ALPR cameras are self-illuminating for superior night operation, and operate effectively in many low light conditions with excellent read capability in a variety of weather conditions. Finder mobile in-vehicle ALPR cameras are mounted within the vehicle.
<u>C.3.2.3.1</u>	Non-IR cameras will be accepted upon demonstration and verification of its equivalency	Comply – Rekor invites the Sheriff’s Department to test and verify our equipment.
<u>C.3.2.4</u>	LPR cameras shall be water-resistance with few moving parts that can be damaged	Comply – Rekor’s Edge 300 equipment is NEMA IP67 rated for submersion and contain few moving parts that can be damaged. Rekor’s Finder, which operates from within the vehicle, is naturally protected from wet weather by the vehicle
<u>C.3.2.5</u>	LPR cameras shall have the ability to automatically capture all variations of California license plates, to include California dealer issued plates (paper plates)LPR cameras shall have the ability to automatically capture all variations of California license plates, to include California dealer issued plates (paper plates)	Comply – Rekor’s Edge 300 and Finder ALPR camera systems can read all variations of California license plates, including the dealer issued (paper) plates as well as read all types of license plates (digitally printed, vanity, multiple and half-height characters plates) from all other 49 states, the District of Columbia and U.S. Territories, and over 85 countries, including Canada and Mexico, in both daylight and darkness.
<u>C.3.2.6</u>	Cameras shall have a dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle for verification purposes	Comply – Non-IR camera subject to demonstration and verification – The Rekor Edge 300 portable and trailer-mounted cameras provide complete capability to capture the IR image for night ALPR license plate reading as well as the color overview image (during the day) <u>without</u> the need for a dual lens configuration. The Rekor Finder mobile system operates effectively in many low light conditions without the need for a dual lens configuration (they also capture the color overview image of the target vehicle).



Specification Reference to How Rekor Complies	Specification	Compliance Status and How We Meet the Requirements
C.3.2.7	Cameras shall be sealed to NEMA 6 (IP67) standards	Comply – The Rekor Edge 300 portable and trailer-mounted ALPR cameras are IP67-rated and the in-vehicle Finder mobile systems operate from within the vehicle and as such the vehicle itself provides water protection.
C.3.2.8	Dual lens cameras shall be capable of capturing up to 60 frames per second	Comply – Rekor’s Edge 300 and Finder cameras are capable of operating at 60 frames per second for superior high-speed capture.
C.3.2.9	Cameras shall have the ability to adjust shutter, brightness, and gain settings to ensure a high-quality image regardless of weather or lighting conditions	Comply – Rekor’s Edge 300 and Finder cameras have the ability to adjust all critical image capture metrics (e.g. shutter, brightness, gain, etc.) to ensure superior image quality in a broad range of environmental conditions – and these characteristics can be monitored and adjusted remotely
C.3.2.10	The cameras shall be able to have a fixed focal point or target distance from the camera to the vehicle's license plate from 9 ½ feet to 30 feet	Comply – Rekor’s Edge 300 cameras can support short-range operation as low as 9.5 feet as well target distances well beyond 30 feet. In order to give our clients the flexibility to place cameras in convenient locations, our Edge fixed and portable ALPR cameras can capture license plates at distances up to 300 feet. Rekor’s Finder cameras have a focal distance up to 50 feet.
C.3.2.11	The camera shall be capable of various configurations to capture plates in any of the following modes depending on the configuration:	Comply – Rekor’s Edge 300 and Finder cameras can capture license plates in the configuration specifications listed below:
C.3.2.11.1	An adjacent lane on either side of the vehicle while driving through traffic and/or parking lots	Comply – Rekor’s Finder in-vehicle cameras can support reading license plates in the adjacent lanes on either side of the vehicle while driving through traffic, as well as all expected parking environments. In addition, our Finder cameras can capture license plates of vehicles travelling in the same and opposite direction as the police vehicle.
C.3.2.11.2	Traffic in an adjacent lane while parked on the side of the shoulder of a roadway	Comply – Our Finder in-vehicle mobile cameras read license plates in adjacent lanes (left or right) while parked on the side of the shoulder of a roadway.
C.3.2.11.3	Parked vehicles in parking lots	Comply – Rekor’s Finder in-vehicle mobile cameras can support reading license plates of parked vehicles in parking lots and in all expected parking environments.
C.3.2.12	Each camera shall have the ability to read more than one lane.	Comply – Rekor’s Edge 300 portable or trailer-mounted ALPR cameras can read three or more lanes. Rekor’s Finder in-vehicle mobile cameras can read two or more lanes.



Specification Reference to How Rekor Complies	Specification	Compliance Status and How We Meet the Requirements
3.3 LPR PROCESSOR		
C.3.3.1	Processor shall have a “self-trigger” mode to detect the presence of correctly mounted vehicle license plates in the camera's field of view for image capture from the camera	Comply – Unlike some traditional ALPR systems that rely on a “self-trigger” mode to detect the presence of a correctly-mounted vehicle license plate in the camera’s field of view, Rekor Edge and Finder cameras <i>monitor their field of view on a continuous basis</i> and our software is designed to recognize license plates and identify a vehicle’s characteristics using AI and machine learning
C.3.3.2	Processor's installed in vehicles shall be equipped with an intelligent Power Supply Unit (PSU) that provides for a safe start and shut-down each time the vehicle's ignition is turned on and turned off	Comply – Rekor’s Finder in-vehicle mobile systems are configured to robustly and safely support the expected on/off conditions from the vehicles ignition circuit and are equipped with a power conditioning box between the CPU and the ignition circuit to handle power surges at on/off.
C.3.3.3	Processor controls the power supplied to the cameras and provides video connection points for simplified system wiring	Comply – Rekor system processors provide power to cameras via a POE power distribution, and a central wiring point is provided for simplified installation.
C.3.3.4	Processor shall have at least four (4) LPR camera connections and multiple USB ports	Comply – Rekor’s in-vehicle mobile four-camera system can connect four (4) ALPR cameras and has six (6) USB ports, and our in-vehicle two-camera system can connect two (2) ALPR cameras and has two (2) USB ports. Edge 300 systems can connect two (2) ALPR cameras and are equipped with one (1) USB port. All camera and system configuration and data transfer can be achieved via Wi-Fi or cellular connection, and therefore our systems do not require multiple USB ports.
C.3.3.5	Vehicle mounted processors shall meet the environmental conditions associated with being mounted in a trunk	Comply – Rekor’s four-camera mobile in-vehicle system is equipped with a ruggedized graphic processing unit that is well suited for the environmental conditions associated with being mounted in the trunk of a vehicle. The two-camera mobile in-vehicle system does not require equipment to be mounted in a trunk. All of its components are mounted within the passenger compartment and are designed to withstand normal passenger compartment environmental conditions.



Specification Reference to How Rekor Complies	Specification	Compliance Status and How We Meet the Requirements
4. LPR SPEED TRAILER – COMPLETE PACKAGE		
C.4.1	Solar LPR Trailer with Speed Sign	Comply – The solar-powered Rekor ALPR Speed Trailer enables the Sheriff's Department to combine the power of Rekor's automated vehicle and license plate recognition technology with radar-speed detection. The trailer features one of the largest portable speed signs available today.
C.4.2	Solar LPR Trailer shall be able to operate at least three (3) days.	Comply – The Rekor ALPR Speed Trailer has 300-watt solar array and is able to operate for 15 days on battery backup without any solar charging.
C.4.3	Speed sign will be radar equipped	Comply – Our Speed Trailer's FCC/CE compliant radar captures speeds up to 120 miles per hour.
C.4.4	Trailer chassis	Comply – The Speed Trailer is US Department of Transportation approved, equipped with IP67-rated, lockable enclosures that protect equipment, suited for highway/residential use, compact design, can be set up in five (5) minutes, with see-through design that keeps pedestrians and road workers in view.
C.4.5	GPS antenna and minimum of 3 Generation (G)/4G or Long-Term Evolution (LTE) multiband antenna	Comply - The Speed Trailer offers a 3G/4G FirstNet-ready wireless modem.
C.4.6	Two (2) ALPR cameras IR (or its equivalent) and color	Comply – Our Speed Trailer contains two (2) ALPR cameras with integrated Rekor AI-driven ALPR technology, advanced vehicle recognition with plate, make, type and color, accuracy in daylight and all-weather conditions. Rekor's Edge 300 ALPR cameras are self-illuminating for superior night operation, and operate effectively in many low light conditions with excellent read capability in a variety of weather conditions.
C.4.7	Extended battery	Comply – Our Speed Trailer has a 15-day battery backup. Our automatic charging systems shuts down when batteries are fully charged, preventing damage, and a colling fan protects the battery charger from overheating.
C.4.8	Everything needed to transmit LPR data, such as data processor, modem, computer, power inverter.	Comply – Our Speed Trailer is provided as a fully-functioning, self-contained unit with all equipment to process ALPR data, transmit and store data, and manage power inversion.



E.1 Rekor Edge 300 Specifications Sheet



**REKOR**
AI DRIVEN DECISIONS

Rekor Edge 300

FIXED VEHICLE & LICENSE PLATE RECOGNITION

Rekor Edge is a complete vehicle recognition solution that seamlessly captures and processes vehicle data. Designed in a sleek, durable enclosure, Rekor Edge can be easily mounted to a building or pole and includes a full repair/replace warranty with no additional service fee.

FEATURES AND FUNCTIONS

- Edge recognition includes plate read, vehicle characteristics, direction of travel, vehicle count, and traffic density
- 3 lanes, 300 ft max range*
- 120 mph max capture speed*
- Accurate in day/night and all weather conditions
- Outdoor rated, IP67, NEMA4
- 4G LTE, Wi-Fi, Ethernet ready
- User dashboard available in the cloud or on-premise
- Optional solar power

*Solutions available for extreme ranges and lane coverage

Rekor Edge 300 | Fixed Vehicle & License Plate Recognition rekor.ai



REKOR EDGE SPECIFICATIONS

Recommended usage

Rekor Edge 300: Highways, Primary Roads

Coverage*

Lane coverage: 3 - 4 lanes max

Distance: 300 ft max

Speed: 120 mph max

Camera specifications

Camera resolution: 1920 x 1080 HDTV 1080p

Image compression: JPEG

Video streaming: H.264

Network security: Password, IP address filtering

IR illumination: Optimized IR w/power efficient, long-life 850 nm IR LED's

Plate search: Automated: Records, Edge, Account, and Hotlist Ingestion & Management

Communications

Communications: Ethernet, Cellular Modem

Cellular modem: 3G, 4G LTE MIMO

Cellular service: Not included

GPS: Included

Security: SSL over websockets & HTTPS

Mount & power

Mounting style: Surface, Pole

Mounting pole: Optional

Input voltage range: 9 VDC - 48 VDC

Power consumption: Average: 18W, Max: 22W

Solar power: Optional

Environmental specifications

Enclosure: Diecast aluminum, IP67

Operational temperature: -22°F to 131°F

Storage temperature: -40°F to 149°F

Warranty: Full repair/replace

*Coverage up to. Actual performance may vary.



Ready to get started?

Contact sales@rekor.ai

Rekor Systems

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Columbia, MD 21046

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info@rekor.ai
410.762.0800



E.2 Rekor Finder In-Vehicle Specification Sheet



Rekor Finder

MOBILE LICENSE PLATE & VEHICLE RECOGNITION

Rekor Finder accurately identifies license plates and vehicles in real-time at high rates of speed and extreme viewing angles. The unique interior mount design is portable to any vehicle in the fleet, allowing for full-featured LPR wherever it is needed.



FEATURES AND FUNCTIONS

- 1280x720 HD Video at 25/30 FPS
- 50 ft capture distance @ 1MP resolution
- Closing speed of up to 120 mph
- 512 GB of M.2 SSD storage
- 1.5 Teraflop NVIDIA GPU
- 4G LTE, Wi-Fi, and GPS network connectivity
- Low-profile, two camera interior mount
- Rekor Watchman software included
- Full repair/replace warranty

Rekor Finder | Mobile License Plate & Vehicle Recognition

rekor.ai



REKOR FINDER SPECIFICATIONS

Technical specifications

ALPR image capture range:	50 feet
Closing speed:	Up to 120 mph
Video resolution:	720p HD Video
Video capture rate:	25/30 FPS
Video compression format:	MPEG-4, H.264
Memory storage capacity:	512GB M.2 SSD
GPU:	1.5 teraflop NVIDIA

Electrical specifications

Input voltage range:	10 - 15 VDC
Power consumption:	20W
Operation duration:	Continuous charge

External components

Network connectivity:	4G LTE, Wi-Fi, GPS
Data comm. components:	USB3, Ethernet Ports

Mechanical specifications

Length:	9.5 inches
Width:	4 inches
Height:	2.5 inches
Weight:	3.4 pounds
Enclosure:	Anodized aluminum

Environmental specifications

Operational temperature:	-20°C to 60°C
Portability:	Mobile unit (5 min. setup)
Durability:	Impact resistant



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The Finder four-camera processor is shown below and its dimensions are L 10.2" x W 6.9" x H 3.1".





E.3 Mobile ALPR Speed Trailer Camera



Rekor ALPR Speed Trailer

PORTABLE ALPR AND SPEED DETECTION

Combine the power of Rekor's automated vehicle and license plate recognition (ALPR) technology with radar-speed detection in Rekor's ALPR Speed Trailer. The trailer features one of the largest portable speed sign available today. With standard speed display and customizable alerts and notifications, the trailer allows you to strategically place the sign in dangerous, high-risk areas to improve motorist and pedestrian safety. By adding ALPR technology, you can cover major city or localized access points for wanted vehicles, receive AMBER and Silver alerts, and accelerate investigations.



FEATURES AND FUNCTIONS



INTEGRATED WITH ACCURATE ALPR

- Integrated Rekor AI-driven ALPR technology
- Advanced vehicle recognition with plate, make, type, color
- Accurate in day/night and all-weather conditions
- Up to 120 mph capture speed



HIGH QUALITY AND EXTREMELY PORTABLE

- DOT approved
- Heavy duty security locks
- Highway and residential use
- Compact, easily portable with a 5-minute setup



FLEXIBLE COMMUNICATIONS AND POWER OPTIONS

- FCC/CE compliant Radar captures speeds up to 120mph
- 3G/4G FirstNet ready wireless modem
- Integrated GPS
- 300w solar array and up to 15-day battery backup

Rekor ALPR Speed Trailer | Portable ALPR and Speed Detection

rekor.ai



QUICK AND FLEXIBLE SETUP

- Portable system is easy to transport and deploy
- Changeable speed numbers
- Customizable speed limit setting and flashing excessive-speed message
- Localization options for speed units, mph or kmh
- Heavy-duty hand-winch with safety brake raises regulatory sign for deployment
- Locking device holds signs frame in place while operating and during transport

OPERATION READY

- Extra-large electronic speed display with full matrix of LEDs and up to three digits
- Lenses and shades over LEDs produce superior visibility
- Display flashes when a vehicle exceeds speed limit
- Radar unit is CE compliant, FCC approved
- See-through design puts pedestrians and road workers in view

DURABLE DESIGN

- DOT approved materials and design
- Durable powder-coat finish
- Heavy-duty fenders
- IP67-rated lockable control box

POWER SYSTEM

- Energy-efficient operation for extended run times
- Battery powered with solar or commercial charging
- Automatic charging system shuts down when batteries are fully charged, preventing damage
- Cooling fan protects battery charger from overheating
- Battery box can be locked to prevent unauthorized access

Compact Trailer

Deployed footprint (LxW):	106x61 in (268x154 cm)
Operating height:	123 in (312 cm)
Travel height:	91 in (231 cm)
Display cabinet size (WxH*):	26x38 in (91x95 cm)
Speed display font size:	26 in (66 cm)
Speed limit sign size (WxH):	24x30 in (61x76 cm)
Weight, approx:	870 lb (395 kg)
Power:	Batteries with solar or commercial recharging

*Height includes Your Speed sign



Ready to get started?

[Contact sales@rekor.ai](mailto:sales@rekor.ai)

Rekor Systems

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Next

Bid

COUNTY OF SAN DIEGO

SHERIFF'S DEPARTMENT REQUEST FOR BID FOR LICENSE PLATE READERS

RFB # 10684

DECEMBER 22, 2020

Motorola Solutions, Inc.
500 W Monroe Street, Ste 4400
Chicago, IL 60661-3781
USA

December 22, 2020

Punnita Dinmuong
County of San Diego – San Diego Sheriff's Department
5560 Overland Avenue, Suite 270
San Diego, CA 92123-1204

RE: RFB #10684 – Request for Bids; License Plate Readers

Dear Punnita Dinmuong,

Motorola Solutions, Inc. (Motorola Solutions) is pleased to provide the San Diego Sheriff's Department with this response focused on our industry-leading portfolio of automated license plate recognition products. We have taken great care in providing a detailed and comprehensive response package that consists of all requested sections outlined in RFB #10684.

Motorola Solutions is a global leader in video solutions and system integration with our combined portfolio of Motorola Solutions and Vigilant Solutions branded products and services which are offered in over 125 countries. Our integration experience and successful deployment history with large enterprises and government agencies will allow us to meet the San Diego Sheriff's Department's implementation timeline as referenced in the RFB. As both the manufacturer and integrator of these solutions, Motorola Solutions is in a unique position to leverage our dedicated resources to provide the Sheriff with the necessary support, during, and after system implementation.

This proposal is subject to the is subject to the clarifications and exceptions set forth herein, as well as the enclosed terms and conditions of the existing Enterprise Service Agreement, together with its attachments or a negotiated version thereof. Motorola Solutions will be pleased to address any concerns you may have regarding the proposal and/or the existing agreement.

We appreciate the opportunity to respond to this RFB and for San Diego Sheriff's Department's continued interest in Motorola Solutions' proven system offerings for automated license plate recognition. We value our long-term relationship with you and hope to strengthen it by continuing to work with the department to design and implement the optimal ALPR solution.

Motorola Solutions is pleased to address any questions or clarifications needed in regard to this response. Please direct any inquiries to your Motorola Solutions Area Sales Manager, Jerry Burch, Area Sales Manager, at (971)-219-8970 or jburch@motorolasolutions.com

Sincerely,

Jerry Burch, Area Sales Manager
MOTOROLA SOLUTIONS, INC.



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EXECUTIVE SUMMARY

Vigilant Solutions, a wholly owned subsidiary of Motorola Solutions, Inc. is known as an industry leader in Automated License Plate Recognition. Founded in 2005, Vigilant Solutions has successfully partnered with our law enforcement clients to help identify, locate and apprehend security and safety threats by utilizing innovative intelligence solutions proven to help save lives through our innovative LPR hardware, software and investigative tools. Our public safety infrastructure is driven by technology and data that delivers success across the globe.

1.1 STRATEGIC VISION OF SAN DIEGO SHERIFF

Motorola Solutions recognizes that the vision of San Diego Sheriff includes some of the following:

- Provide a state-of-the art LPR system designed to be housed in a secure CJIS compliant hosted environment.
- Provide the State with a cost-effective license plate recognition system that is delivered on time and within budget.
- Provide highly accurate, low profile LPR cameras that capture license plate images in color and infrared.

Motorola Solutions' Vigilant Solutions will not only satisfy all these requirements as described throughout our response, we will also provide the most benefit to the San Diego Sheriff Department its Law Enforcement officers and the communities they serve.

Thousands of vehicle detections alone will not solve crimes; they create more work. That is why we do more than provide detections and the ability to load a hot list. We help with the legwork by providing powerful analytics that make sense of those detections that enables San Diego Sheriff to develop targeted leads that lead to closed cases.

1.2 THE VIGILANT SOLUTIONS PLATFORM

Vigilant Solutions has worked hard to create a network of people, devices and applications for law enforcement by law enforcement and the communities they serve. Every component of the Vigilant Solutions ecosystem works together to deliver a cohesive public safety LPR solution.





1.3 LAW ENFORCEMENT DATA SHARING AND COMMERCIAL DATA

With Vigilant Solutions as your LPR provider, law enforcement agencies have 100% control over their data and whom they share their data with, if they choose to do so. Vigilant Solutions also owns and manages the single largest license plate recognition data sharing initiative that consists of over 11 billion LPR detections and is growing at a rate of over 175 million scans monthly. This data consists largely of commercial data harvested by Vigilant Solutions and made available for law enforcement consumption. This extensive LPR data set provides intangible value from an investigative perspective inside of the LEARN suite of applications. With more than 1,600 agencies and 41,000 active law enforcement users currently utilizing the LEARN platform, partnering with other local law enforcement to share data is extraordinary. The commercial data along with shared law enforcement data is comprised of nearly 20 billion detections nationwide.

Vigilant Solutions' facial recognition module is an intuitive, user-friendly system that includes a highly accurate matching algorithm. The IDP consisting of both commercial data and facial recognition will provide the state's law enforcement with a phenomenal investigative tool.

1.4 PROPOSED CAMERA HARDWARE

Vigilant's Reaper HD camera is a high definition, low profile, dual lens camera that provides high speed image processing of up to 60 images per second (Color and Infrared). Both MSI's fixed and mobile cameras offer several features including CarDetector and TAS alerts. Fixed Camera solutions complement our mobile systems and can be used to create a virtual fence, detect patterns of travel, be used as a crime deterrent and gather data at high volume locations around the city/critical infrastructure even in extreme weather conditions. We provide law enforcement purpose built LPR cameras and solutions.



1.5 LAW ENFORCEMENT ARCHIVAL REPORTING NETWORK (LEARN)

Our **LAW ENFORCEMENT ARCHIVAL REPORTING NETWORK (LEARN)** software platform offers a host of analytic and investigative tools proven to assist law enforcement's efforts in providing safe communities within San Diego Sheriff's jurisdiction. LEARN offers an exclusive application known as Locate Analysis, which is designed to provide a probabilistic assessment of where to most likely locate a suspect vehicle. In addition, LEARN offers an exclusive reporting option in its Stakeout application allowing for multiple points of interest to be defined on a map, with corresponding geo-zones and times/dates, for the location of "common plates" that are seen in more than one of the locations of interest. Coupled with Stakeout is an exclusive query utility known as Associate Analysis. A query on a known plate can be sent for Associate Analysis to identify other vehicles in close proximity to the suspect vehicle. This is very useful in identifying possible associates of a known suspect, or perhaps establishing a pattern of surveillance between a perpetrator and a victim.

1.6 CRIMINAL JUSTICE INFORMATION SYSTEM (CJIS)

Maintaining CJIS compliance is a critical component to any law enforcement solution. Vigilant Solutions' hosted environment is compliant with all relevant requirements set forth in the FBI-CJIS Security Policy. Vigilant Solutions' LPR data is hosted on secure servers in an accessed controlled facility in Virginia.

With redundancy on every level, on-site system administrators and engineers continually monitor the system to ensure that only credentialed law enforcement officers with a valid ORI have access to the data on the hosted server. Vigilant Solutions uses technical controls and mechanisms within its suite of products that facilitate privacy controls on the data and restrict access to only those that are granted access by the agency.

LEA information is not comingled, combined, or shared with any commercial database. ALPR data is the sole property of the submitting agency.

1.7 SUMMARY

1. Vigilant Solutions has worked hard to create a network of people, devices and applications for law enforcement by law enforcement and the communities they serve. Every component of the Vigilant Solutions ecosystem works together to deliver a cohesive public safety ALPR solution.
2. Vigilant is the only ALPR company with an integrated platform of commercial data which is the largest ALPR data repository in the nation. We see 18-22% of all license plates every 30 days, greatly enhancing the ability to generate an investigative lead and alerts from across the country.
3. Vigilant is the industry leader in sharing technologies backed by a commitment to privacy and CJIS standards - granular permissions allow precise management of data access privileges. We are the only platform that offers seamless sharing/receipt of Law Enforcement data nationwide. There are more than 10 Billion Law Enforcement scans available through LE data sharing.
4. Vigilant has world-class OCR capabilities and is the leader in video analytics. We own our own technology - no licensed algorithms.
5. Vigilant has superior data analytics including Stakeout, Make/Model search and Locate Analysis.
6. Law Enforcement Data Sharing and Commercial Data

San Diego Sheriff is a current customer of Vigilant Solutions and utilizes our shared data platform to successfully develop leads. San Diego Sheriff has partnered with other local law enforcement to share data (nearly every San Diego agency, every Orange County municipal agency, Riverside County Sheriff, San Bernardino Sheriff, all Imperial County agencies). With Vigilant Solutions as your ALPR provider, you will have 100% control over your data and who your agency chooses to share data with.

Vigilant Solutions also owns and manages the single largest license plate recognition data sharing initiative that consists of over 20 billion ALPR detections and is growing at a rate of over 175 million scans monthly. This data consists largely of commercial data harvested by Vigilant Solutions and made available for law enforcement consumption. This extensive ALPR data set provides intangible value from an investigative perspective inside of the LEARN suite of applications. With more than 1,600 agencies and 41,000 active law enforcement users currently utilizing the LEARN platform.

7. Vigilant Solutions is the only ALPR company that puts the power of mobile device scanning of License Plates directly into the agency's LEARN account. We are the only company with both an HTML5 and APP available to be used for data collection and analytics in a mobile environment.

1.8 EXPERIENCE

A detailed description of the Proposer's experience designing, implementing, training, and supporting similar technology systems in other local governments. Including References from Similar Projects completed within the last five (5) years.

MOTOROLA SOLUTIONS RESPONSE

Vigilant Solutions has installed and serviced, fixed and mobile ALPR assets in communities ranging in size from 2 sworn to 10,000 sworn. Vigilant Solutions has implemented over 15,000 fixed cameras throughout the US. With the ability to seamlessly integrate fixed and mobile assets into our LEARN platform the scans are available within seconds for active alerting and crime analysis. Our LEARN Platform allows for both proactive policing and criminal investigations.

1.9 REFERENCES

References of similar projects are provided below.

1.9.1 Reference 1: Torrance Police Department ALPR Program

Torrance Police Department ALPR Program	
Contact Name	Captain Mark Athan mathan@torrance.gov
Project Description	40 Fixed Cameras, 3 Mobile Units, 1 Covert Unit
Phone	310-415-2178

1.9.2 Reference 2: Los Angeles Sheriff's Department ALPR Program

Los Angeles Sheriff's Department ALPR Program	
Contact Name	Deputy Sam Paul sspaul@lasd.org
Project Description	Many Deployment's Directly with the Sheriff and with Contract Cities, Includes Fixed, Mobile, Trailers, and more.
Phone	323-829-0072

1.9.3 Reference 3: San Bernardino Sheriff's Department ALPR Program

San Bernardino Sheriff's Department ALPR Program	
Contact Name	Jenny Anderson janderson@sbcasd.org
Project Description	Many Deployment's Directly with the Sheriff and with Contract Cities, Includes Fixed, Mobile, Trailers, and more
Phone	909-387-3517



SECTION A

COVER PAGE, CERTIFICATIONS AND INDEMNIFICATION AGREEMENT

A.1 COVER PAGE (P&C 600 FORM)

The Cover page (P&C 600 Form) is provided below.

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB # 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION A: COVER PAGE (P&C 600 FORM)

COUNTY OF SAN DIEGO
SECTION A-P&C 600 FORM
This is not an order

Issued: December 14, 2020

MAIL OR DELIVER TO:

COUNTY OF SAN DIEGO, RFB No. 10684
DEPARTMENT OF PURCHASING & CONTRACTING
5560 OVERLAND AVE., SUITE 270
SAN DIEGO, CA 92123

AWARD WILL BE MADE TO THE LOWEST RESPONSIVE,
RESPONSIBLE BIDDER BASED ON

- ☐ ALL OR NONE
☐ EACH LOT
☒ TOTAL PRICE
☐ OTHER (SEE PRICING SCHEDULE)

UNSPSC commodity code: 461716.0000

FOR INFORMATION, PLEASE CONTACT:

PUNNITA DINMUONG, ASSISTANT PROCUREMENT SPECIALIST
PUNNITA.DINMUONG@SDCOUNTY.CA.GOV

Bid OPENING DATE: DECEMBER 22, 2020

**BIDS MUST BE RECEIVED AT THE ABOVE ADDRESS
PRIOR TO 11:00 A.M. ON DATE OF BID OPENING.**

PLEASE STATE YOUR LOWEST PRICE
F.O.B. DESTINATION AND BRAND NAME
OR TRADE NAME IF APPLICABLE.

(Please use typewriter or black ink)

YOUR ENVELOPE MUST INCLUDE RFB No. 10684

DESCRIPTION

THE COUNTY OF SAN DIEGO (COUNTY), SHERIFF'S DEPARTMENT HAS A REQUIREMENT FOR LICENSE PLATE READERS IN ACCORDANCE WITH THE TERMS & CONDITIONS AND THE STATEMENT OF WORK REFLECTED HEREIN.

INITIAL TERM: DATE OF AWARD – JANUARY 31, 2022
1ST OPTION YEAR: FEBRUARY 1, 2022 – JANUARY 31 2023
2ND OPTION YEAR: FEBRUARY 1, 2023 – JANUARY 31, 2024

PRICING SUBMITTED IS TO REMAIN FIRM FIXED FOR THE TERM PERIOD IDENTIFIED ABOVE. ALL ITEMS WITHIN EACH TERM PERIOD MUST BE PRICED TO BE CONSIDERED RESPONSIVE. AWARD WILL BE MADE TO THE LOWEST RESPONSIVE, RESPONSIBLE OFFEROR BASED ON THE TOTAL PRICE. OFFEROR WHO SUBMITS THE LOW BID WILL BE DEEMED RESPONSIBLE BASED ON THE RESULTS OF THE PRE-AWARD SURVEY.

ARE YOU ABLE TO COMPLY WITH ALL ITEMS SPECIFIED WITHIN THE SCOPE OF WORK? YES X OR NO

BIDDER ACKNOWLEDGES ADDENDUM NO. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

SUBJECT TO ACCEPTANCE WITHIN 90 DAYS NAME AND ADDRESS OF BIDDER Motorola Solutions, Inc. STREET, CITY, STATE, ZIP 10680 Trenea Street, San Diego, CA., 92131 TELEPHONE: NUMBER () (971) 219-8970 FAX TELEPHONE: () E-MAIL: jburch@motorola Solutions, Inc.	PAYMENT TERMS NET 30 DAYS OR % DAY NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER:  12/22/2020 SIGNATURE OFFEROR DATE PRINTED NAME: Jerry Burch PRINTED TITLE: Area Sales Manager
---	--

NOTIFICATION OF AWARD

ACCEPTANCE AS TO ITEM(S) NUMBERED: (VC No.)	(THIS SECTION FOR COUNTY USE ONLY) COUNTY OF SAN DIEGO BY: _____ DATE: _____ JOHN M. PELLEGRINO, DIRECTOR DEPT OF PURCHASING & CONTRACTING NAME AND TITLE OF CONTRACTING OFFICER
---	---

TOTAL AMOUNT AWARD No.
P&C 600 Form

A.2 REPRESENTATIONS AND CERTIFICATIONS FORM

The Representations and Certifications Form is provided below.

County of San Diego
Department of Purchasing and Contracting
REPRESENTATIONS AND CERTIFICATIONS

The following representations and certifications are to be completed, signed and returned with the offer (the term "offer" includes a bid, proposal, quote, statement of qualifications, or any other submission to provide goods and/or services).

1. BUSINESS TYPE

☒ For-profit ☐ Non-profit ☐ Government

2. INTERLOCKING DIRECTORATE

In accordance with Board of Supervisors Policy A-79, if Offeror is a non-profit and will be subcontracting with a related for-profit entity where an interlocking directorate, management or ownership relationship exists, Offeror must list all such entity(ies) on an attached separate sheet, and authorization must be sought from Board of Supervisors. If Offeror is a non-profit and does not submit such a list, Offeror certifies it has not entered into a subcontract relationship with a related for-profit entity.

List Attached? Yes ☐

3. BUSINESS REPRESENTATION

Offeror represents as a part of this offer the following information regarding the ownership, operation, and control of its business:

3.1. Are you a local business with a physical address within the County of San Diego? ☐ Yes ☐ No

3.2. Are you certified by the State of California as a:

☐ Disabled Veteran Business Enterprise(DVBE)

Certification #: _____

☐ Small Business Enterprise (SBE)

Certification #: _____

3.3. Are you certified by the U.S. Dept Of Veterans' Affairs as:

☐ Veteran Owned Small Business (VOSB)

Certification # _____

☐ Service Disabled Veteran Owned Small Business (SDVOSB)

Certification # _____

3.4. Estimated percentage of work in this offer to be performed or fulfilled locally (within the geographic boundaries of the County of San Diego): 100 %

4. DEBARMENT, SUSPENSION, AND RELATED MATTERS

4.1. Offeror certifies to the best of its knowledge that neither it nor any of its officers:

4.1.1. Are presently debarred, suspended, declared ineligible, or voluntarily excluded from covered transactions by any state, local, or federal department or agency.

4.1.2. Have within a three (3) year period preceding this agreement been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

4.2. Except as allowed for in Section 4.2.5, Offeror hereby certifies to the best of its knowledge that neither it nor any of its officers:

4.2.1 Are presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with the commission of any of the offenses enumerated in paragraph 4.1.2 of this certification;

4.2.2 Have within a three (3) year period preceding this agreement had one or more public transactions (federal, state or local) terminated for cause or default;

4.2.3 Are presently the target or subject of any investigation, accusation or charges by any federal, state or local agency or law enforcement, licensing, certification, ethics, or compliance body;

4.2.4 Are proposed for debarment by any state, local, or federal department or agency.

4.2.5 If Offeror is unable to certify Sections 4.2.1, 4.2.2, 4.2.3, or 4.2.4, it certifies that it has disclosed and attached to this Representations and Certifications the reason(s) it cannot do so. The disclosure must include the Section(s), specific relevant facts including dates, contracts, individuals involved, status of actions, and any other relevant information that prevent it from making the requested certification(s). The County reserves the right to disqualify an Offeror based upon information disclosed.

Disclosure Attached? Yes ☐

5. RELATED WORK

Offeror certifies to the best of its knowledge that, other than as disclosed in an attached separate sheet, it and its proposed subcontractors, agents, and consultants have not previously contracted with the County to perform work on or related to this project (e.g. preparing related studies or recommendations, components of the statement of work, or plans and specifications).

Disclosure Attached? Yes ☐

6. CURRENT COST OR PRICING

Offeror certifies to the best of its knowledge that cost and/or pricing data submitted with this offer, or specifically identified by reference if actual submission of the data is impracticable, are accurate, complete, and current as of the date signed below.

7. INDEPENDENT PRICING

Offeror certifies that in relation to this offer:

7.1. The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with other offerors, with any competitors, or with any County employee(s) or consultant(s) involved in this or related procurements;

7.2. Unless otherwise required by law, the prices that have been quoted in this offer have not been knowingly disclosed by the Offeror and will not knowingly be disclosed by the Offeror prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other Offeror or to any competitor or with any County employee(s) or consultant(s) involved in this or related procurements; and

7.3. No attempt has been made or will be made by the Offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.


8. ADDITIONAL DISCLOSURES

Offeror shall report in writing to the County Department of Purchasing and Contracting within five business days of discovering or having any reason to suspect any change in status as certified in the preceding paragraphs. Upon County's request, Offeror shall provide additional information supporting Offeror's Representations and Certifications. Offeror's obligations under this Section 8 shall continue until Offeror is no longer under consideration for award of a contract, or until termination or expiration of any resulting contract(s).

CERTIFICATION

The information furnished in Paragraphs 1 through 8 and in the accompanying offer is certified to be factual and correct as of the date submitted and this certification is made under penalty of perjury under the laws of the State of California.

Name: Jerry Burch

Signature: 

Title: Area Sales Manager

Date: December 22, 2020

Company/Organization: Motorla Solutions, Inc.

SUBMIT THIS FORM AS DIRECTED IN THE REQUEST FOR SOLICITATION DOCUMENTS OR WITH THE OFFER

A.3 NONDISCLOSURE INDEMNIFICATION AGREEMENT FORM

The Nondisclosure Indemnification Agreement is provided below.

COUNTY OF SAN DIEGO
NONDISCLOSURE INDEMNIFICATION AGREEMENT

IF OFFEROR SUBMITS EXHIBIT CONFIDENTIAL/PROPRIETARY, THE FOLLOWING NONDISCLOSURE INDEMNIFICATION AGREEMENT MUST BE COMPLETED, SIGNED AND RETURNED WITH THE OFFER

This indemnification agreement ("Agreement") is made and entered into by and between the County of San Diego ("County") and Offeror Company/Organization Name: Motorola Solutions, Inc.
("Offeror") with reference to the following facts: _____


WHEREAS the County may receive a request for disclosure of Offeror's submission under the California Public Records Act, Government Code Section 6250, et seq.; and

WHEREAS, Offeror has included in its submission an exhibit entitled "*EXHIBIT – CONFIDENTIAL/PROPRIETARY*" containing records that Offeror has determined to constitute trade secrets or other proprietary information exempt from disclosure under the California Public Records Act; and

WHEREAS the County requires defense and indemnity from Offeror for the County's ongoing non-disclosure of Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*;

NOW, THEREFORE, for good and valuable consideration and the mutual promises contained herein, the parties agree to the following:

1. The above recitals are incorporated herein by this reference.
2. Except as otherwise provided herein, the County will not release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* based on Offeror's representation that the records contained therein are proprietary and exempt from disclosure under the California Public Records Act and/or are trade secrets as that term is defined in Government Code Section 6250, et seq. Notwithstanding the foregoing, however, the County may release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* in the event of any of the following:
 - a. Offeror fails to comply with the terms and conditions of this Agreement; or
 - b. Offeror provides the County with written notice that some or all of the records may be released; or
 - c. A court of competent jurisdiction orders the County to release the records and the County has exhausted or waived its appeal rights.
3. To the fullest extent allowed by law, the County shall not be liable for, and Offeror shall defend and indemnify County and its Board of Supervisors, officers, directors, employees and agents of County (collectively "County Parties"), against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees (whether incurred by County attorneys or attorneys employed by County) and court costs (hereinafter collectively referred to as "Claims"), related to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.
4. Offeror waives any and all claims in law or equity and hereby releases the County Parties from any and all claims, deductibles, self-insured retentions, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs, which arise out of or are in any way connected to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.

TO BE COMPLETED BY AN AUTHORIZED REPRESENTATIVE OF THE OFFEROR	
Offeror Company/Organization Name:	<u>Motorola Solutions, Inc.</u>
Authorized Representative Name:	<u>Jerry Burch</u>
Authorized Representative Title:	<u>Area Sales Manager</u>
Signature: <u></u>	Date: <u>December 22, 2020</u>

SECTION B

SUBMITTING BID AND PRE-AWARD SURVEY REQUIREMENTS

B.1 COMPLETING AND SUBMITTING BID AND PRE-AWARD SURVEY REQUIREMENTS

RFB Section B. The County reserves the right to perform a pre-award survey of the bidder to determine capability to perform, including but not limited to insurability, staffing, equipment, experience, references, past performance, financial stability, certification, and the submission of documentation as requested in the Pre-Award Survey (Section B, Paragraph C7). The determination of the County as to the bidder's prospective ability to perform the contract shall be conclusive.

MOTOROLA SOLUTIONS RESPONSE

Understood.

RFB # C7. The County will conduct a pre-award survey of the apparent low bidder. This survey will be used to determine the bidders' capacity to perform under this contract. Items that will be considered will include the contractor's licenses, insurability, staffing, facilities, equipment, supplies, current financial statements, references, and performance history.

MOTOROLA SOLUTIONS RESPONSE

Understood.

SECTION C

SAMPLE CONTRACT

C.1 CLARIFICATIONS AND EXCEPTIONS

RFB Section C.9

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: Motorola complies with the clarification that in the event its response is the only one received for this RFP, Motorola's negotiations would be limited to listed price only and not profit margin. If awarded, Motorola would provide the County with Commercial Off the Shelf license plate solution, a commercial item available to its customers. As a publicly traded corporation, Motorola will not disclose its internal cost or pricing information.

RFB # 21. Indemnity.

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: Motorola agrees to the concept of indemnity as outlined in the County's agreement and proposes the following edits:

County shall not be liable for, and Vendor shall defend and indemnify County and the employees and agents of County collectively, "County Parties") against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, changes or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as "Claims"), related to or arising out of this purchase order **for personal injury, death and direct damage to tangible property**, and arising ~~either~~ directly ~~or indirectly~~ from any act, error, omission or negligence of Vendor or its contractors, licensees, agents, servants, or employees **while performing their duties under this agreement**, ~~including Claims caused by the concurrent negligent act, error or omission of County Parties~~. However, Vendor shall have no obligation to defend or indemnify County Parties against Claims (i) to the extent they arise from the active concurrent negligence of County Parties, or (ii) caused by the sole negligence or willful misconduct of County Parties. County will give Vendor prompt, written notice of any claim or suit. County will cooperate with Vendor in its defense or settlement of the claim or suit. This Section sets forth the full extent of Vendor's general indemnification of County from liabilities that are in any way related to Vendor's performance under this agreement.

RFB # 25.2 Cost or pricing data.

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: Motorola's proposed pricing enclosed in its response to this RFP is based on discounts against its list pricing. Therefore, while Motorola acknowledges the County's right to audit certain Motorola books and records to verify Motorola's performance on the contract, it requests the following clarification to the language outlined herein:

If the Contractor submitted cost or pricing data in connection with the pricing of this contract or any change or modification thereto, unless such pricing was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities of the general public, or prices set by law or regulation, the Contracting Officer or his representatives who are employees of the County or its agent shall have the right to examine all **directly pertinent** books, records, documents and other data of the Contractor related to the negotiation pricing or performance of such contract, change or modification, for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data submitted. **For the avoidance of doubt, 'cost or pricing data' as contemplated in this section means Contractor's published pricing provided to County. In no circumstances will Contractor be required to create or maintain documents not kept in the ordinary course of Contractor's business operations, nor will Contractor be required to disclose any information, including but not limited to product cost data, which it considers confidential or proprietary to Contractor.**

RFB # 29. Insurance.

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: Motorola will comply with the County's insurance requirements with the clarifications included on the attached redlined RFP Section C Exhibit B.

RFB # 44. Subcontractor for work or services.

MOTOROLA SOLUTIONS RESPONSE

Comply: Motorola proposes to utilize the services of a subcontractor as identified in its proposal for the mobile installation.

RFB # 52.2. Subcontracting Requirements.

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: Motorola will utilize the services of a Subcontractor for mobile installation subject to its subcontract agreement with the Subcontractor. Motorola will flow through, to the extent permitted, the Subcontractor requirements described herein. Motorola asserts and clarifies its subcontract agreement is its proprietary and confidential information that is not released externally and not subject to Director approval.

Motorola is not engaging the services of an equipment rental firm as defined in this section and if awarded the opportunity, proposes removing the equipment rental firm requirements as not applicable to Motorola's scope of work under the agreement.

**RFB Exhibit D Federal Grant Requirements.
RFB # D.**

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: If selected for award, Motorola would be providing a commercial item available to its customers. Motorola therefore considers the requirements rights to inventions as described in this section are not applicable.

RFB # H.

MOTOROLA SOLUTIONS RESPONSE

Exception. Motorola asserts it does not perform under Cost Accounting Standards ("CAS") covered contracts; (ii) does not accept contracts where cost or pricing data is required to be provided; (iii) does not need to have and maintain an estimating system such as described in DFARS 252.215-7002; (iv) does not generate labor hour estimates from an estimating system; (v) does not provide cost information; and (vi) does not calculate or submit cost-based indirect or labor rates so it cannot agree to be bound by the Uniform Administration Requirements of 2 CFR Part 200. Additionally, Motorola cannot agree to terms and conditions imposed by any federal agency without the ability to review such terms and conditions to ensure compliance so we respectfully request deletion of this clause.

In addition to its clarifications and exceptions, Motorola includes the attached supplemental contract terms (Section C.2) as part of its proposal and anticipates incorporation of these terms in the final contract to be negotiated between the parties. These terms provide the contractual provisions required for software licensing, camera license keys, and the use of LEARN.

C.2 SUPPLEMENTAL TERMS AND CONDITIONS

Please see the attached Motorola Enterprise Service Agreement (ESA) and Equipment Purchase Addendum.

Enterprise Service Agreement (ESA)

This Enterprise Service Agreement (the "Agreement") is made and entered into as of this _____ Day of _____, 202_ by and between Motorola Solutions, Inc. ("Motorola"), a Delaware corporation, _____ and County of San Diego, a law enforcement agency (LEA) or other governmental agency, having its principal place of business at 5560 Overland Avenue, Suite 270, San Diego, CA 92123 ("Customer").

WHEREAS, Motorola designs, develops, licenses and services advanced video analysis software technologies for the law enforcement and security markets;

WHEREAS, Motorola provides access to license plate data as a value-added component of the Vigilant law enforcement package of license plate recognition equipment and software;

WHEREAS, Customer will separately purchase License Plate Recognition (LPR) hardware components from Motorola for use with the Software Products (as defined below);

WHEREAS, Customer desires to license from and receive service for the Software Products provided by Motorola;

WHEREAS, Customer may elect to purchase LPR hardware components, professional or subscription services in addition to the license and service for the Software Products and related services. Any such services will be governed by the terms in the applicable Addendum containing terms specific to such service. Such Addenda will be labeled with the name of the service being purchased;

THEREFORE, In consideration of the mutual covenants contained herein this Agreement, Customer and Motorola hereby agree as follows:

I. Definitions:

"Addendum (Addenda)" is the title of the document(s) containing a specific set of terms and conditions applicable to a particular service or other offering beyond the Software Products contemplated in the Enterprise Service Agreement. The terms in the Addendum are applicable only to the specific service or offering described therein.

"Booking Images" refers to both LEA Booking Images and Commercial Booking Images.

“CJIS Security Policy” means the FBI CJIS Security Policy document as published by the FBI CJIS Information Security Officer.

“CLK” or **“Camera License Key”** means an electronic key that will permit each license of Motorola’s CarDetector brand LPR software or FaceAlert brand facial recognition software (one CLK per camera) to be used with other Motorola approved and licensed LPR hardware components (i.e., cameras and other hardware components provided by Motorola) and Software Products. CLKs shall be not issuable and if issued in error shall be removed and immediately rendered null and void for cameras and other hardware components that are not Motorola-authorized cameras and other hardware.

“Commercial Booking Images” refers to images collected by commercial sources and available on LEARN with a paid subscription.

“Commercial LPR Data” refers to LPR data collected by private sources and available on LEARN with a separately paid subscription.

“Criminal Justice Information Services Division” or **“CJIS”** means the FBI division responsible for the collection, warehousing, and timely dissemination of relevant CJI to the FBI and to qualified law enforcement, criminal justice, civilian, academic, employment, and licensing agencies.

“Effective Date” means sixty (60) days subsequent to the date set forth in the first paragraph of this Agreement.

“Enterprise License” means a non-exclusive, non-transferable license to install and operate the Software Products, on applicable media provided by Vigilant. This Enterprise Service Agreement allows Customer to install the Software Products on such devices, in accordance with the selected Service Package(s), and allow benefits of all rights granted hereunder this Agreement.

“LEA Booking Images” refers to images collected by LEAs and available on the Software Service for use by other LEAs. LEA Booking Images are freely available to LEAs at no cost and are governed by the contributing LEA’s policies.

“LEA LPR Data” refers to LPR data collected by LEAs and available on LEARN for use by other LEAs. LEA LPR Data is freely available to LEAs at no cost and is governed by the contributing LEA’s retention policy.

“Service Fee” means the amount due from Customer prior to the renewal of this Agreement as consideration for the continued use of the Software Products and Service Package benefits according to Section VIII of this Agreement.

“Service Package” means the Customer designated service option(s) which defines the extent of use of the Software Products, in conjunction with any service and/or benefits therein granted as rights hereunder this Agreement.

“Service Period” has the meaning set forth in Section III (A) of this Agreement.

“Software Products” means Motorola’s Law Enforcement & Security suite of Software Products including CarDetector, Law Enforcement Archival & Reporting Network (LEARN), PlateSearch, Mobile Companion for Smartphones, Target Alert Service (TAS) server/client alerting package, FaceSearch, FaceAlert, and other software applications considered by Motorola to be applicable for the benefit of law enforcement and security practices. Software Products shall only be permitted to function on approved Motorola cameras and other hardware components provided by Motorola. Software Products shall not be permitted to operate on third-party provided or not Motorola-authorized hardware components, and if found to be operating on third-party provided hardware components Software Products shall be promptly removed by Customer.

“Technical Support Agents” means Customer’s staff person specified in the Contact Information Worksheet of this Agreement responsible for administering the Software Products and acting as Customer’s Software Products support contact.

“User License” means a non-exclusive, non-transferable license to install and operate the LPR Software Products, on applicable media, limited to a single licensee.

“Users” refers to individuals who are agents and/or sworn officers of the Customer and who are authorized by the Customer to access LEARN on behalf of Customer through login credentials provided by Customer.

II. Enterprise License Grant; Duplication and Distribution Rights:

Subject to the terms and conditions of this Agreement, Motorola hereby grants Customer an Enterprise License to the Software Products for the Term provided in Section III below. Except as expressly permitted by this Agreement, Customer or any third party acting on behalf of Customer shall not copy, modify, distribute, loan, lease, resell, sublicense or otherwise transfer any right in the Software Products. Except as expressly permitted by this Agreement, no other rights are granted by implication, estoppels or otherwise. Customer shall not eliminate, bypass, or in any way alter the copyright screen (also known as the “splash” screen) that may appear when Software Products are first started on any computer. Any use or redistribution of Software Products in a manner not explicitly stated in this Agreement, or not agreed to in writing by Motorola, is strictly prohibited.

III. Term; Termination.

A. Term. The initial term of this Agreement is for one (1) year beginning on the Effective Date (the “Initial Term”), unless earlier terminated as provided herein. Sixty (60) days

prior to the expiration of the Initial Term and each subsequent Service Period, Motorola will provide Customer with an invoice for the Service Fee due for the subsequent twelve (12) month period (each such period, a "Service Period"). This Agreement and the Enterprise License granted under this Agreement will be extended for a Service Period upon Customer's payment of that Service Period's Service Fee, which is due 30 days prior to the expiration of the Initial Term or the existing Service Period, as the case may be. Pursuant to Section XIII below, Customer may also pay in advance for more than one Service Period.

B. Customer Termination. Customer may terminate this Agreement at any time by notifying Motorola of the termination in writing thirty (30) days prior to the termination date and deleting all copies of the Software Products. If Customer terminates this Agreement prior to the end of the Initial Term, Motorola will not refund or prorate any license fees, nor will it reduce or waive any license fees still owed to Motorola by Customer. Upon termination of the Enterprise License, Customer shall immediately cease any further use of Software Products. Customer may also terminate this agreement by not paying an invoice for a subsequent year's Service Fee within sixty (60) days of invoice issue date.

C. Motorola Termination. Motorola has the right to terminate this Agreement by providing thirty (30) days written notice to Customer. If Motorola's termination notice is based on an alleged breach by Customer, then Customer shall have thirty (30) days from the date of its receipt of Motorola's notice of termination, which shall set forth in detail Customer's purported breach of this Agreement, to cure the alleged breach. If within thirty (30) days of written notice of violation from Motorola Customer has not reasonably cured the described breach of this Agreement, Customer shall immediately discontinue all use of Software Products and certify to Motorola that it has returned or destroyed all copies of Software Products in its possession or control. If Motorola terminates this Agreement prior to the end of a Service Period for breach, no refund for any unused Service Fees will be provided. If Motorola terminates this Agreement prior to the end of a Service Period for no reason, and not based on Customer's failure to cure the breach of a material term or condition of this Agreement, Motorola shall refund to Customer an amount calculated by multiplying the total amount of Service Fees paid by Customer for the then-current Service Period by the percentage resulting from dividing the number of days remaining in the then-current Service Period, by 365.

IV. Warranty and Disclaimer; Infringement Protection; Use of Software Products Interface.

A. Warranty and Disclaimer. Motorola warrants that the Software Products will be free from all Significant Defects (as defined below) during the term of this Agreement (the "Warranty Period"). "Significant Defect" means a defect in a Software Product that impedes the primary function of the Vigilant Software Product. This warranty does not include products not manufactured by Motorola. Motorola will repair or replace any Software Product with a Significant Defect during the Warranty Period; *provided, however*, if Motorola cannot substantially correct a Significant Defect in a commercially reasonable manner, Customer may terminate this Agreement and Motorola shall refund to Customer an amount calculated by multiplying the total amount of Service Fees paid by Customer for the then-current Service

Period by the percentage resulting from dividing the number of days remaining in the then-current Service Period, by 365. The foregoing remedies are Customer's exclusive remedy for defects in the LPR Software Product. Motorola shall not be responsible for labor charges for removal or reinstallation of defective software, charges for transportation, shipping or handling loss, unless such charges are due to Motorola's gross negligence or intentional misconduct. **MOTOROLA DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR ANY DAMAGES WHATSOEVER ARISING OUT OF THE USE OF, OR INABILITY TO USE, THE SOFTWARE PRODUCTS.**

B. Infringement Protection. If an infringement claim is made against Customer by a third-party in a court of competent jurisdiction regarding Customer's use of any of the Software Products, Motorola shall indemnify Customer, and assume all legal responsibility and costs to contest any such claim. If Customer's use of any portion of the Software Products or documentation provided to Customer by Motorola in connection with the Software Products is enjoined by a court of competent jurisdiction, Motorola shall do one of the following at its option and expense within sixty (60) days of such enjoinder: (1) Procure for Customer the right to use such infringing portion; (2) replace such infringing portion with a non-infringing portion providing equivalent functionality; or (3) modify the infringing portion so as to eliminate the infringement while providing equivalent functionality.

C. Use of Software Products Interface. Under certain circumstances, it may be dangerous to operate a moving vehicle while attempting to operate a touch screen or laptop screen and any of their applications. It is agreed by Customer that Customer's users will be instructed to only utilize the interface to the Software Products at times when it is safe to do so. Motorola is not liable for any accident caused by a result of distraction such as from viewing the screen while operating a moving vehicle.

V. Software Support, Warranty and Maintenance.

Customer will receive technical support by submitting a support ticket to Motorola's company support website or by sending an email to Motorola's support team. Updates, patches and bug fixes of the Software Products will be made available to Customer at no additional charge, although charges may be assessed if the Software Product is requested to be delivered on physical media. Motorola will provide Software Products support to Customer's Technical Support Agents through e-mail, fax and telephone.

VI. Camera License Keys (CLKs).

Customer is entitled to use of the Software Products during the term of this Agreement to set up and install the Software Products on an unlimited number of media centers within Customer's agency in accordance with selected Service Options. As Customer installs additional units of the Software Products and connects them to LPR cameras, Customer is required to obtain a Camera License Key (CLK) for each camera installed and considered in active service. A CLK

can be obtained by Customer by going to Motorola's company support website and completing the online request form to Motorola technical support staff. Within two (2) business days of Customer's application for a CLK, Customer's Technical Support Agent will receive the requested CLK that is set to expire on the last day of the Initial Term or the then-current Service Period, as the case may be.

VII. Ownership of Software.

A. Ownership of Software Products. The Software Products are copyrighted by Motorola and remain the property of Motorola. The license granted under this Agreement is not a sale of the Software Products or any copy. Customer owns the physical media on which the Software Products are installed, but Motorola retains title and ownership of the Software Products and all other materials included as part of the Software Products.

B. Rights in Software Products. Motorola represents and warrants that: (1) it has title to the Software Products and the authority to grant license to use the Software Products; (2) it has the corporate power and authority and the legal right to grant the licenses contemplated by this Agreement; and (3) it has not and will not enter into agreements and will not take or fail to take action that causes its legal right or ability to grant such licenses to be restricted.

VIII. Data Sharing, Access and Security.

If Customer is a generator as well as a consumer of LPR Data, Customer at its option may share its LEA LPR Data with similarly situated LEAs who contract with Motorola to access LEARN (for example, LEAs who share LEA LPR Data with other LEAs). Motorola will not share any LEA LPR Data generated by the Customer without the permission of the Customer.

Motorola has implemented procedures to allow for adherence to the FBI CJIS Security Policy. The hosting facility utilizes access control technologies that meet or exceed CJIS requirements. In addition, Motorola has installed and configured network intrusion prevention appliances, as well as ensured that the configuration of the Microsoft environment adhere to the Windows Server Security Guide.

IX. Ownership and use of Data.

Motorola retains all title and rights to Commercial LPR Data and all Commercial Booking Images. Users shall not utilize Commercial LPR Data or Commercial Booking Images on the behalf of other local, state or Federal LEAs. Customer retains all rights to LEA LPR Data and LEA Booking Images generated by the Customer. Should Customer terminate agreement with Motorola, a copy of all LEA LPR Data and LEA Booking Images generated by the Customer will be created and provided to the Customer.

After the copy is created, all LEA LPR Data and LEA Booking Images generated by the Customer will be deleted from LEARN at the written request of an authorized representative of the Customer or per the Customer's designated retention policy, whichever occurs first.

Commercial LPR Data, Commercial Booking Images, LEA LPR Data and LEA Booking Images should be used by the Customer for law enforcement purposes only.

X. Loss of Data, Irregularities and Recovery.

Motorola places imperative priority on supporting and maintaining data center integrity. Using redundant disk arrays, there is a virtual guarantee that any hard disk failure will not result in the corruption or loss of the valuable LPR data that is essential to the LEARN system and clients.

XI. Data Retention and Redundancy.

LEA LPR Data and LEA Booking Images are governed by the contributing LEA's retention policy. LEA LPR Data that reaches its expiration date will be deleted from LEARN. Motorola's use of redundant power sources, fiber connectivity and disk arrays ensure no less than 99% uptime of the LEARN LPR database server system.

XII. Account Access.

A. Eligibility. Customer shall only authorize individuals who satisfy the eligibility requirements of "Users" to access LEARN. Motorola in its sole discretion may deny access to LEARN to any individual based on such person's failure to satisfy such eligibility requirements. User logins are restricted to agents and sworn officers of the Customer. No User logins may be provided to agents or officers of other local, state, or Federal LEAs without the express written consent of Motorola.

B. Security. Customer shall be responsible for assigning an Agency Manager who in turn will be responsible for assigning to each of Customer's Users a username and password (one per user account). A limited number of User accounts is provided. Customer will cause the Users to maintain username and password credentials confidential and will prevent use of such username and password credentials by any unauthorized person(s). Customer shall notify Motorola immediately if Customer believes the password of any of its Users has, or may have, been obtained or used by any unauthorized person(s). In addition, Customer must notify Motorola immediately if Customer becomes aware of any other breach or attempted breach of the security of any of its Users' accounts.

C. CJIS Requirements. Customer certifies that its LEARN users shall comply with the CJIS requirements outlined in Exhibit B.

XIII. Service Package, Fees and Payment Provisions.

A. Service Package. This Enterprise License Agreement is based on one (1) of the three (3) following Service Package Options. Please select one (1) Service Package below:

☐ Service Package - Basic LPR Service Package:

- Vigilant Managed/Hosted LPR server LEARN Account
- Access to all Vigilant Software including all upgrades and updates
- Unlimited user licensing for the following applications:
 - LEARN, CarDetector and TAS

☐ Service Package - Option # 1 – Standard LPR Service Package:

- All Basic Service Package benefits
- Unlimited use of CarDetector – Mobile Hit Hunter (CDMS-MHH)
- Unlimited use of Vigilant's LPR Mobile Companion smartphone application

☐ Service Package - Option # 2 – 'Intelligence-Led Policing (ILP)' Service Package:

- All Service Package Option # 1 benefits
- Mobile LPR hardware up to level of Tier (see Exhibit A)
- Use of Vigilant Facial Recognition technologies up to level of Tier
 - FaceSearch Account
 - FaceSearch Mobile Companion
 - Templates up to limit for FaceSearch Account (details in Exhibit A)
- Tiered based on size of department (Tier 1A up to 50 sworn officers Tier 1 up to 100 sworn officers, Tier 2 up to 200 sworn officers, Tier 3 up to 500 sworn officers, Tier 4 up to 1,000 sworn officers, Tier 5 up to 1,500 sworn officers, Tier 6 up to 2,000 sworn officers)
- States, Federal Agencies, and Departments with greater than 2,000 sworn fall under a, "Custom" Tier which will be defined in the Annual Service Fee Schedule if applicable.

B. Service Fee. Payment of each Service Fee entitles Customer to all rights granted under this Agreement, including without limitation, use of the Software Products for the relevant Service Period, replacement of CLKs, and access to the updates and releases of the Software Products and associated equipment driver software to allow the Software Products to remain current and enable the best possible performance. The annual Service Fee due for a particular Service Period is based on the number of current Motorola issued CLK's at the time of Service Fee invoicing, and which will be used by Customer in the upcoming Service Period. A schedule of annual Service Fees is shown below:

Annual Service Fee Schedule (multiplied by number of CLK's Issued)					
Total # of CLK's under this ESA	0-14 CLK's	15-30 CLK's	31-60 CLK's	Over 60	
Basic Service	\$525.00	\$450.00	\$400.00	\$275.00	
Standard (Option # 1)	\$750.00	\$640.00	\$565.00	\$390.00	
ILP Subscriber CLK Renewal Fees	\$525.00	\$450.00	\$400.00	\$275.00	

Intelligence-Led Policing Service Package Annual Fee Schedule			
Tier	Mobile	Fixed	
ILP Tier 1B (Option #2)	\$ 11,750.00	\$ 22,250.00	
ILP Tier 1A (Option #2)	\$ 15,250.00	\$ 25,750.00	
ILP Tier 1 (Option #2)	\$ 18,750.00	\$ 29,250.00	
ILP Tier 2 (Option #2)	\$ 34,250.00	\$ 55,250.00	
ILP Tier 3 (Option #2)	\$ 55,250.00	\$ 86,750.00	
ILP Tier 4 (Option #2)	\$ 84,750.00	\$126,750.00	
ILP Tier 5 (Options #2)	\$117,495.00	\$169,995.00	
ILP Tier 6 (Option #2)	\$144,995.00	\$207,995.00	
ILP Tier 7 (Option #2)	\$185,000.00	\$251,000.00	
ILP Tier 8 (Option #2)	\$292,500.00	\$369,000.00	

Payment of the Service Fee is due thirty (30) days prior to the renewal of the then-current Service Period. All Service Fees are exclusive of any sales, use, value-added or other federal, state or local taxes (excluding taxes based on Motorola's net income) and Customer agrees to pay any such tax. Service Fees may increase by no higher than 4% per year for years after the first year of this agreement. For ILP (Option # 2) Tier packages, the Tier amount is due for subsequent periods and Basic Service CLK fees are due for all cameras from previous periods (this is in addition to the Annual Subscription Fee).

Customer and Motorola agree that the number of CLKs issued as of the Effective Date of this Agreement is ____ [Insert Quantity]. All future additions of CLKs shall only be those as provided for in the definitions provided above.

C. Advanced Service Fee Payments. Motorola will accept advanced Service Fee payments on a case by

case basis for Customers who wish to lock in the Service Fee rates for subsequent periods at the rates currently in effect, as listed in the table above. If Customer makes advanced Service Fee payments to Motorola, advanced payments to Motorola will be applied in full to each subsequent Service Period's Service Fees until the balance of the credits is reduced to a zero balance. System based advanced credits shall be applied to subsequent Service Fees in the amount that entitles Customer continued operation of the designated camera unit systems for the following Service Period until the credits are reduced to a zero balance.

D. Price Adjustment. Motorola has the right to increase or decrease the annual Service Fee from one Service Period to another; *provided, however*, that in no event will a Service Fee be increased by more than 4% of the prior Service Period's Service Fees. If Motorola intends to adjust the Service Fee for a subsequent Service Period, it must give Customer notice of the proposed increase on or before the date that Motorola invoices Customer for the upcoming Service Period.

XIV. Miscellaneous.

A. Limitation of Liability. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL DAMAGES INCLUDING DAMAGES FOR LOSS OF USE, DATA OR PROFIT, ARISING OUT OF OR CONNECTED WITH THE USE OF THE SOFTWARE PRODUCTS, WHETHER BASED ON CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, EVEN IF MOTOROLA HAS BEEN ADVISED OF THE POSSIBILITY OF DAMAGES. IN NO EVENT WILL MOTOROLA'S LIABILITY ARISING OUT OF OR RELATED TO THIS AGREEMENT EXCEED THE FEES PAID BY CUSTOMER TO MOTOROLA FOR THE SOFTWARE PRODUCTS LICENSED UNDER THIS AGREEMENT.

B. Confidentiality. Customer acknowledges that Software Products contain valuable and proprietary information of Motorola and Customer will not disassemble, decompile or reverse engineer any Software Products to gain access to confidential information of Motorola.

C. Assignment. Neither Motorola nor Customer is permitted to assign this Agreement without the prior written consent of the other party. Any attempted assignment without written consent is void.

D. Amendment; Choice of Law. No amendment or modification of this Agreement shall be effective unless in writing and signed by authorized representatives of the parties. This Agreement shall be governed by the laws of the state of Colorado without regard to its conflicts of law.

E. Complete Agreement; Order of Precedence. This Agreement constitutes the final and complete agreement between the parties with respect to the subject matter hereof, and supersedes any prior or contemporaneous agreements, written or oral, with respect to such

subject matter. In interpreting this Agreement and resolving any ambiguities: The applicable service Addendum for the services contemplated therein will take precedence over the main body of the Agreement.

F. Relationship. The relationship created hereby is that of contractor and customer and of licensor and Customer. Nothing herein shall be construed to create a partnership, joint venture, or agency relationship between the parties hereto. Neither party shall have any authority to enter into agreements of any kind on behalf of the other and shall have no power or authority to bind or obligate the other in any manner to any third party. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever. Each party hereto represents that it is acting on its own behalf and is not acting as an agent for or on behalf of any third party.

G. No Rights in Third Parties. This agreement is entered into for the sole benefit of Motorola and Customer and their permitted successors, executors, representatives, administrators and assigns. Nothing in this Agreement shall be construed as giving any benefits, rights, remedies or claims to any other person, firm, corporation or other entity, including, without limitation, the general public or any member thereof, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries, property damage, or any other relief in law or equity in connection with this Agreement.

H. Construction. The headings used in this Agreement are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement. Any term referencing time, days or period for performance shall be deemed calendar days and not business days, unless otherwise expressly provided herein.

I. Severability. If any provision of this Agreement shall for any reason be held to be invalid, illegal, unenforceable, or in conflict with any law of a federal, state, or local government having jurisdiction over this Agreement, such provision shall be construed so as to make it enforceable to the greatest extent permitted, such provision shall remain in effect to the greatest extent permitted and the remaining provisions of this Agreement shall remain in full force and effect.

J. Federal Government. Any use, copy or disclosure of Software Products by the U.S. Government is subject to restrictions as set forth in this Agreement and as provided by DFARS 227.7202-1(a) and 227.7202-3(a) (1995), DFARS 252.227-7013(c)(1)(ii) (Oct 1988), FAR 12.212(a)(1995), FAR 52.227-19, or FAR 52.227 (ALT III), as applicable.

K. Right to Audit. Customer, upon thirty (30) days advanced written request to Motorola, shall have the right to investigate, examine, and audit any and all necessary non-financial books, papers, documents, records and personnel that pertain to this Agreement and any other Sub Agreements.

L. Notices; Authorized Representatives; Technical Support Agents. All notices, requests, demands, or other communications required or permitted to be given hereunder must be in writing and must be addressed to the parties at their respective addresses set forth below and shall be deemed to have been duly given when (a) delivered in person; (b) sent by facsimile transmission indicating receipt at the facsimile number where sent; (c) one (1) business day after being deposited with a reputable overnight air courier service; or (d) three (3) business days after being deposited with the United States Postal Service, for delivery by certified or registered mail, postage pre-paid and return receipt requested. All notices and communications regarding default or termination of this Agreement shall be delivered by hand or sent by certified mail, postage pre-paid and return receipt requested. Either party may from time to time change the notice address set forth below by delivering 30 days advance notice to the other party in accordance with this section setting forth the new address and the date on which it will become effective.

Motorola Solutions Attn: Sales 500 W Monroe St Chicago, IL 60661	Customer: _____ Attn: _____ Address: _____
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M. Authorized Representatives; Technical Support Agents. Customer's Authorized Representatives and its Technical Support Agents are set forth below in the Contact Information Worksheet. Customer's Authorized Representative is responsible for administering this Agreement and Customer's Technical Support Agents are responsible for administering the Software Products and acting as Customer's Software Products support contact. Either party may from time to time change its Authorized Representative, and Customer may from time to time change its Technical Support Agents, in each case, by delivering 30 days advance notice to the other party in accordance with the notice provisions of this Agreement.

N. Facial Recognition Image Integration. Customer may elect, at its sole discretion, to have Motorola enable the ability for the Customer's existing facial recognition images to be imported into its FaceSearch gallery. This process requires some reformatting of the data for compatibility. The data remains property of the Customer, is maintained according to the retention policy set by the Customer and is shared to other agencies under the rules defined by the Customer. This service is at an additional cost. Motorola uses a third-party service from The Center for Law Enforcement Technology, Training, & Research, Inc. (LETTR) to deliver this service. If the Customer elects to use this service, it acknowledges that The Center for Law Enforcement Technology, Training, & Research, Inc. a non-profit, 501(c)(3) corporation, working under contract with Motorola and acting on behalf of the Customer, will perform the described services for law enforcement information sharing purposes.

IN WITNESS WHEREOF, the parties have executed the Agreement as of the Effective Date.

Company: Motorola Solutions, Inc.

Authorized Agent:

Title:

Date:

Signature:

Customer Organization:

Authorized
Agent:

Title:

Date:

Signature:

**Enterprise Service Agreement
Contact Information Worksheet**

Please complete the following contact information for your Software Products Enterprise License program.

Enterprise License Agreement Holder			
Company / Agency Name:			
Company / Agency Type:			
Address:			
Primary Contact			
Name:			
Title:		Phone:	
Email:			
Supervisor Information			
Name:			
Title:		Phone:	
Email:			
Financial Contact (Accounts Payable)			
Name:			
Title:		Phone:	
Email:			
Technical Support Contact # 1			
Name:			
Title:		Phone:	
Email:			
Technical Support Contact # 2			
Name:			
Title:		Phone:	
Email:			

For questions or concerns, please contact Motorola Solutions' sales team:

sales@vigilantsolutions.com

1-925-398-2079

Exhibit A: Option # 2 ILP Tier Package Components

<p>ILP Bundle for Agencies of Up to 25 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - One (1) 3-Camera Mobile LPR System or Three (3) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 5,000 images 	<p>ILP Bundle for Agencies of Up to 50 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - One (1) 3-Camera Mobile LPR System or Three (3) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 5,000 images
<p>ILP Bundle for Agencies of 51 to 100 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - One (1) 3-Camera Mobile LPR System or Three (3) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 5,000 images 	<p>ILP Bundle for Agencies of 101 to 200 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Two (2) 3-Camera Mobile LPR System or Six (6) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 20,000 images
<p>ILP Bundle for Agencies of 201 to 500 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Three (3) 3-Camera Mobile LPR System or Nine (9) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 50,000 images 	<p>ILP Bundle for Agencies of 501 to 1,000 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Four (4) 3-Camera Mobile LPR Systems or Twelve (12) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 75,000 images

<p>ILP Bundle for Agencies of 1,000 to 1,500 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Five (5) 3-Camera Mobile LPR Systems or Fifteen (15) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 100,000 images 	<p>ILP Bundle for Agencies of 1,501 to 2,000 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Six (6) 3-Camera Mobile LPR Systems or Eighteen (18) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 200,000 images
<p>ILP Bundle for Agencies up to 2,500 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Seven (7) 3-Camera Mobile LPR Systems or Twenty one (24) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 250,000 images 	<p>ILP Bundle for Agencies up to 5,000 Sworn</p> <p>Includes:</p> <ul style="list-style-type: none"> - Agency license for LEARN SaaS - Unlimited access to Commercial LPR data - Eight (8) 3-Camera Mobile LPR Systems or Twenty four (24) Fixed Camera Systems - First year of Basic and Standard Service Packages - LEARN-Mobile Companion - Mobile Hit Hunter - Agency license for FaceSearch - Image gallery up to 500,000 images

Exhibit B: CJIS Requirements

Motorola and the Customer agree on the importance of data security, integrity and system availability and that these security objectives will only be achieved through shared responsibility. Motorola and the Customer agree they will more likely be successful with information security by use of the Motorola supplied technical controls and client Customer use of those controls; in conjunction with agency and personnel policies to protect the systems, data and privacy.

Motorola and the Customer agree that Customer owned and FBI-CJIS supplied data in Motorola systems does not meet the definition of FBI-CJIS provided Criminal Justice Information (CJI). Regardless, Motorola agrees to treat the Customer-supplied information in Motorola systems as CJI. Motorola will strive to meet those technical and administrative controls; ensuring the tools are in place for the proper protection of systems, information and privacy of individuals to the greatest degree possible.

Motorola and the Customer agree that information obtained or incorporated into Motorola systems may be associated with records that are sensitive in nature having, tactical, investigative and Personally Identifiable Information. As such, that information will be treated in accordance with applicable laws, policies and regulations governing protection and privacy of this type of data.

Motorola and the Customer agree that products and services offered by Motorola are merely an investigative tool to aid the client in the course of their duties and that Motorola make no claims that direct actions be initiated based solely upon the information responses or analytical results. Further, Motorola and the Customer agree that the Customer is ultimately responsible for taking the appropriate actions from results, hits, etc. generated by Motorola products and require ongoing training, human evaluation, verifying the accuracy and currency of the information, and appropriate analysis prior to taking any action.

As such, the parties agree to do the following with respect to Software Products, and the obligations contained herein do not apply to any products, software or services supplied by Motorola other than the Software Products

Motorola:

1. Motorola has established the use of FBI-CJIS Security Policy as guidance for implementing technical security controls in an effort to meet or exceed those Policy requirements.
2. Motorola agrees to appoint a CJIS Information Security Officer to act as a conduit to the client Contracting Government Agency, Agency Coordinator, to receive any security policy information and disseminate to the appropriate staff.
3. Motorola agrees to adhere to FBI-CJIS Security Policy Awareness Training and Personnel Screening standards as required by the Customer.
4. Motorola agrees, by default, to classify all client supplied data and information related to client owned infrastructure, information systems or communications systems as "Criminal Justice Data". All client information will be treated at the highest level of confidentiality by all Motorola staff and authorized partners. Motorola has supporting guidance/policies for staff handling the full life cycle of information in physical or electronic form and has accompanying disciplinary procedures for unauthorized access, misuse or mishandling of that information.

5. Motorola will not engage in data mining, commercial sale, unauthorized access and/or use of any of Customer owned data.
6. Motorola and partners agree to use their formal cyber Incident Response Plan if such event occurs.
7. Motorola agrees to immediately inform Customer of any cyber incident or data breach, to include DDoS, Malware, virus, etc. that may impact or harm client data, systems or operations so proper analysis can be performed and client Incident Response Procedures can be initiated.
8. Motorola will only allow authorized support staff to access the Customer's account or Customer data in support of Customer as permitted by the terms of contracts.
9. Motorola agrees to use training, policy and procedures to ensure support staff use proper handling, processing, storing, and communication protocols for Customer data.
10. Motorola agrees to protect client systems and data by monitoring and auditing staff user activity to ensure that it is only within the purview of system application development, system maintenance or the support roles assigned.
11. Motorola agrees to inform the Customer of any unauthorized, inappropriate use of data or systems.
12. Motorola will design software applications to facilitate FBI-CJIS compliant information handling, processing, storing, and communication of Customer.
13. Motorola will advise Customer when any software application or equipment technical controls are not consistent with meeting FBI-CJIS Policy criteria for analysis and due consideration.
14. Motorola agrees to use the existing Change Management process to sufficiently plan for system or software changes and updates with Rollback Plans.
15. Motorola agrees to provide technical security controls that only permit authorized user access to Customer owned data and Motorola systems as intended by the Customer and data owners.
16. Motorola agrees to meet or exceed the FBI-CJIS Security Policy complex password construction and change rules.
17. Motorola will only provide access to Motorola systems and Customer owned information through Customer managed role-based access and applied sharing rules configured by the Customer.
18. Motorola agrees to provide technical controls with additional levels of user Advanced Authentication in Physically Non-Secure Locations.
19. Motorola agrees to provide compliant FIPS 140-2 Certified 128-bit encryption to Customer owned data during transport and storage ("data at rest") while in the custody and control of Motorola.
20. Motorola agrees to provide firewalls and virus protection to protect networks, storage devices and data.
21. Motorola agrees to execute archival, purges and/or deletion of data as configured by the data owner.
22. Motorola agrees to provide auditing and alerting tools within the software applications so Customer can monitor access and activity of Motorola support staff and Customer users

for unauthorized access, disclosure, alteration or misuse of Customer owned data. (Motorola support staff will only have access when granted by the Customer.)

23. Motorola will only perform direct support remote access to Customer systems/infrastructure when requested, authorized and physically granted access to the applications/systems by the Customer. This activity will be documented by both parties.
24. Motorola creates and retains activity transaction logs to enable auditing by the Customer data owners and Motorola staff.
25. Motorola agrees to provide physical protection for the equipment-storing Customer data along with additional technical controls to protect physical and logical access to systems and data.
26. Motorola agrees to participate in any Information or Technical Security Compliance Audit performed by the Customer, state CJIS System Agency or FBI-CJIS Division.
27. Motorola agrees to perform independent employment background screening for its' staff and participate in additional fingerprint background screening as required by Customer.
28. Motorola agrees that the Customer owns all Customer contributed data to include "hot-lists", scans, user information etc., is only shared as designated by the client and remains the responsibility and property of the Customer.

Customer:

1. Customer agrees to appoint an Agency Coordinator as a central Point of Contact for all FBI-CJIS Security Policy related matters and to assign staff that are familiar with the contents of the FBI-CJIS Security Policy.
2. Customer agrees to have the Agency Coordinator provide timely updates with specific information regarding any new FBI-CJIS, state or local information security policy requirements that may impact Motorola compliance or system/application development and, to facilitate obtaining certifications, training, and fingerprint-based background checks as required.
3. Customer agrees to inform Motorola when any FBI-CJIS Security Awareness Training, personnel background screening or execution of FBI-CJIS Security Addendum Certifications are required.
4. Customer agrees to immediately inform Motorola of any relevant data breach or cyber incident, to include DDoS, Malware, virus, etc. that may impact or harm Motorola systems, operations, business partners and/or other Customers, so proper analysis can be performed, and Incident Response Procedures can be initiated.
5. Customer agrees that they are responsible for the legality and compliance of information recorded, submitted or placed in Motorola systems and use of that data.
6. Customer agrees that they are responsible for proper equipment operation and placement of equipment.
7. Customer agrees that they are responsible for vetting authorized user access to Motorola systems with due consideration of providing potential access to non-Customer information.
8. Customer agrees that responsibility and control of persons granted access to purchased Motorola systems, along with data stored and transmitted via Motorola systems, is that of the Customer.

9. Customer agrees that they have responsibility for all data security, handling and data protection strategies from point of acquisition, during transport and until submission ("Hotlist upload") into Motorola systems.
10. Customer agrees to reinforce client staff policies and procedures for secure storage and protection of Motorola system passwords.
11. Customer agrees to reinforce client staff policies for creating user accounts with only government domain email addresses. Exceptions will be granted in writing.
12. Customer agrees to reinforce client staff policies for not sharing user accounts.
13. Customer agrees to use Motorola role-based access as designed to foster system security and integrity.
14. Customer agrees that they control, and are responsible for, appropriate use and data storage policies as well as procedures for the data maintained outside the Motorola systems. This includes when any information is disseminated, extracted or exported out of Motorola systems.
15. Customer agrees that they control and are responsible for developing policies, procedures and enforcement for applying deletion/purging and dissemination rules to information within and outside the Motorola systems.
16. Customer agrees that it is their responsibility to ensure data and system protection strategies are accomplished through the tools provided by Motorola for account and user management features along with audit and alert threshold features.
17. Customer agrees to use the "virtual escorting" security tools provided for managing client system remote access and monitor Motorola support staff when authorized to assist the client.
18. Customer agrees that the Motorola designed technical controls and tools will only be effective in conjunction with Customer created policies and procedures that guide user access and appropriate use of the system.
19. Customer agrees that information and services provided through Motorola products do not provide any actionable information, Customer users are responsible for the validity and accuracy of their data and developing procedures to verify information with the record owner and other systems (NCIC) based upon the potential lead generated.

EQUIPMENT SALE ADDENDUM LPR hardware components

This Addendum is to the Enterprise Service Agreement (“Primary Agreement”) and provides additional or different terms and conditions to govern the sale of equipment and related software provided by Motorola. The terms in this Addendum are integral to and incorporated into the Primary Agreement. To the extent there is a conflict between the terms and conditions of the Primary Agreement and the terms and conditions of this Addendum, this Addendum takes precedence, as to the inconsistency only.

1. Exhibits

The Exhibits listed below are incorporated into and made a part of this Addendum. In interpreting this Addendum and resolving any ambiguities, the main body of this Addendum takes precedence over the exhibits and any inconsistency between the exhibits will be resolved in their listed order. Documents included in the proposal and listed below as Exhibits are incorporated by this reference.

Exhibit A Motorola “Software License Agreement”
Exhibit B Equipment List.

2. DEFINITIONS

All capitalized terms not otherwise defined herein shall have the same meaning as defined in the Primary Agreement.

2.1. “Product Price” means the price for the equipment and related Software and installation or related services, excluding applicable sales or similar taxes and freight charges.

2.2. “Effective Date” means that date upon which the last Party executes the Primary Agreement or, the date on which the last Party executes the Addendum, whichever is later.

2.3. “Equipment” means the equipment listed in the Equipment List that Customer purchases from Motorola pursuant to this Addendum.

2.4 “Infringement Claim” means a third party claim alleging that the Equipment manufactured by Motorola or the Motorola Software directly infringes a United States patent or copyright.

2.5. “Motorola Software” means Software that Motorola or its affiliated company owns.

2.6. “Non-Motorola Software” means Software that another party owns.

2.7. “Open Source Software” (also called “freeware” or “shareware”) software with either freely obtainable source code, license for modification, or permission for free distribution.

2.8. “Products” mean the Equipment and Software sold by Motorola under this Addendum.

2.9. "Proprietary Rights" means the patents, patent applications, inventions, copyrights, trade secrets, trademarks, trade names, mask works, know-how, ideas and concepts, moral rights, processes, methodologies, tools, techniques, and other intellectual property rights in and to the Equipment and Software, including those created or produced by Motorola under this Addendum and any corrections, bug fixes, enhancements, updates or modifications to or derivative works from the Software whether made by Motorola or another party.

2.10. "Software" means the Motorola Software and Non-Motorola Software in object code format that is furnished with the Equipment.

2.11. "Specifications" means the functionality and performance requirements that are described in the Proposal/Quote or Technical and Implementation Documents (as applicable).

2.12. "Warranty Period" means one (1) year from the date of shipment of the Products.

3. SCOPE AND TERM

3.1. SCOPE OF WORK. Motorola will provide and install (if applicable) the Products, and perform its other contractual responsibilities, all in accordance with this Addendum.

3.2. CHANGE ORDERS. Either Party may request changes within the general scope of this Addendum. Neither Party is obligated to perform requested changes unless both Parties execute a written change order.

3.3. TERM. Unless terminated in accordance with other provisions of the Primary Agreement or extended by mutual agreement of the Parties, the term of this Addendum begins on the Effective Date and continues until the expiration of the Warranty Period or three (3) years from the Effective Date, whichever occurs last.

3.4. ADDITIONAL EQUIPMENT OR SOFTWARE. During the Term of this Addendum, Customer may order additional Equipment or Software if it is then available. Each order must refer to the Primary Agreement and Addendum and must specify the pricing and delivery terms. Notwithstanding any additional or contrary terms in the order, the applicable provisions of this Addendum (except for pricing, delivery, and payment terms) will govern the purchase and sale of the additional Equipment or Software. Payment is due within thirty (30) days after the invoice date, and Motorola will send Customer an invoice as the additional Equipment is shipped or Software is licensed

3.5. MAINTENANCE SERVICE. This Addendum does not cover maintenance or support of the Products except as provided under the warranty. If Customer wishes to purchase maintenance or support, Motorola will provide a separate maintenance and support proposal upon request.

3.6. MOTOROLA SOFTWARE. Any Motorola Software, including subsequent releases, is licensed to Customer solely in accordance with the Software License Agreement. Customer hereby accepts and agrees to abide by all of the terms and restrictions of the Software License Agreement.

3.7. NON-MOTOROLA SOFTWARE. Any Non-Motorola Software is licensed to Customer in accordance with the standard license, terms, and restrictions of the copyright owner on the Sheriff's Department Request for Bid for License Plate Readers

Effective Date unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the Software License Agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under the Software License Agreement. Motorola makes no representations or warranties of any kind regarding Non-Motorola Software. Non-Motorola Software may include Open Source Software. Upon request by Customer, Motorola will use commercially reasonable efforts to determine whether any Open Source Software will be provided under this Agreement; and if so, identify the Open Source Software and provide to Customer a copy of the applicable standard license (or specify where that license may be found); and provide to Customer a copy of the Open Source Software source code if it is publicly available without charge (although a distribution fee or a charge for related services may be applicable).

3.8 SUBSTITUTIONS. At no additional cost to Customer, Motorola may substitute any Equipment, Software, or services to be provided by Motorola, if the substitute meets or exceeds the Specifications and is of equivalent or better quality to the Customer. Any substitution will be reflected in a change order.

Section 4 ACCEPTANCE, PERFORMANCE SCHEDULE AND DELAYS

4.1 Acceptance of the Products will occur upon delivery to Customer.

4.2 If this Addendum includes the performance of services relating to the Product, the proposal/quote or Statement of Work will describe the performance schedule, or if there is no performance schedule, within a reasonable period of time.

Section 5 CONTRACT PRICE, PAYMENT, AND INVOICING

5.1. PRODUCT PRICE. The Product Price in U.S. dollars is set forth in the Statement of Work and is due and payable as described therein.

5.2. INVOICING AND PAYMENT. Motorola will submit invoices to Customer for Products and for installation or related services when they are performed. Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Customer will make payments when due in the form of a wire transfer, check, or cashier's check from a U.S. financial institution. Overdue invoices will bear simple interest at the maximum allowable rate. For Customer's reference, the Federal Tax Identification Number for Motorola Solutions, Inc. is 36-1115800

5.3 FREIGHT, TITLE, AND RISK OF LOSS. Unless otherwise agreed in writing, title and risk of loss to the Equipment will pass to Customer upon shipment. Notwithstanding, title to Software will not pass to Customer at any time. Motorola will pack and ship all Equipment in accordance with good commercial practices.

SECTION 6 SITES AND SITE CONDITIONS

6.1. ACCESS TO SITES. If Motorola is providing installation or other services, Customer will provide all necessary construction and building permits, licenses, and the like; and access to the work sites or vehicles identified in the Technical and Implementation Documents as reasonably requested by Motorola so that it may perform its contractual duties.

6.2. **SITE CONDITIONS.** If Motorola is providing installation or other services at Customer's sites, Customer will ensure that these work sites be safe, secure, and in compliance with all applicable industry and OSHA standards.

To the extent applicable and unless the Statement of Work states to the contrary, Customer will ensure that these work sites have adequate: physical space, air conditioning and other environmental conditions; adequate and appropriate electrical power outlets, distribution, equipment and connections; and adequate telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the Products.

Section 7 REPRESENTATIONS AND WARRANTIES

7.1. **EQUIPMENT WARRANTY.** During the Warranty Period, Motorola warrants that the Equipment under normal use and service will be free from material defects in materials and workmanship.

7.2. **MOTOROLA SOFTWARE WARRANTY.** Unless otherwise stated in the Software License Agreement, during the Warranty Period, Motorola warrants the Motorola Software in accordance with the terms of the Software License Agreement and the provisions of this Section that are applicable to the Motorola Software.

7.3. **EXCLUSIONS TO EQUIPMENT AND MOTOROLA SOFTWARE WARRANTIES.** These warranties do not apply to: (i) defects or damage resulting from: use of the Equipment or Motorola Software in other than its normal, customary, and authorized manner; accident, liquids, neglect, or acts of God; testing, maintenance, disassembly, repair, installation, alteration, modification, or adjustment not provided or authorized in writing by Motorola; Customer's failure to comply with all applicable industry and OSHA standards; (ii) breakage of or damage to antennas unless caused directly by defects in material or workmanship; (iii) Equipment that has had the serial number removed or made illegible; (iv) batteries (because they carry their own separate limited warranty) or consumables; (v) freight costs to ship Equipment to the repair depot; (vi) scratches or other cosmetic damage to Equipment surfaces that does not affect the operation of the Equipment; and (vii) normal or customary wear and tear.

7.4. **WARRANTY CLAIMS.** To assert a warranty claim, Customer must notify Motorola in writing of the claim before the expiration of the Warranty Period. Upon receipt of this notice, Motorola will investigate the warranty claim. If this investigation confirms a valid warranty claim, Motorola will (at its option and at no additional charge to Customer) repair the defective Equipment or Motorola Software, replace it with the same or equivalent product, or refund the price of the defective Equipment or Motorola Software. That action will be the full extent of Motorola's liability for the warranty claim. If this investigation indicates the warranty claim is not valid, then Motorola may invoice Customer for responding to the claim on a time and materials basis using Motorola's then current labor rates. Repaired or replaced product is warranted for the balance of the original applicable Warranty Period. All replaced products or parts will become the property of Motorola.

7.5. **ORIGINAL END USER IS COVERED.** These express limited warranties are extended by Motorola to the original user purchasing the Products for commercial, industrial, or governmental use only, and are not assignable or transferable.

7.6. DISCLAIMER OF OTHER WARRANTIES. THESE WARRANTIES ARE THE COMPLETE WARRANTIES FOR THE EQUIPMENT AND MOTOROLA SOFTWARE PROVIDED UNDER THIS ADDENDUM AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

SECTION 8 INDEMNIFICATION

8.1. RESERVED.

8.2. PATENT AND COPYRIGHT INFRINGEMENT INDEMNIFICATION

8.2.1. Motorola will defend at its expense any suit brought against Customer to the extent it is based on a third-party claim alleging that the Equipment manufactured by Motorola or the Motorola Software ("Motorola Product") directly infringes a United States patent or copyright ("Infringement Claim"). Motorola's duties to defend and indemnify are conditioned upon: Customer promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and Customer providing to Motorola cooperation and, if requested by Motorola, reasonable assistance in the defense of the Infringement Claim. In addition to Motorola's obligation to defend, and subject to the same conditions, Motorola will pay all damages finally awarded against Customer by a court of competent jurisdiction for an Infringement Claim or agreed to, in writing, by Motorola in settlement of an Infringement Claim.

8.2.2. If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense: (a) procure for Customer the right to continue using the Motorola Product; (b) replace or modify the Motorola Product so that it becomes non-infringing while providing functionally equivalent performance; or (c) accept the return of the Motorola Product and grant Customer a credit for the Motorola Product, less a reasonable charge for depreciation. The depreciation amount will be calculated based upon generally accepted accounting standards.

8.2.3. Motorola will have no duty to defend or indemnify for any Infringement Claim that is based upon: (a) the combination of the Motorola Product with any software, apparatus or device not furnished by Motorola; (b) the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Motorola Product; (c) Motorola Product designed or manufactured in accordance with Customer's designs, specifications, guidelines or instructions, if the alleged infringement would not have occurred without such designs, specifications, guidelines or instructions; (d) a modification of the Motorola Product by a party other than Motorola; (e) use of the Motorola Product in a manner for which the Motorola Product was not designed or that is inconsistent with the terms of this Addendum; or (f) the failure by Customer to install an enhancement release to the Motorola Software that is intended to correct the claimed infringement. In no event will Motorola's liability resulting from its indemnity obligation to Customer extend in any way to royalties payable on a per use basis or the Customer's revenues, or any royalty basis other than a reasonable royalty based upon revenue derived by Motorola from Customer from sales or license of the infringing Motorola Product.

8.2.4. This Section 8.2 provides Customer's sole and exclusive remedies and Motorola's entire liability in the event of an Infringement Claim. Customer has no right to recover and Motorola has no obligation to provide any other or further remedies, whether under another provision of this Addendum or any other legal theory or principle, in connection with an Infringement Claim.

In addition, the rights and remedies provided in this Section 8 are subject to and limited by the restrictions set forth in Section 9.

SECTION 9 LIMITATION OF LIABILITY

Except for personal injury, death or damage to tangible property, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of the Equipment, Software, or services with respect to which losses or damages are claimed. **ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS ADDENDUM, THE SALE OR USE OF THE EQUIPMENT OR SOFTWARE, OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS ADDENDUM.** This limitation of liability provision survives the expiration or termination of the Addendum and applies notwithstanding any contrary provision. No action for contract breach or otherwise relating to the transactions contemplated by this Addendum may be brought more than one (1) year after the accrual of the cause of action, except for money due upon an open account.

Section 10 GENERAL

10.1. TAXES. The Contract Price does not include excise, sales, lease, use, property, or other taxes, assessments or duties, all of which will be paid by Customer except as exempt by law. If Motorola is required to pay any of these taxes, Motorola will send an invoice to Customer and Customer will pay to Motorola the amount of the taxes (including any interest and penalties) within thirty (30) days after the date of the invoice. Customer will be solely responsible for reporting the Equipment for personal property tax purposes, and Motorola will be solely responsible for reporting taxes on its income or net worth.

10.2 MISCELLANEOUS. This addendum may be executed in multiple counterparts, and shall have the same legal force and effect as if the Parties had executed it as a single document. The Parties may sign in writing, or by electronic signature, including by email. An electronic signature, or a facsimile copy or computer image, such as a PDF or tiff image, of a signature, shall be treated as and shall have the same effect as an original signature. In addition, an electronic signature, a true and correct facsimile copy or computer image of this Addendum shall be treated as and shall have the same effect as an original signed copy of this document.

10.3 AUTHORITY TO EXECUTE ADDENDUM. Each Party represents that it has obtained all necessary approvals, consents and authorizations to enter into this Addendum and to perform its duties under this Addendum; the person executing this Addendum on its behalf has the authority to do so; upon execution and delivery of this Addendum by the Parties, it is a valid and binding contract, enforceable in accordance with its terms; and the execution, delivery, and performance of this Addendum does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.

The Parties hereby enter into this Addendum as of the Effective Date.

Motorola Solutions, Inc.

Customer

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

EXHIBIT A MOTOROLA SOFTWARE LICENSE AGREEMENT

This Exhibit A Motorola Software License Agreement ("Agreement") is between Motorola Solutions, Inc., ("Motorola"), and _____ ("Licensee").

For good and valuable consideration, the parties agree as follows:

Section 1 DEFINITIONS

1.1 "Camera License Key" or "CLK" means an electronic key that will permit each license of Software to be used with license plate recognition ("LPR") cameras obtained from Motorola. Each LPR camera must have a valid CLK.

1.2 "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.

1.3 "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).

1.4 "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.5 "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.

1.6 "Primary Agreement" means the Addendum to which this exhibit is attached.

1.7 "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.

1.8 "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

Section 2 SCOPE

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary software or products containing embedded or pre-loaded proprietary software, or both. This Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the proprietary software and affiliated documentation.

Section 3 GRANT OF LICENSE

3.1. Subject to the provisions of this Agreement and the continued payment of applicable CLK fees, Motorola grants to Licensee during the Term of the Enterprise Software Agreement, a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. This Agreement does not grant any rights to source code. Except with prior written approval from Motorola, Licensee may not use the Software on or in connection with any LPR cameras other than the Equipment purchased from Motorola.

3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; and (ii) identify the Open Source Software (or specify where that license may be found).

3.3 TO THE EXTENT, IF ANY, THAT THERE IS A SEPARATE LICENSE AGREEMENT PACKAGED WITH, OR PROVIDED ELECTRONICALLY WITH, A PARTICULAR PRODUCT THAT BECOMES EFFECTIVE ON AN ACT OF ACCEPTANCE BY THE END USER, THEN THAT AGREEMENT SUPERSEDES THIS SOFTWARE LICENSE AGREEMENT AS TO THE END USER OF EACH SUCH PRODUCT.

Section 4 LIMITATIONS ON USE

4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.

4.2. Licensee will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software.

Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software.

4.3. Licensee must obtain a valid CLK for each LPR camera installed and considered in active service during the term of the Enterprise Software Agreement. Payment for the CLK must be received in advance, and will entitle Licensee to use the Software in connection with such camera. Unless otherwise provided in this Agreement, each CLK is good for one year. CLK's shall not be issuable, and if issued in error shall be null and void, for cameras and other hardware components that are not Motorola-approved.

4.4 Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

Section 5 OWNERSHIP AND TITLE

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY

6.1. Unless otherwise stated in the Primary Agreement, the commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation.

Motorola does not warrant that Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software.

Notwithstanding, any warranty provided by a copyright owner in its standard license terms will flow through to Licensee for third party software provided by Motorola.

6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.

6.3. Warranty claims are described in the Primary Agreement.

6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.

Section 7 TRANSFERS

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement.

Section 8 TERM AND TERMINATION

8.1 Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the term of the Enterprise Software Agreement, provided that applicable CLK fees are received.

8.2 Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.

8.3 Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

Section 9 COMMERCIAL COMPUTER SOFTWARE

9.1 *This Section 9 only applies to U.S. Government end users.* The Software, Documentation and updates are commercial items as that term is defined at 48 C.F.R. Part 2.101, consisting of “commercial computer software” and “computer software documentation” as such terms are defined in 48 C.F.R. Part 252.227-7014(a)(1) and 48 C.F.R. Part 252.227-7014(a)(5), and used in 48 C.F.R. Part 12.212 and 48 C.F.R. Part 227.7202, as applicable. Consistent with 48 C.F.R. Part 12.212, 48 C.F.R. Part 252.227-7015, 48 C.F.R. Part 227.7202-1 through 227.7202-4, 48 C.F.R. Part 52.227-19, and other relevant sections of the Code of Federal Regulations, as applicable, the Software, Documentation and Updates are distributed and licensed to U.S. Government end users: (i) only as commercial items, and (ii) with only those rights as are granted to all other end users pursuant to the terms and conditions contained herein.

9.2 If Licensee is licensing Software for end use by the United States Government or a United States Government agency, Licensee may transfer such Software license, but only if: (i) Licensee transfers all copies of such Software and Documentation to such United States Government entity or interim transferee, and (ii) Licensee has first obtained from the transferee (if applicable) and ultimate end user an enforceable end user license agreement containing restrictions substantially identical to the ones contained in this Agreement. Except as stated in the foregoing, Licensee and any transferee(s) authorized by this subsection 9.2 may not otherwise use or transfer or make available any Motorola software to any third party nor permit any party to do so.

Section 10 CONFIDENTIALITY

Licensee acknowledges that the Software and Documentation contain Motorola’s valuable proprietary and Confidential Information and are Motorola’s trade secrets, and that the provisions in the Primary Agreement concerning Confidential Information apply.

Section 11 LIMITATION OF LIABILITY

The Limitation of Liability provision is described in the Equipment Sale Addendum.

Section 13 GENERAL

13.1. COPYRIGHT NOTICES. The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.

13.2. COMPLIANCE WITH LAWS. Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.

13.3. **ASSIGNMENTS AND SUBCONTRACTING.** Motorola may assign its rights or subcontract its obligations under this Agreement, or encumber or sell its rights in any Software, without prior notice to or consent of Licensee.

13.4. **GOVERNING LAW.** This Agreement is governed by the laws of the United States to the extent that they apply and otherwise by the internal substantive laws of the State to which the Software is shipped if Licensee is a sovereign government entity, or the internal substantive laws of the State of Illinois if Licensee is not a sovereign government entity.

The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.

13.5. **THIRD PARTY BENEFICIARIES.** This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.

13.6. **SURVIVAL.** Sections 4, 5, 6.4, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.

13.7. **ORDER OF PRECEDENCE.** In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.

13.8. **SECURITY.** Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.

C.3 EXHIBIT A – STATEMENT OF WORK

MOTOROLA SOLUTIONS RESPONSE

Responses to Exhibit A: Statement of Work are provided in the table below.

Specification	Compliant	Comment
3.1.1. Is your solution compliant with California Senate Bill 34 (SB34)? If yes, please provide compliance process	Yes	Our software includes all necessary features to be compliant under SB-34, however, the actions of the users are equally important. With a combination of our software plus proper training and action of the users, we are SB-34 compliant. Training will be provided at no cost.
3.1.2. Single Sign-On (SSO) implementation options	Yes	SAML w/ IDP initiated SAML Assertion
3.1.2.1 Security Assertion Markup Language (SAML) 2.0 compliance	Yes	SAML w/ IDP initiated SAML Assertion
3.1.2.2 Other SSO methods, such as Active Directory and Office 365.	Yes	SAML w/ IDP initiated SAML Assertion
3.1.3 User and Entity Based Behavioral Analytics (UEBA)	Yes	Motorola utilize advanced algorithms to define entity-based behavioral patterns using our analytical tools against the ALPR data provided. This includes the solutions such as: Data Clustering, Alerting on Excessive patterns, etc.
3.1.4 Distributed Denial of Service (DDoS) protection	Yes	Motorola datacenters are protected by DDoS attacks and are actively monitored for them.
3.1.5 Data sanitization and anti-malware prevention. Minimizing attack vectors throughout the LPR solution using a multi-layered approach	Yes	Motorola uses best practices and mitigate risks by using Anti-Malware prevention, data sanitization, and active monitoring to prevent attacks on our hosted solution.
3.1.5.1 Anti-malware scanning and threat prevention with up to date signatures	Yes	Motorola deploys enterprise anti-malware scanning and threat prevention software that automatically updates per our Security Plan policy.
3.1.5.2 Alerts and notifications	Yes	Motorola is able to supply many variations of Alerts through TAS Application, Email Alerts, and in-vehicle Alerts. Also, we supply status alerts for Camera Health monitoring.

Specification	Compliant	Comment
3.1.5.3 Input sanitization: All data coming into the system from users or application programming interfaces (API's)	Yes	Data input is sanitized to prevent erroneous and threat-specific attacks via SQL injection, Enumeration, path traversal, or other input vulnerabilities.
3.1.5.4 White list of file types for attaching/uploading for all purposes	Yes	Motorola's LEARN server limits which file types are able to be uploading to prevent failure and prevent executable files from being inserted.
3.1.5.5 File Contents Disarm and Reconstruction (CDR)	Yes	Motorola requires flat files and plaintext files for communications. We inspect files for SQL injection and potential hazardous content. Active content is treated as suspect and removed.
3.1.6 Disaster Recovery	Yes	We have a Disaster Recovery Plan that allows for recovery of data up to 15 minutes of the transaction occurring.
3.1.6.1 Data protection, backup, and recovery strategy	Yes	Our DR Plan includes Full, Incremental, and Transactional encrypted backups. Recovery strategy tests are completed on annual cadence and when relevant architecture changes occur.
3.1.6.2 Disaster recovery liability in case of catastrophic event	Yes	Motorola is capable of recovering to a colocation datacenter upon a catastrophic event occurring.
3.1.7 California Consumer Privacy Act (CCPA) compliance	Yes	We comply with the California Consumers Privacy Act (CCPA) in that we <u>Do Not Collect</u> "personal information" from consumers, as described in the CCPA. The License Plate Recognition (LPR) data that is "collected" is Entirely Owned, Managed, and Deleted by the agency utilizing the LPR systems. Vigilant Solutions (a Motorola Solutions company) provides full encryption, security, maintenance and hosting of the LPR data sites for the agencies that chose to collect LPR data, as well as provide the full range of analytics and auditing tools required to meet CCPA and SB34 standards.

Specification	Compliant	Comment
3.1.8 Vendor shall provide a secure, database encrypted and web-based system that provides real-time access to uploaded data	Yes	Motorola uses TLS HTTPS communications for web-based data in transit and AES256 encryption with 128-bit encryption or better for sensitive data at rest that could contain PII or CJI; while remaining real-time access.
3.1.9. Vendor shall allow authorized users access to LPR data in a number of LPR-specific dashboards	Yes	Authorized users have access to LPR data in numerous LPR-Specific dashboards on our LEARN back-office solution. This includes: Mapping Alert Service, Density Map, Client Status, LEARN Dashboards (Reporting), QuickSearch, and many more.
3.1.10 Dashboard will show LPR vehicle scans in an easy to read graphical format	Yes	Dashboard Data is clear and easy to read and depending on use-case, the Dashboard can be used for specific to content desired. On QuickSearch application, by default LEARN will display: Plate Image, Vehicle Image, OCR of ALPR Plate Read, Date, Time, Scanned By, and System.
3.1.11. LPR dashboard will show vehicle location, images captured and provide the ability to search using the license plate	Yes	LPR Dashboards can display the location, images captured, and be able to search using a specific license plate or a wildcard of the license plate.
3.1.12. Vendor shall provide an option to purge data at specified intervals or dates	Yes	Motorola have the ability to purge data on our solution at a specific interval defined by an Agency's retention policy. Both Detections and Hits are treated separately to allow for separate retention policies on the desired data.
3.1.12.1 Will have a notification process to assure compliance	Yes	Custom Agency notices are configurable on login to assure compliance. Users can be forced to accept or comply with the policy on notification. Supplemental to this configurable notice, LEARN requires audit details be provided via audit notification to assure compliance with each transaction.

Specification	Compliant	Comment
3.1.12.1.1. Provide notification of purge date	Yes	Purge notifications are validated prior to setting the retention policy and email notifications are sent to Agency Managers for review of purge date requests.
3.1.12.1.2. Provide notification of purge date Provide confirmation and notification that specified data was purged	Yes	Motorola audits all purges that occur. Purges occur on daily intervals and audit notifications may be configured to be sent for review of the daily purges that occur.
2.1.13 Data uploaded will only be shared at the discretion of an administrator designated by the San Diego County	Yes	Motorola is only the processor of data and never a data controller of customer data. San Diego County is owner of their Data and Motorola cannot share on their behalf without written request to do so. Only Agency Managers (administrators designated by San Diego County), can accept and share their Data with other Law Enforcement Agencies or their Partners (internal or external).
Sheriff's Department		
3.2 LPR CAMERAS		
3.2.1 Contractor shall have LPR systems capable of being installed on a fixed object (i.e. light pole), marked patrol vehicles, covert vehicles and speed trailers.	Yes	We have all of these products/solutions available.
3.2.2 Marked patrol vehicle camera mounting brackets must be compatible with Whelen, Code3, TOMAR, Federal Signal, Arjent S2 light bars	Yes	We have all of these brackets built.
3.2.3 Cameras shall be self-illuminating Infrared (IR) for effective license plate image capture in a variety of weather and lighting conditions	Yes	Our cameras operate using IR in these environments.
3.2.3.1. Non-IR cameras will be accepted upon demonstration and verification of its equivalency	Not applicable	We utilize dual lensed color/IR cameras to offer the highest accuracy possible.
3.2.4 LPR cameras shall be water-resistance with few moving parts that can be damaged	Yes	Cameras are IP67 rated with fixed lensing to minimize moving parts
2.2.5 LPR cameras shall have the ability to automatically capture all variations of California license plates, to include	Yes	Our HD cameras capture all variations of CA license plates, including paper and legacy plates.

Specification	Compliant	Comment
California dealer issued plates (paper plates)		
3.2.6 Cameras shall have a dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle for verification purposes	Yes	Our cameras meet this specification.
3.2.6.1. Cameras with equivalent specifications (IR and color overview) will be accepted upon demonstration and verification	Yes	We are happy to provide a demo of our HD camera line.
3.2.7 Cameras shall be sealed to NEMA 6 (IP67) standards	Yes	Our cameras are IP67 rated.
3.2.8 Dual lens cameras shall be capable of capturing up to 60 frames per second	Yes	We comply with this spec.
3.2.9 Cameras shall have the ability to adjust shutter, brightness, and gain settings to ensure a high-quality image regardless of weather or lighting conditions	Yes	These settings are available within our camera configurator.
3.2.10 The cameras shall be able to have a fixed focal point or target distance from the camera to the vehicle's license plate from 9 ½ feet to 30 feet	Yes	We comply, and have much longer ranges available if desired.
3.2.11 The camera shall be capable of various configurations to capture plates in any of the following modes depending on the configuration:	Yes	
3.2.11.1 An adjacent lane on either side of the vehicle while driving through traffic and/or parking lots	Yes	The proposed lensing configuration complies with this spec.
3.2.11.2 Traffic in an adjacent lane while parked on the side of the shoulder of a roadway	Yes	The proposed lensing configuration complies with this spec.
3.2.11.3 Parked vehicles in parking lots	Yes	The proposed lensing configuration complies with this spec.
3.2.12. Each camera shall have the ability to read more than one lane		The proposed Reaper High Definition camera complies with this spec.

Specification	Compliant	Comment
3.3 LPR PROCESSOR		
3.3.1 Processor shall have a "self-trigger" mode to detect the presence of correctly mounted vehicle license plates in the camera's field of view for image capture from the camera	Yes	We comply with this spec.
3.3.2 Processor's installed in vehicles shall be equipped with an intelligent Power Supply Unit (PSU) that provides for a safe start and shut-down each time the vehicle's ignition is turned on and turned off	Yes	We comply with this spec.
3.3.3 Processor controls the power supplied to the cameras and provides video connection points for simplified system wiring	Yes	All cameras connect direct to processor for power and data transfer.
3.3.4. Processor shall have at least four (4) LPR camera connections and multiple USB ports	Yes	We comply with this spec.
3.3.5. Vehicle mounted processors shall meet the environmental conditions associated with being mounted in a trunk	Yes	Our processor operates within a temperate range of -40 degrees Celsius to 70 degrees Celsius.
COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB # 10493)		
SHERIFF'S DEPARTMENT		
LICENSE PLATE READERS		
SECTION C: EXHIBIT A STATEMENT OF WORK		
Page 24 of 46		
2.4 LPR SOFTWARE		
3.4.1 Application software shall be capable of running on a Windows based mobile computer	Yes	Our CDMS software is windows compatible.
3.4.2 There shall be no Java programming or Java derivatives	Yes	We comply with this spec.
3.4.3 LPR system shall have real time alerting and the ability to program custom hotlist	Yes	We comply with this spec. Hotlists can be created from a web browser or within the vehicle ALPR software.
3.4.4 There shall be a secure login and password function on the LPR software; The user's access shall be controlled by an administrator designated by the San Diego County Sheriff's Department	Yes	We comply with this spec.
3.4.4.1 API capable of integrating user defined active directory	Yes with comment	SAML w/ IDP initiated SAML Assertion

Specification	Compliant	Comment
3.4.5 The software shall provide live, simultaneous display of all the following data:		
3.4.5.1 The IR license plate image	Yes	Displayed within our CDMS software.
3.4.5.2 The license plate interpretation or system read	Yes	Displayed within our CDMS software.
3.4.5.3 A corresponding color overview of the vehicle displaying the captured IR license plate	Yes	Displayed within our CDMS software.
3.4.5.4 The date and time stamp	Yes	Displayed within our CDMS software.
3.4.5.5 Identification of the camera capturing the image	Yes	Displayed within our CDMS software.
3.4.6 Software shall capture GPS coordinates for every recorded license reads	Yes	Displayed within our CDMS software.
3.4.7 Software shall have the ability to GPS stamp all the reads	Yes	All reads are stamped with the ALPR vehicle GPS coordinates at the time the plate was captured.
3.4.8 Software will give a unique audible and visible alert when a wanted license plate is discovered	Yes	Our CDMS software complies with this spec.
3.4.9 The Alert Screen remains displayed until acknowledged by the user, and, while displayed, the system continues to process license plate data in the background	Yes	Our CDMS software complies with this spec.
4. LPR SPEED TRAILER – Complete Package		
4.1. Solar LPR Trailer with Speed Sign	Yes	The proposed system includes a speed sign.
4.2. Solar LPR Trailer shall be able to operate at least three (3) days.	Yes	The proposed system is capable of at least 3 days.
4.3. Speed sign will be radar equipped	Yes	Equipped with k-band radar.
4.4. Trailer chassis	Yes	
4.5. GPS antenna and minimum of 3 Generation (G)/4G or Long-Term Evolution (LTE) multiband antenna	Yes	4G antenna included
4.6. Two (2) ALPR cameras IR (or its equivalent) and color	Yes	This is standard with all of our ALPR outfitted trailers.
4.7. Extended battery	Yes	This is standard with all of our ALPR outfitted trailers.
4.8. Everything needed to transmit LPR data, such as data processor, modem, computer, power inverter.	Yes	Data processor, modem, computer and power inverter are included.

Specification	Compliant	Comment
5. DEMONSTRATION OR SAMPLE		
5.1. The San Diego County Sheriff's Department reserves the right to request an on-site demonstration of the LPR camera system being quoted or a sample be sent to determine if it meets the requirements stated. All specifications listed in the General Requirements shall be confirmed. All travel, demonstration supplies and/or shipping expenses shall be at the vendor's expense.	Yes	We are happy to do so.
6 INSTALLATION		
6.1. Vendor will provide the option to purchase systems as a "kit" that includes all hardware, wiring and software for standard installations.	Yes	We comply with this spec.
6.2. Vendor will provide installation and warranty repair options on vehicles within San Diego County.	Yes	We have several vendors we work with that can install and service within San Diego County.
6.3. Vendor will provide technician or representative to visit Sheriff site for system start-up, configuration and commissioning of LPR system.	Yes	This is one of our standard offerings.
7. CUSTOMER SUPPORT		
7.1. The vendor shall provide timely (within 72 business hours) and accurate technical advice and sales support.	Yes	We comply with this spec.
8. TRAINING		
8.1. The San Diego County Sheriff's Department reserves the right to request up to eight (8) hours of training at a San Diego County Sheriff's Department facility within 30 days of delivery at no additional charge.	Yes	We have an entire training team of retired law enforcement personnel that offers free training throughout the country at no charge.
9. DELIVERY REQUIREMENTS		
9.1. Delivery address: San Diego County Sheriff's Department Attn: Ivy Scites - Grants Unit 9621 Ridgeway Court San Diego, CA 92123	Yes	We comply with this spec.
9. DELIVERY REQUIREMENTS		
9.1. Delivery address: San Diego County Sheriff's Department Attn: Ivy Scites - Grants Unit 9621 Ridgeway Court San Diego, CA 92123	Yes	We comply with this spec.

Specification	Compliant	Comment
10. INVOICE		
10.1. Invoices shall be sent to: San Diego County Sheriff's Department Attn: Ivy Scites - Grants Unit 9621 Ridgehaven Court	Yes	We comply with this spec.
8.2 Only new products shall be accepted. An LPR system that has been used in any way, refurbished, reconditioned, or gray	Yes	We comply with this spec.
8.3 The County shall be given credit for damaged and returned items within five (5) business days.	Yes	We comply with this spec.
8.4 There shall be no restocking fees or other charges for returns of damaged or incorrect items.	Yes	We comply with this spec.
8.5 Deviations to the terms, conditions and/or specifications shall be conspicuously noted in writing by the respondent.	Yes	We comply with this spec.

C.4 EXHIBIT B – INSURANCE REQUIREMENTS

MOTOROLA SOLUTIONS RESPONSE

Please see the 'redlined' responses noted below.

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10493)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS

SECTION C: EXHIBIT B INSURANCE REQUIREMENT – [Motorola Solutions, Inc.](#)
[Clarifications](#)

INSURANCE REQUIREMENTS FOR CONTRACTORS

Without limiting Contractor's indemnification obligations to County, Contractor shall provide at its sole expense and maintain for the duration of this contract, or as may be further required herein, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of the work by the Contractor, his agents, representatives, employees or subcontractors.

1. ~~Minimum~~ Scope of Insurance Coverage shall be at least as broad as:

- A. Commercial General Liability, Occurrence form, Insurance Services Office form CG0001.
- B. Automobile Liability covering all owned, non owned, hired auto Insurance Services Office form CA0001.
- C. Workers' Compensation, as required by State of California and Employer's Liability Insurance.
- D. Technology Liability (Errors & Omissions)

2. ~~Minimum~~ Limits of Insurance

Contractor shall maintain limits no less than:

- A. Commercial General Liability including Premises, Operations, Products and Completed Operations, Contractual Liability, and Independent Contractors Liability: \$~~12~~,000,000 per occurrence for bodily injury, personal injury and property damage. The General Aggregate limit shall be \$24,000,000.
- B. Automobile Liability: \$1,000,000 each accident for bodily injury and property damage.
- C. Employer's Liability: \$1,000,000 each accident for bodily injury or disease. Coverage shall include waiver of subrogation endorsement in favor of County of San Diego.
- D. Technology Liability (Errors & Omissions): \$~~12~~,000,000 per ~~claim occurrence or~~ ~~claim~~ with an aggregate limit of not less than \$24,000,000. This coverage shall be

maintained for a minimum of three years following termination or completion of Contractor's work pursuant to the Contract.

~~If the contractor maintains broader coverage and/or higher limits than the minimums shown above, the County requires and shall be entitled to the broader coverage and/or higher limits maintained by the Contractor. As a requirement of this contract, any available insurance proceeds in excess of the specified minimum limits and coverage stated above, shall also be available to the County of San Diego.~~

3. Self-Insured Retentions

Any self-insured retention or deductible under Contractor's policies herein shall be the Contractor's sole obligation. ~~must be declared to and approved by County Risk Management. At the option of the County, either: the insurer shall reduce or eliminate such self-insured retentions as respects the County, the members of the Board of Supervisors of the County and the officers, agents, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the County guaranteeing payment of losses and related investigations, claim administration, and defense expenses.~~

4. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

A. Additional Insured Endorsement

The County of San Diego, the members of the Board of Supervisors of the County and the officers, agents, employees ~~and volunteers~~ of the County, individually and collectively are to be covered as additional insureds on the General Liability policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired or borrowed by or on behalf of the Contractor. General Liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO from ~~CG 2010 11 85 or both~~ CG 2010, CG 2026, CG 2033, or CG 2038; and CG 2037 for m sms if later revisions used).

B. Primary Insurance Endorsement

For any claims related to this project, the Contractor's insurance coverage, including any excess liability policies, shall be primary insurance at least as broad as ISO CG 2001 04 13 as respects the County, the members of the Board of

C. Each insurance policy required above shall state that in the event of cancellation of coverage ~~shall not be canceled, except with~~ notice will be provided to the County. Notice of Cancellation

D. Severability of Interest Clause

Coverage applies separately to each insured, except with respect to the limits of liability, and that an act or omission by one of the named insureds shall not reduce or avoid coverage to the other named insureds.

GENERAL PROVISIONS

5. Qualifying Insurers

All required policies of insurance shall be issued by companies which have been approved to do business in the State of California by the State Department of Insurance, and which hold a current policy holder's alphabetic and financial size category rating of not less than A, VII according to the current Best's Key Rating guide, or a company of equal financial stability that is approved in writing by County Risk Management.

6. Evidence of Insurance

Prior to commencement of this Contract, but in no event later than the effective date of the Contract, Contractor shall furnish the County ~~with a copy of the policy declaration and endorsement pages along with the~~ certificates of insurance and ~~amendatory endorsements effecting coverage~~ required by this clause. ~~Policy declaration and~~ Endorsement pages shall be included with renewal certificates.

~~and amendatory endorsements submissions and shall be furnished to County within thirty days of the expiration of the term of any required policy. Contractor shall permit County at all reasonable times to inspect any required policies of insurance.~~

Failure to Obtain or Maintain Insurance; County's Remedies

Contractor's failure to provide insurance specified or failure to furnish certificates of insurance and amendatory endorsements or failure to make premium payments required by such insurance shall constitute a material breach of the Contract, and County may, at its option, terminate the Contract for any such default by Contractor.

7. No Limitation of Obligations

The foregoing insurance requirements as to the types and limits of insurance coverage to be maintained by Contractor, and any approval of said insurance by the County are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Contractor pursuant to the Contract, including, but not limited to, the provisions concerning indemnification.

8. Review of Coverage

County retains the right at any time to review the coverage, form and amount of insurance required herein and may require Contractor to obtain insurance reasonably sufficient in coverage, form and amount to provide adequate protection against the kind and extent of risk which exists at the time a change in insurance is required.

9. Self-Insurance

Contractor may, with the prior written consent of County Risk Management, fulfill some or all of the insurance requirements contained in this Contract under a plan of self-insurance. Contractor shall only be permitted to utilize such self-insurance if in the opinion of County Risk Management, Contractor's (i) net worth, and (ii)

reserves for payment of claims of liability against Contractor, are sufficient to adequately compensate for the lack of other insurance coverage required by this Contract. Contractor's utilization of self-insurance shall not in any way limit liabilities assumed by Contractor under the Contract.

10. Claims Made Coverage

If coverage is written on a "claims made" basis, the Certificate of Insurance shall clearly so state. In addition to the coverage requirements specified above, such policy shall provide that:

- A. The policy retroactive date coincides with or precedes Contractor's commencement of work under the Contract (including subsequent policies purchased as renewals or replacements).
- B. Contractor will make every effort to maintain similar insurance during the required extended period of coverage following expiration of the Contract.
- C. If insurance is terminated for any reason, Contractor shall purchase an extended reporting provision of at least three years to report claims arising in connection with the Contract.
- D. The policy allows for reporting of circumstances or incidents that might give rise to future claims.

12. Subcontractors' Insurance

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that County is an additional insured on insurance required from subcontractors. Such Additional Insured endorsement shall be attached to the certificate of insurance in order to be valid and on a form at least as broad as ISO from CG 2010 11 85 or both CG 2010, CG 2026, CG 2033, or CG 2038; and CG 2037 forms if later revisions used. ~~If any sub-contractor's coverage does not comply with the foregoing provisions, Contractor shall defend and indemnify the County from any damage, loss, cost, or expense, including attorneys' fees, incurred by County as a result of subcontractor's failure to maintain required coverage.~~

Waiver of Subrogation

Contractor hereby grants to County a waiver of their rights of subrogation which any insurer of Contractor may acquire against County by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the County for all work performed by the Contractor, its employees, agents and subcontractors.

MOTOROLA SOLUTIONS RESPONSE

RFB # H. **Exception.** Motorola asserts it does not perform under Cost Accounting Standards ("CAS") covered contracts; (ii) does not accept contracts where cost or pricing data is required to be provided; (iii) does not need to have and maintain an

estimating system such as described in DFARS 252.215-7002; (iv) does not generate labor hour estimates from an estimating system; (v) does not provide cost information; and (vi) does not calculate or submit cost-based indirect or labor rates so it cannot agree to be bound by the Uniform Administration Requirements of 2 CFR Part 200. Additionally, Motorola cannot agree to terms and conditions imposed by any federal agency without the ability to review such terms and conditions to ensure compliance so we respectfully request deletion of this clause.

C.5 EXHIBIT C – PRICING SCHEDULE

Description	MFG & Model	Estimated Quantity	Unit Price	Total	Notes
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for plate capture and a color overview image of the vehicle	Vigilant Mobile LPR 4-Camera Reaper High Definition System	4	\$6,675	\$26,700	
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle	Vigilant Fixed LPR ReaperHD Camera with Sun Shield - 25mm Lens with Camera Cable - Standard ReaperHD Camera	10	\$4,005	\$40,050	
LPR Camera Mounting Brackets for Light Bar	Vigilant LPR Camera Mounting Brackets - Light Bar Mounting Style - Complete Set	4	\$623	\$2,492	
LPR Mounting for Portable system	Fixed LPR Camera Bracket	10	\$311	\$3,110	
LPR Processor	n/a	14 already included	n/a		Processors are included with Mobile and Installation "Kit" line items)
Modem (for mobile)	Cradlepoint IBR600C	4	\$445	\$1,780	We typically use the existing modem, but can supply our own
Modem (for portable)	Cradlepoint IBR600C	10 already included	n/a		Modems included with "Installation Kit" line item

Description	MFG & Model	Estimated Quantity	Unit Price	Total	Notes
LPR Software (Mobile)	Vigilant LPR Basic Service Package for Hosted/Managed LPR Deployments	4 Units	\$840	\$3,360	
LPR Software (Portable)	Vigilant LPR Basic Service Package for Hosted/Managed LPR Deployments	10 Units	\$210	\$2,100	
LPR Speed Trailer complete package	Vigilant Basic Solar 2-Camera HD LPR Trailer with 80W panel	1	\$17,795.55	\$17,795.55	
Start-up, configuration, and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Vigilant System Start Up & Commissioning of 'In Field' LPR system	14	\$0.00	\$0	
Installation (4 Installs included for mobiles, County indicated they would use their own assets for "portable" installation)	Standard 4-Camera Vehicle Installation	4	\$800	\$3,200	
Covert Installation in vehicle	Covert Installation on Vehicle TBD	1	\$3,000	\$3,000	
Installation "Kit", includes all hardware, wiring, and software for "do it yourself" standard installations (on poles & trailers)	Vigilant Fixed Camera Communications Box	5	\$2,500	\$12,500	Box contains processor, modem, and connection for 120v continuous power.
Training	Vigilant Training	8	\$0	\$0	Training is always free with Vigilant Solutions.
Shipping (Mobile)	Vigilant Shipping Charges (Mobile)	4	\$130	\$520	

Description	MFG & Model	Estimated Quantity	Unit Price	Total	Notes
Shipping (Portable)	Vigilant Shipping Charges (Fixed)	10	\$55	\$550	
Shipping (Trailer)	Crating and Shipping for Vigilant Trailer	1	\$1,500	\$1,500	Forklift required at delivery
			Total:	\$118,657.55	
Additional Notes:					
All equipment comes with one year of hosting and warranty on LEARN.					
ARJIS API included under the Sheriff's existing arrangement with Vigilant.					
Ongoing hosting fees after year 1 will be in accordance with the existing ESA between Vigilant and San Diego Sheriff.					

C.6 EXHIBIT D – FEDERAL GRANT REQUIREMENTS

RFB Exhibit D Federal Grant Requirements. RFB # D.

MOTOROLA SOLUTIONS RESPONSE

Comply with Clarification: If selected for award, Motorola would be providing a commercial item available to its customers. Motorola therefore considers the requirements rights to inventions as described in this section are not applicable.

RFB # H.

MOTOROLA SOLUTIONS RESPONSE

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C.6.1 Form W-9

MOTOROLA SOLUTIONS RESPONSE

Motorola’s Form W-9 is provided below.

Request for Taxpayer Identification Number and Certification

Give Form to the
requester. Do not
send to the IRS.

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Motorola Solutions, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☒ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) **5**

Exemption from FATCA reporting code (if any) **D**

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

500 W. Monroe Street

6 City, state, and ZIP code

Chicago, IL 60661

7 List account number(s) here (optional)

Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

- -

or

Employer identification number

3 6 - 1 1 1 5 8 0 0

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign
Here

Signature of
U.S. person ►

Date ►

1/6/2020

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding, later*.

SECTION D

ATTACHMENTS

Motorola Solutions has provided the following attachments in this section:

- MOBILE LPR User Guide
- REAPERHD MOBILE Installation Guide
- REAPERHD FIXED installation and configuration guide
- VIGILANT LPR Trailer Configuration Guide



Mobile LPR User Guide

DECEMBER 2020

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MN007779A01-AA



ReaperHD Mobile Installation Guide

DECEMBER 2020



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Disclaimer

Please note that certain features, facilities, and capabilities described in this document may not be applicable to or licensed for use on a specific system, or may be dependent upon the characteristics of a specific mobile subscriber unit or configuration of certain parameters. Please refer to your Motorola Solutions contact for further information.

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Open Source Content

This product contains Open Source software used under license. Refer to the product installation media for full Open Source Legal Notices and Attribution content.

European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) directive



■ The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases).

As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste.

Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

Contact Us

For enquiries, see <https://www.vigilantsolutions.com/support/> or contact our 24 hours support staff at:

- Tel: 925-398-2079
- Fax: 925-398-2113

Document History

Version	Description	Date
MN007802A01-AA	Initial Release	November 2020

Related Publication

The following list contains part numbers and titles of related publications. To find and download the publications, visit <https://learning.motorolasolutions.com>.

Part Number	Title
MN007778A01	<i>ReaperHD Mobile Camera Aiming User Guide</i>
MN007779A01	<i>Mobile LPR User Guide</i>

Read Me First

Notations Used in This Manual

Throughout the text in this publication, you notice the use of **Warning**, **Caution**, and **Notice**. These notations are used to emphasize that safety hazards exist, and the care that must be taken or observed.



WARNING: An operational procedure, practice, or condition, and so on, which may result in injury or death if not carefully observed.



CAUTION: An operational procedure, practice, or condition, and so on, which may result in damage to the equipment if not carefully observed.



NOTICE: An operational procedure, practice, or condition, and so on, which is essential to emphasize.

Special Notations

The following special notations are used throughout the text to highlight certain information or items:

Table 1: Special Notations

Example	Description
Menu key or Camera button	Bold words indicate a name of a key, button, or soft menu item.
The display shows <i>Settings</i> <i>Applied</i> .	Typewriter words indicate the MMI strings or messages displayed on your radio.
< <i>required ID</i> >	The courier, bold, italic, and angle brackets indicate user input.
Setup → Settings → All Settings	Bold words with the arrow in between indicate the navigation structure in the menu items.

Chapter 1

Hardware Overview

This document will help the user to install a Reaper HD + Shield LPR camera system.

1.1

ReaperHD with VLP

Following are the hardware components for ReaperHD with VLP configuration:

- ReaperHD and Magnet Mount Assembly
- VLP
- Camera Cable
- VLP Wiring Harness
- GPS Cable

Hardware Components

Figure 1: ReaperHD and Magnet Mount Assembly



Figure 2: VLP



Figure 3: Camera Cable



Figure 4: VLP Wiring Harness

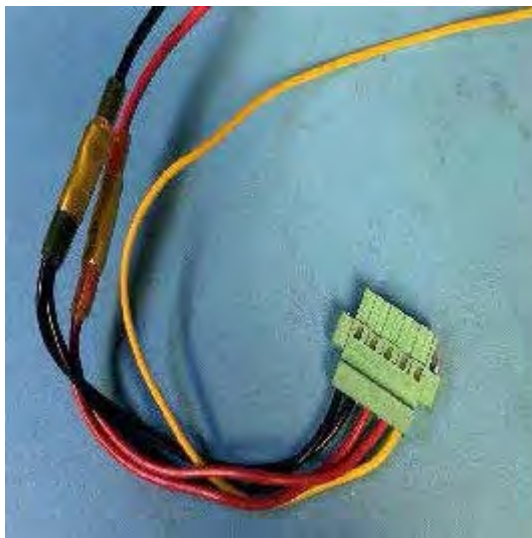


Table 2: VLP Wiring Harness Cable Color

Color	Description
Black	Ground
Red	+12 V
Yellow	Ignition

Figure 5: GPS Cable



IMPORTANT: Do not connect ReaperHD when wet. Ensure that cable end and camera power port are dry to avoid damaging equipment.

1.2

VLS Mobile Tablet

Following are the hardware components for VLS Mobile Tablet configuration:

- ReaperHD with Magnet Mount Assembly
- ReaperHD PoE Injector
- Camera Cable
- PoE Injector Wiring Harness
- GPS
- Tablet
- Ram Mount Base Plate
- Ram Mount Pole Assembly
- Tablet Docking Station
- Tablet KeyBoard/Mouse Kit
- Tablet Power Solution

Figure 6: VLS Mobile Tablet Solution and Ram Mount Assembly



Figure 7: PoE Injector



Figure 8: ReaperHD with Magnet Mount Assembly



Figure 9: Camera Cable



Figure 10: PoE Injector Wiring Harness



Figure 11: GPS Cable



IMPORTANT: Do not connect ReaperHD when wet. Ensure that cable end and camera power port are dry to avoid damaging equipment.

Chapter 2

System Assembly

2.1

Assembling ReaperHD with VLP

Procedure:

- 1 To provide power to the VLP, connect the wiring harness to the VLP box.

Figure 12: VLP Box



- 2 Connect both ends of the Ethernet cable to the VLP box and your PC respectively.

Figure 13: Ethernet Cable to VLP Box



- 3 Connect the camera cable to the LAN/PoE port of the VLP box.

Figure 14: Camera Cable to VLP Box



- 4 Connect the GPS cable to the GPS port of the VLP box.



NOTICE: Ensure that the GPS puck is placed in a location with an unobstructed view of the sky, for example, at the dash of vehicle or exterior of vehicle.

Figure 15: GPS Cable to VLP Box



Figure 16: GPS Puck



- 5 For trunk installation, locate a suitable area for the VLP box so that the air can flow around outside of the enclosure.

- 6 Mount the VLP using screws seated through the notches of the feet of the VLP on both sides.



NOTICE: Ensure that the VLP is fully secured to avoid unnecessary vibration while vehicle is traveling.

2.2

Assembling VLS Mobile Tablet

Procedure:

- 1 Plug the wiring harness to the PoE Injector.

Figure 17: Wiring Harness to PoE Injector



- 2 Connect both ends of the Ethernet cable to the PoE Injector and your laptop respectively.

Figure 18: Ethernet Cable to PoE Injector



- 3 Connect the camera cable to the PoE Injector.

Figure 19: Camera Cable to PoE Injector



- 4 Connect both of the GPS and 4G puck connectors to the Antenna GPS and LTE connectors of the VLS Mobile Tablet respectively.


 **NOTICE:** The Antenna GPS and LTE connectors are located at the bottom of the VLS Mobile Tablet cradle.

Figure 20: GPS Puck Connectors



Table 3: GPS Puck Connectors

Number	Description
1	GPS connector
2	4G connector

- 5 For vehicle installation, locate a suitable area for the PoE Injector so that the air can flow around outside of the enclosure.
- 6 Mount the PoE Injector using screws seated through the notches of the feet on both sides.


 **NOTICE:** Ensure that the PoE Injector is fully secured to avoid unnecessary vibration while vehicle is traveling.
- 7 Install the Ram Mount base plate.

Figure 21: Ram Mount Base Plate



- 8 Install the Ram Mount Pole Assembly and VLS Mobile Tablet Cradle to the base plate.

Figure 22: Ram Mount Assembly



Chapter 3

PC Configuration

3.1

Configuring Window Network Settings

Procedure:

- 1 Open the **Control Panel** and click **Network and Internet**→ **Network and Sharing Center**→**Change Adapter Settings**.
- 2 Find the adapter that represents the port on your PC receiving input from the shield box.
- 3 Right click on it, go to **Properties** and double-click **Internet Protocol Version 4 (TCP/IPv4)**.
- 4 In the **General** tab of **Internet Protocol Version 4 (TCP/IPv4)**, select **Use the following IP address**, and enter one of the following informations:
 - VLP Configuration: IP Address 192.168.5.55, Subnet Mask 255.255.255.0
 - VLS Tablet Configuration: IP Address 192.168.3.1, Subnet Mask 255.255.255.0
- 5 Click **OK** on both windows to set an appropriate IP address.

3.2

Installing Mobile LPR



NOTICE: Software versions may vary from images below.

Procedure:

- 1 Download the software from the http://downloads.vigilantsolutions.com/Software/CDMS_HD_Release.zip.
- 2 Unzip the **CDMS_HD_Release** folder.
- 3 Double-click **setup.exe**.
- 4 Click **Next**.
- 5 Select checkbox next to **I accept the terms of the license agreement** and click **Next**.
- 6 Enter a user name and company name, and click **Next**.
- 7 Click **Next**.
- 8 Click **Install**.
- 9 Click **Finish**.

3.3

Configuring Mobile LPR

Procedure:

- 1 Open the **Vigilant Mobile LPR Application**.
- 2 Read the warning message and click **OK** to proceed.

Figure 23: Mobile LPR Warning Message



- 3 Insert your connection file to connect to LEARN.
 - If you have your LEARN Connection File, click **Browse** and navigate to the location of the file.
 - If you do NOT have your connection file already click **Not Now**.

Figure 24: Connect to LEARN



- 4 If you selected **Not Now**, select the user **CDM Admin** and use the password **12345**. Click **Login**.
- 5 If you have loaded your LEARN connection file, select your LEARN username from the drop-down, enter your LEARN password and click **Login**.

Figure 25: Log In to Mobile LPR



- 6 Once logged in, select the checkbox next to **Automatically connect** and click **Connect**.

Figure 26: Connect to Database

- 7 Click **Yes** when asked to create the database.
- 8 Click **Cancel** in the warning message window.
- 9 Perform one of the following actions:

Configurations	Action
VLP Configuration	<p>a Click the setup tab and enter 192.168.5.150.</p> <p>b Click Apply.</p> <p>Figure 27: Connect to Database</p>
VLS Tablet Configuration	Select the cameras that you will use.

Configurations

Action

Figure 28: Select Cameras

CameraAudioOCRAlertCleanServerProxy

Camera	Name	IP Address
<input checked="" type="checkbox"/> Cam-1	Camera #1	192.168.3.102
<input checked="" type="checkbox"/> Cam-2	Camera #2	192.168.3.101
<input type="checkbox"/> Cam-3	Camera #3	192.168.3.100
<input type="checkbox"/> Cam-4	Camera #4	192.168.3.103

Change Cam

Config IP

Camera Info

Apply


Close

The screen should now be displayed as shown below.

Figure 29: Mobile LPR Window



10 Log back into the Vigilant Mobile LPR and all buttons at the top should be green.

 **NOTICE:** To complete camera system setup and for optimal performance, please refer to *ReaperHD Mobile Camera Aiming User Guide*.

11 From the current screen, select **Setup**.

12 Select your regional **OCR Profile**.

Figure 30: Regional OCR Profile



13 Configure the Alert settings as the following.

Figure 31: Alert Settings

	Plate1 Only	Plate1 & Plate2
Exact match	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One-Off match	<input type="checkbox"/>	<input type="checkbox"/>

☐ Ignore Out-of-State Alerts

Notifications

Sound Audio Alert	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Trigger Pop-Up Window	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Force Pop-Up Priority	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Require Hit Confirmation	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Apply **Close**

3.4

Configuring Vigilant PlateSearch Server (Optional)

This section outlines the necessary ports and protocols to be authorized on the network for communication between Vigilant PlateSearch and the Vigilant CarDetector Mobile (CDM) application.

Communication between the VLS Mobile Tablet or In-Car Laptop and Reaper/Vigilant PlateSearch is done through TCP protocol.

The following ports MUST be open on the VLS Mobile Tablet/In-Car Laptop to communicate with the Reaper DSP Unit.

- TCP Port 2000
- TCP Port 5000
- TCP Port 3000
- TCP Port 22
- TCP Port 22

The Reaper DSP Unit communicates with the Vigilant PlateSearch server (Wireless Card Recommended) through the following TCP ports:

- TCP Port 80
- TCP Port 443

Legal and Support

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Disclaimer

Please note that certain features, facilities, and capabilities described in this document may not be applicable to or licensed for use on a specific system, or may be dependent upon the characteristics of a specific mobile subscriber unit or configuration of certain parameters. Please refer to your Motorola Solutions contact for further information.

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Open Source Content

This product contains Open Source software used under license. Refer to the product installation media for full Open Source Legal Notices and Attribution content.

European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) directive



■ The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases).

As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste.

Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

Contact Us

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- Tel: 925-398-2079
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Read Me First

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Special Notations

The following special notations are used throughout the text to highlight certain information or items:

Table 1: Special Notations

Example	Description
Menu key or Camera button	Bold words indicate a name of a key, button, or soft menu item.
The display shows <code>Settings Applied</code> .	Typewriter words indicate the MMI strings or messages displayed on your radio.
<i><required ID></i>	The courier, bold, italic, and angle brackets indicate user input.
Setup→Settings→All Settings	Bold words with the arrow in between indicate the navigation structure in the menu items.

Chapter 1

Getting Started

Procedure:

- 1 To begin using Mobile LPR, download the software and follow the setup instructions.
- 2 To launch the software, click the **Vigilant Mobile LPR**→**OK**→**License code**→**Unlock**.
- 3 If you do not have the License code, click **Run Trial** to continue.

Figure 1: Mobile LPR Setup

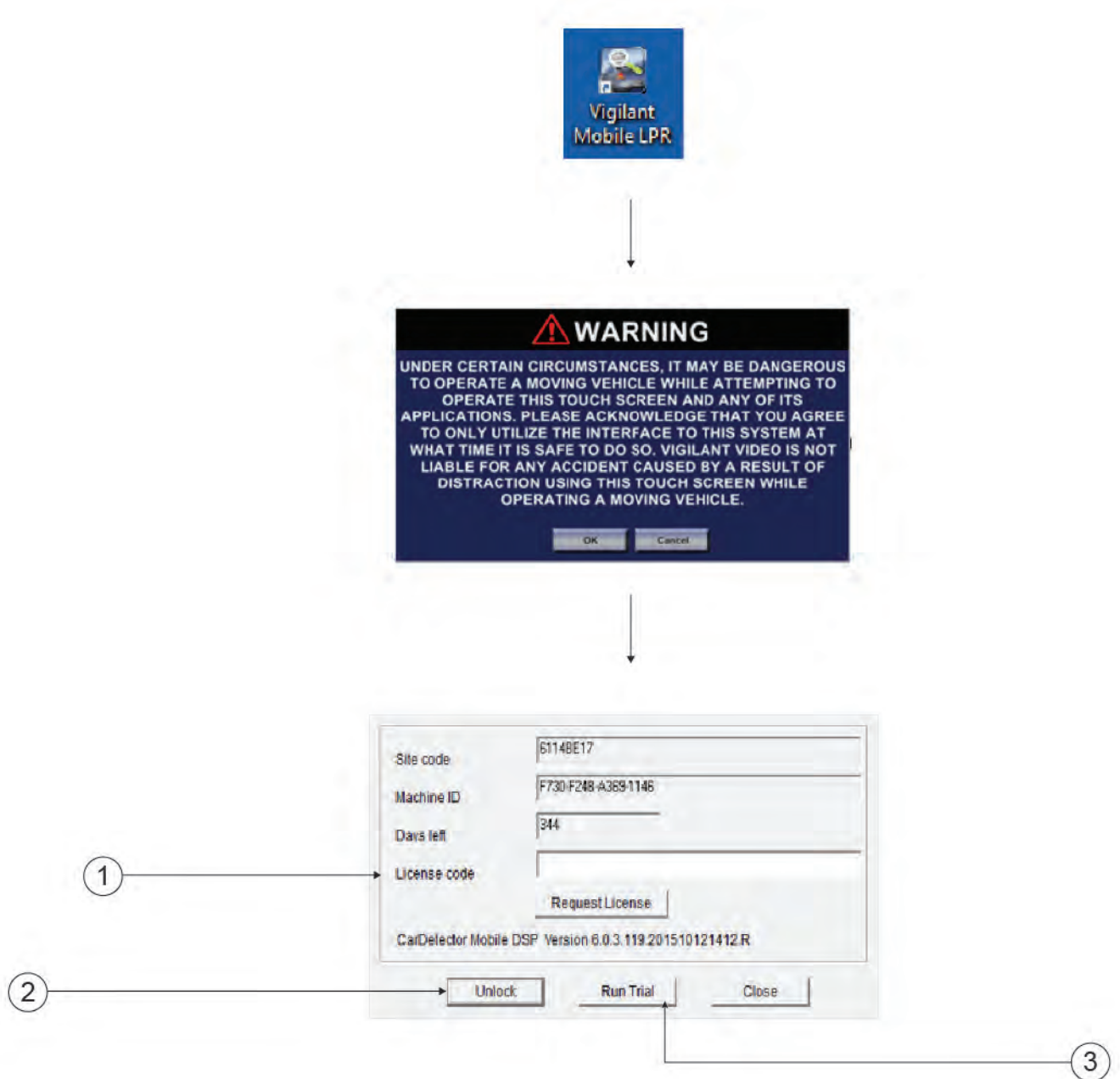
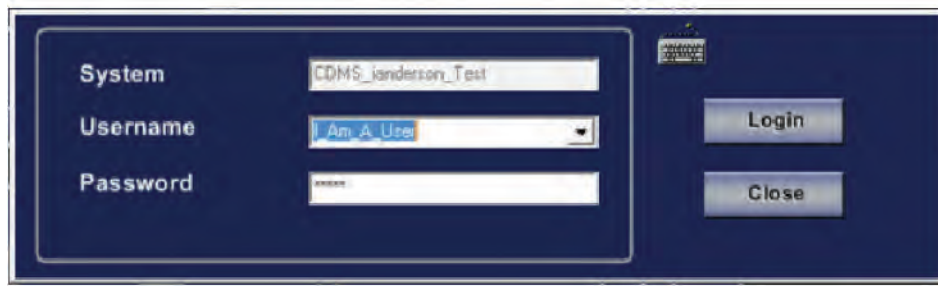


Table 2: Mobile LPR Setup Description

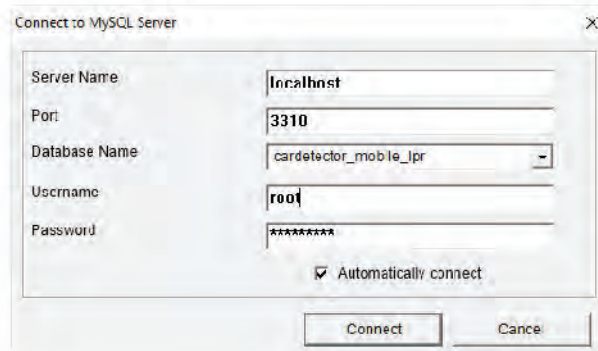
Number	Description
1	Enter license code
2	Click unlock to continue
3	Run a 60 day trial license

4 Enter user credentials to connect to the Mobile LPR database.

Figure 2: Connect to Database Server



A dark blue login window with a white border. It contains three input fields: "System" with the text "CDMS_ianderson_Test", "Username" with a dropdown menu showing "Am A User", and "Password" with masked characters. To the right of these fields are two buttons: "Login" and "Close".



A standard Windows-style dialog box titled "Connect to MySQL Server". It has a close button (X) in the top right corner. The dialog contains five input fields: "Server Name" with "localhost", "Port" with "3310", "Database Name" with a dropdown menu showing "cardetector_mobile_lpr", "Username" with "root", and "Password" with masked characters. Below these fields is a checkbox labeled "Automatically connect" which is checked. At the bottom are two buttons: "Connect" and "Cancel".

- 5 Throughout the mobile LPR software, you will see a little keyboard symbol. To launch the built-in keyboard, click on the keyboard symbol.

Figure 3: Built-In Virtual Keyboard

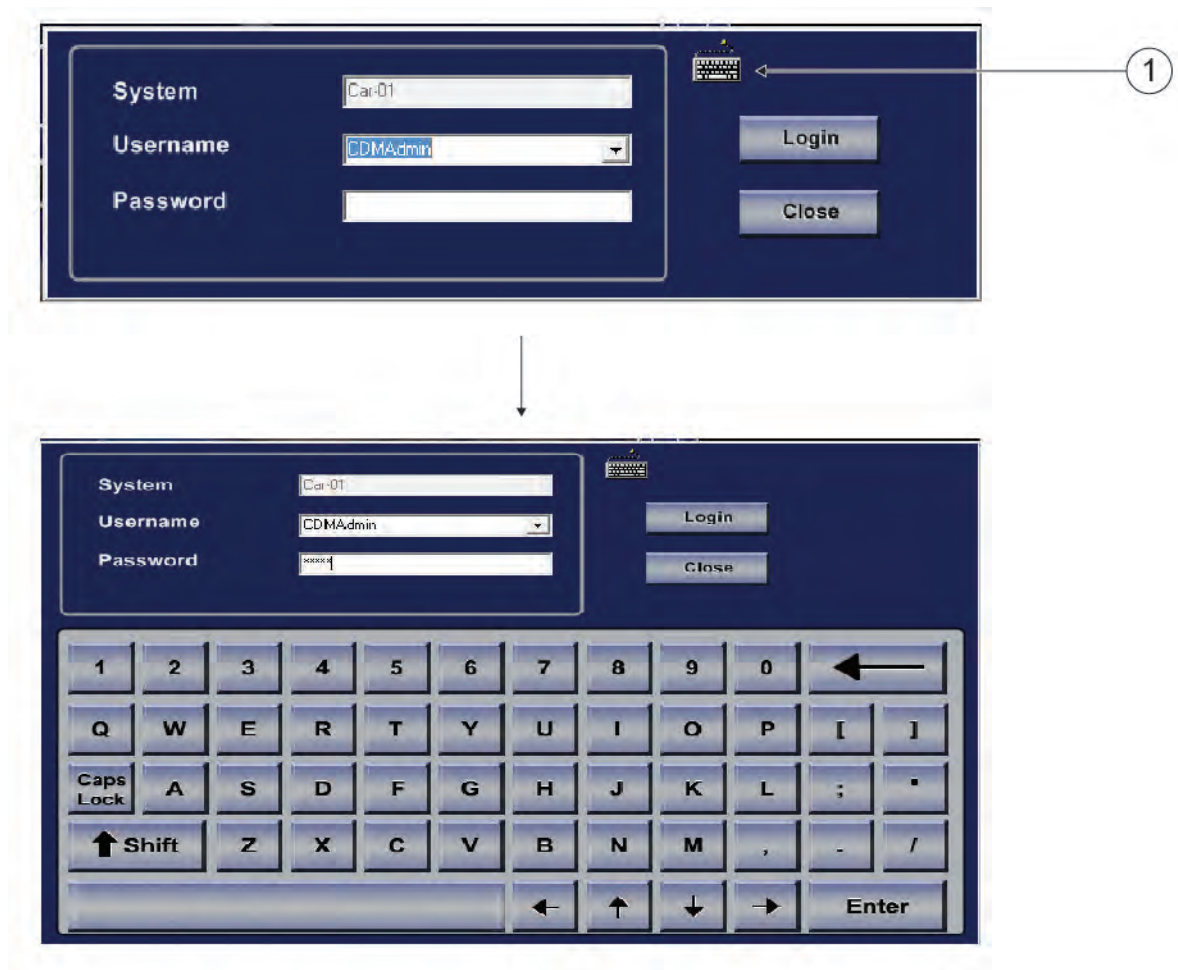


Table 3: Virtual Keyboard Symbol

Number	Description
1	Keyboard Symbol

Chapter 2

Main Menu Overview

The main menu of Mobile LPR has a static control panel on the left-hand side and four responsive information windows that populate new data with each scan.

There are four information windows in the main menu.

- Active Camera Feed
- Detection Viewer
- Hit List
- Detection Plate List

Figure 4: Main Menu Overview



Table 4: Main Menu Overview Description

Number	Description
1	Active camera feed
2	Control buttons
3	Hit list
4	Camera navigation
5	Detection list

Chapter 3

Control Buttons Overview

The control buttons offer users one-click access to customizable features and useful enforcement tools.

Figure 5: Control Buttons Overview

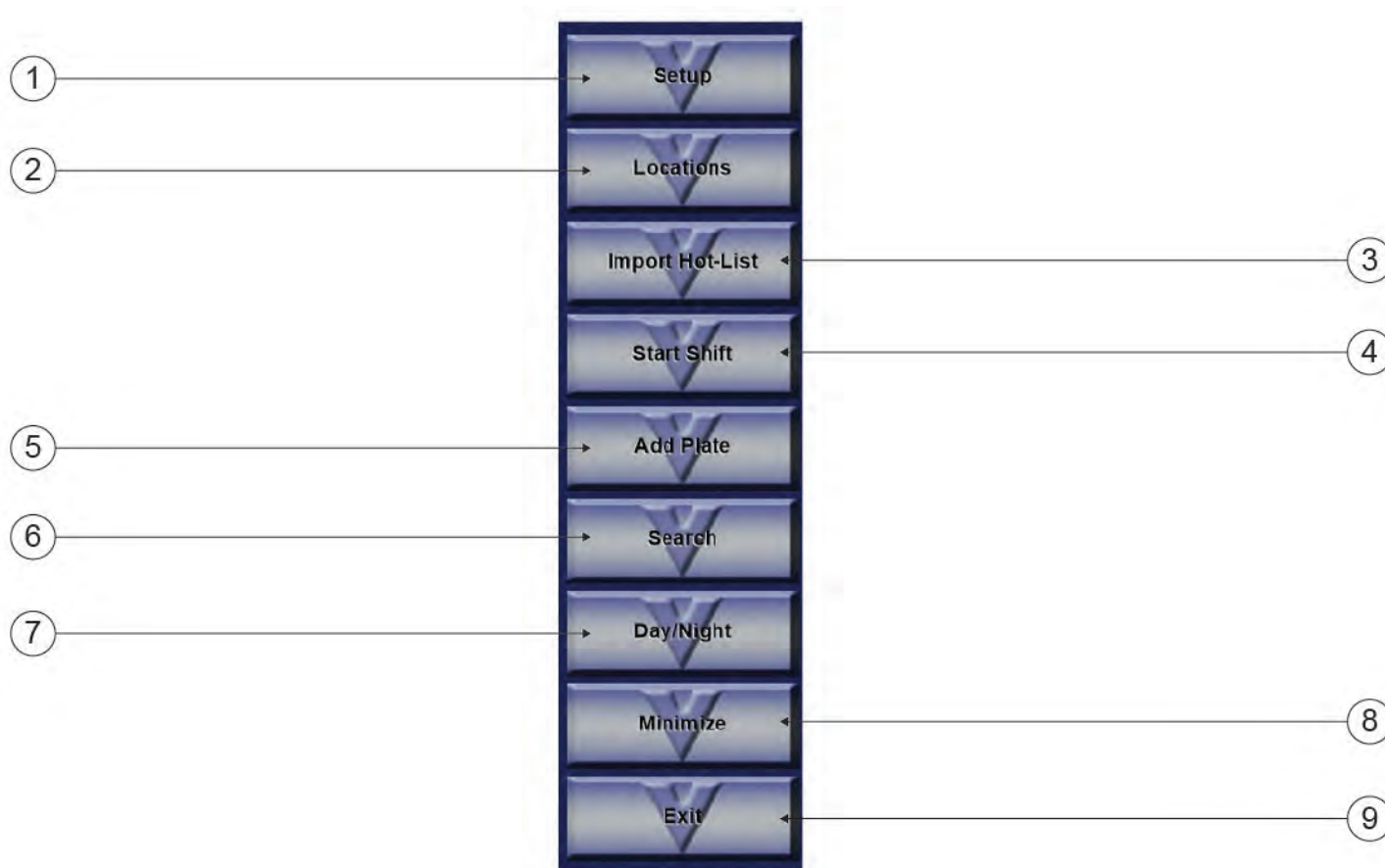


Table 5: Control Buttons Description

Number	Description
1	Launches the main setup parameters and options for Mobile LPR
2	Ability to view current locations set up and choose your location
3	Allows the operator to add hot list files to the hot list database
4	Bookmarks a period for reporting and exporting data records

Number	Description
5	Allows the operator to add single plates to the hot list database
6	Search utility to access all LPR data in the local CDMS database
7	Switch between Day Mode theme and Night Mode theme
8	Minimizes the Mobile LPR application while operating in the background
9	Terminates the Mobile LPR program

3.1

Setup

3.1.1

Configuring Camera/DSP Settings

Procedure:

- 1 To set up your software camera connections, click the **Setup** button.
- 2 In the Camera/DSP Menu, select the cameras you would like to activate.
- 3 Click **Test Connection** to validate the connection.
A green light will indicate a successful connection.
- 4 Click **Apply** to save your preferences.

Figure 6: Configuring ReaperHD Camera

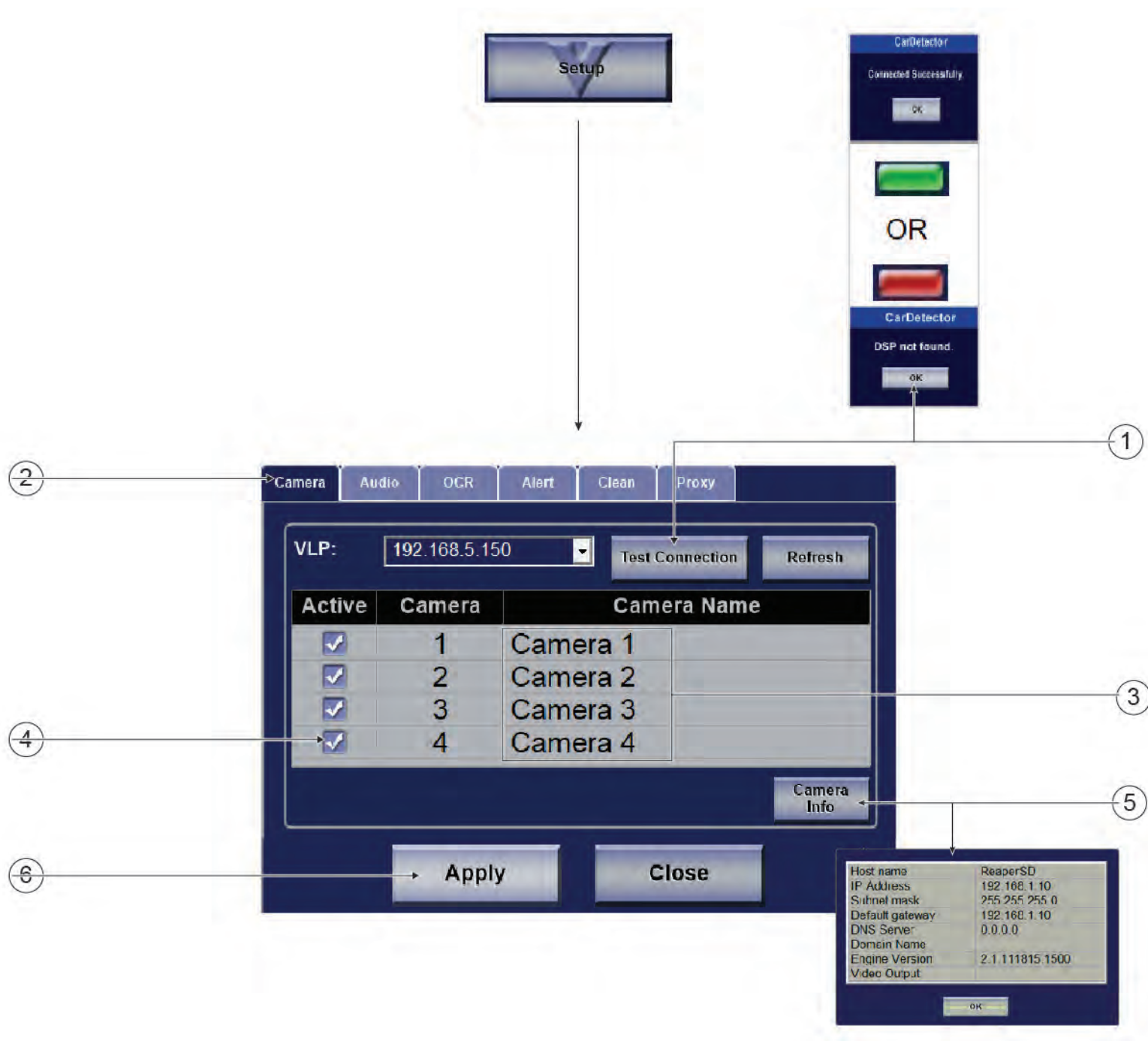


Table 6: Configuring ReaperHD Camera Description

Number	Description
1	Validate DSP connection
2	Camera
3	Camera name
4	Activate camera

Number	Description
5	View DSP details
6	Save settings

Figure 7: Configuring ReaperHD Camera as IP Version

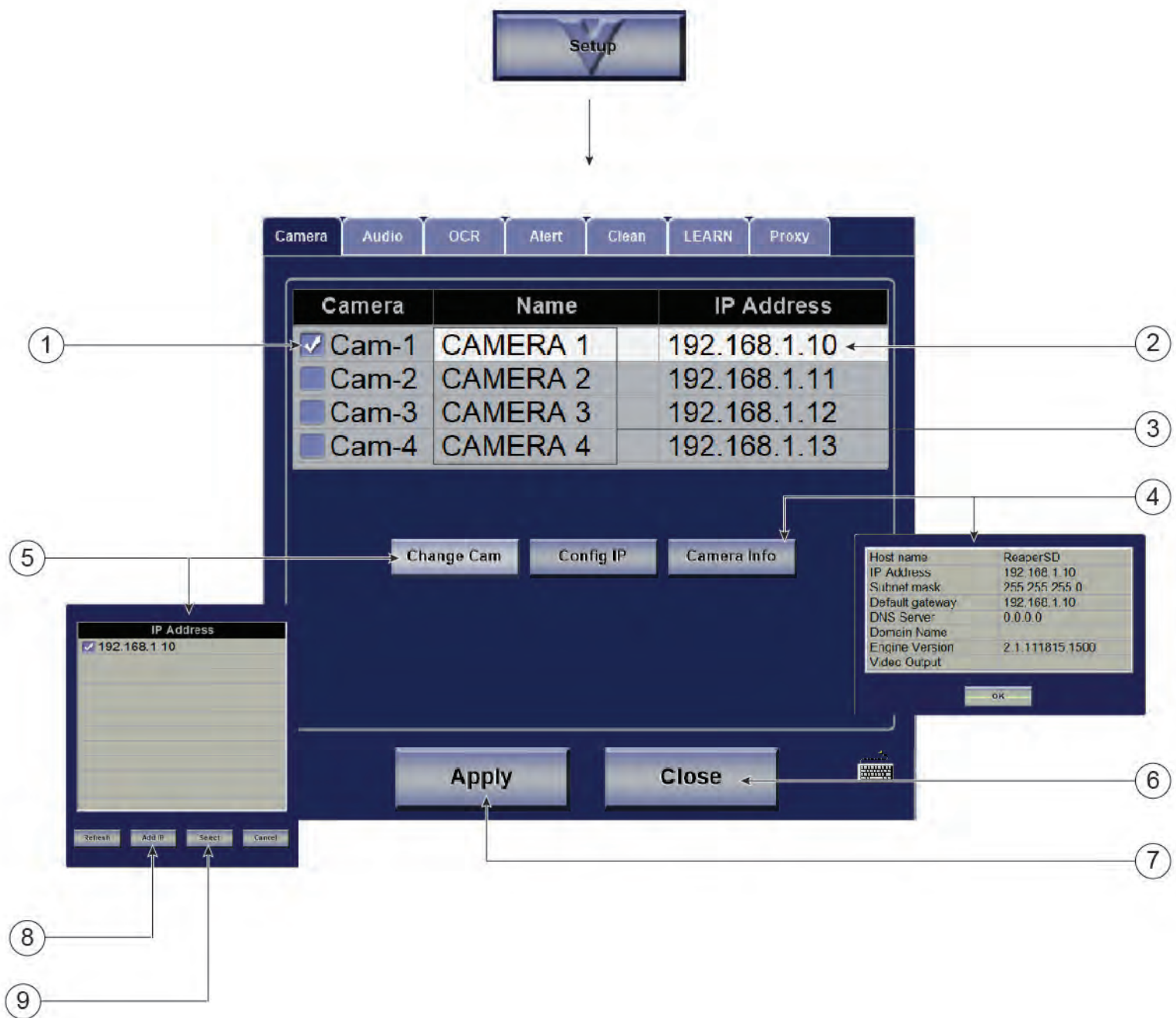


Table 7: Configuring ReaperHD as IP Version Camera Description

Number	Description
1	Activate camera

Number	Description
2	Camera IP
3	Camera name
4	View DSP details
5	Choose camera
6	Close
7	Save settings
8	Manually add IP or DSP
9	Select IP address

Figure 8: Configuring ReaperSD Camera

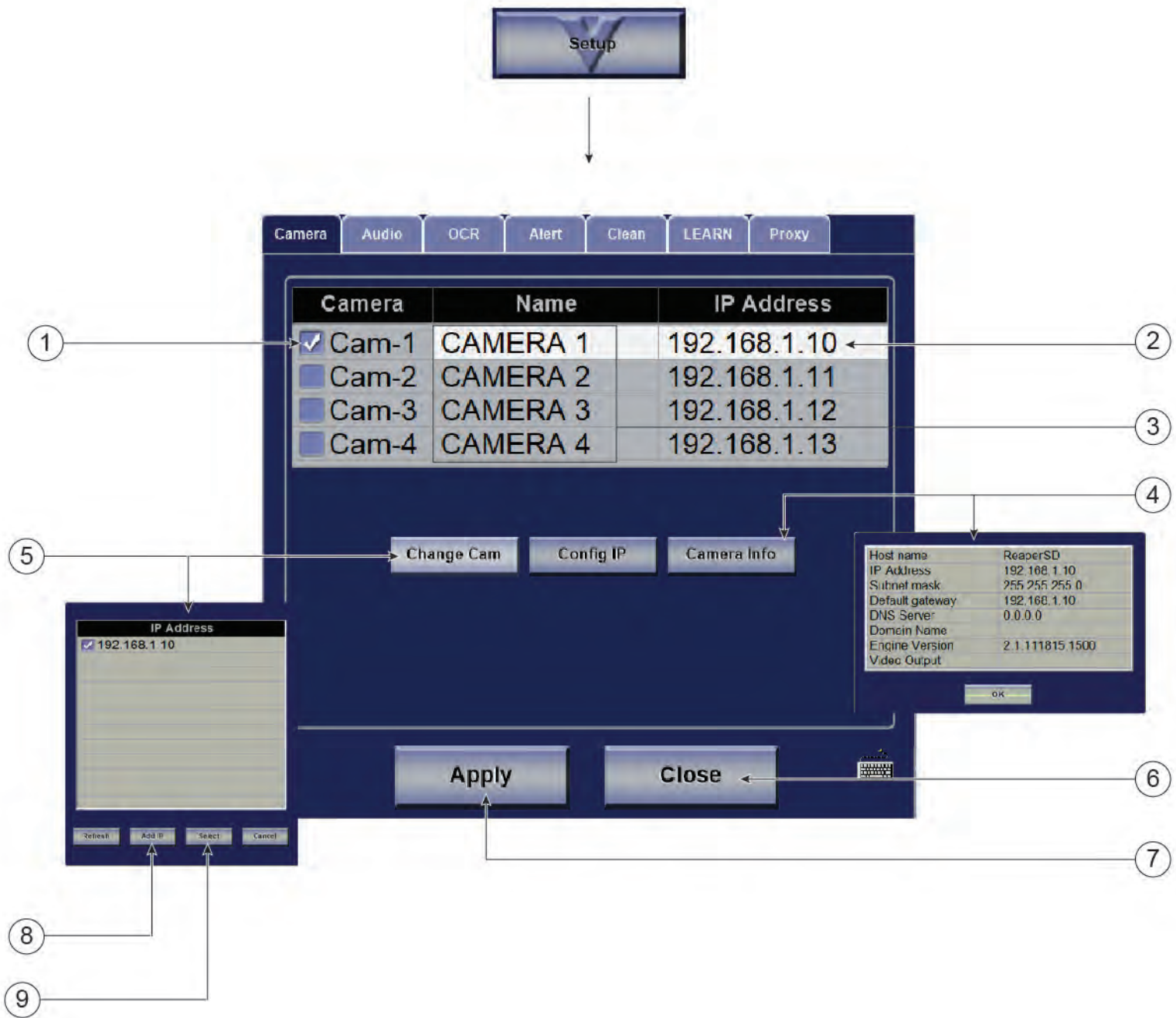


Table 8: Configuring ReaperSD Camera Description

Number	Description
1	Activate camera
2	Camera IP
3	Camera name
4	View DSP details
5	Choose camera

Number	Description
6	Close
7	Save settings
8	Manually add IP or DSP
9	Select IP address

3.1.2

Configuring Audio Settings

Procedure:

Configure the sound of your alert types.

Figure 9: Configuring Audio Settings

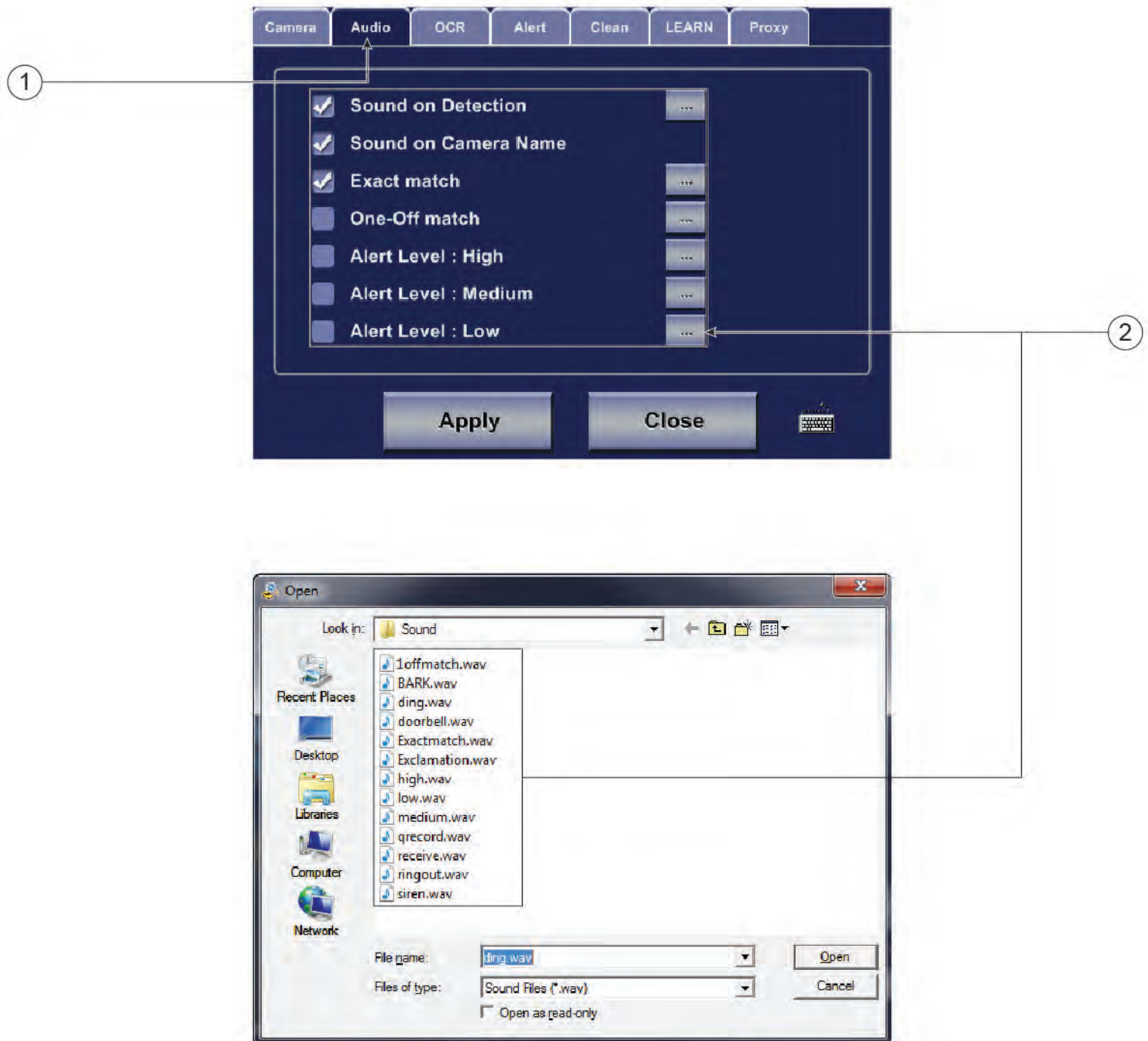


Table 9: Configuring Audio Settings Description

Number	Description
1	Configure audio alerts tab
2	Assign specific sound to detection types

3.1.3

Configuring OCR Settings

Procedure:

Configure your OCR profile within the Mobile LPR application.

Figure 10: Configuring OCR Settings



Table 10: Configuring OCR Settings Description

Number	Description
1	OCR tab
2	Assign appropriate region to ensure accurate detection

3.1.4

Configuring Alert Settings

Procedure:

Set alert parameters and notification type for the Mobile LPR application.

Figure 11: Alert Settings Menu

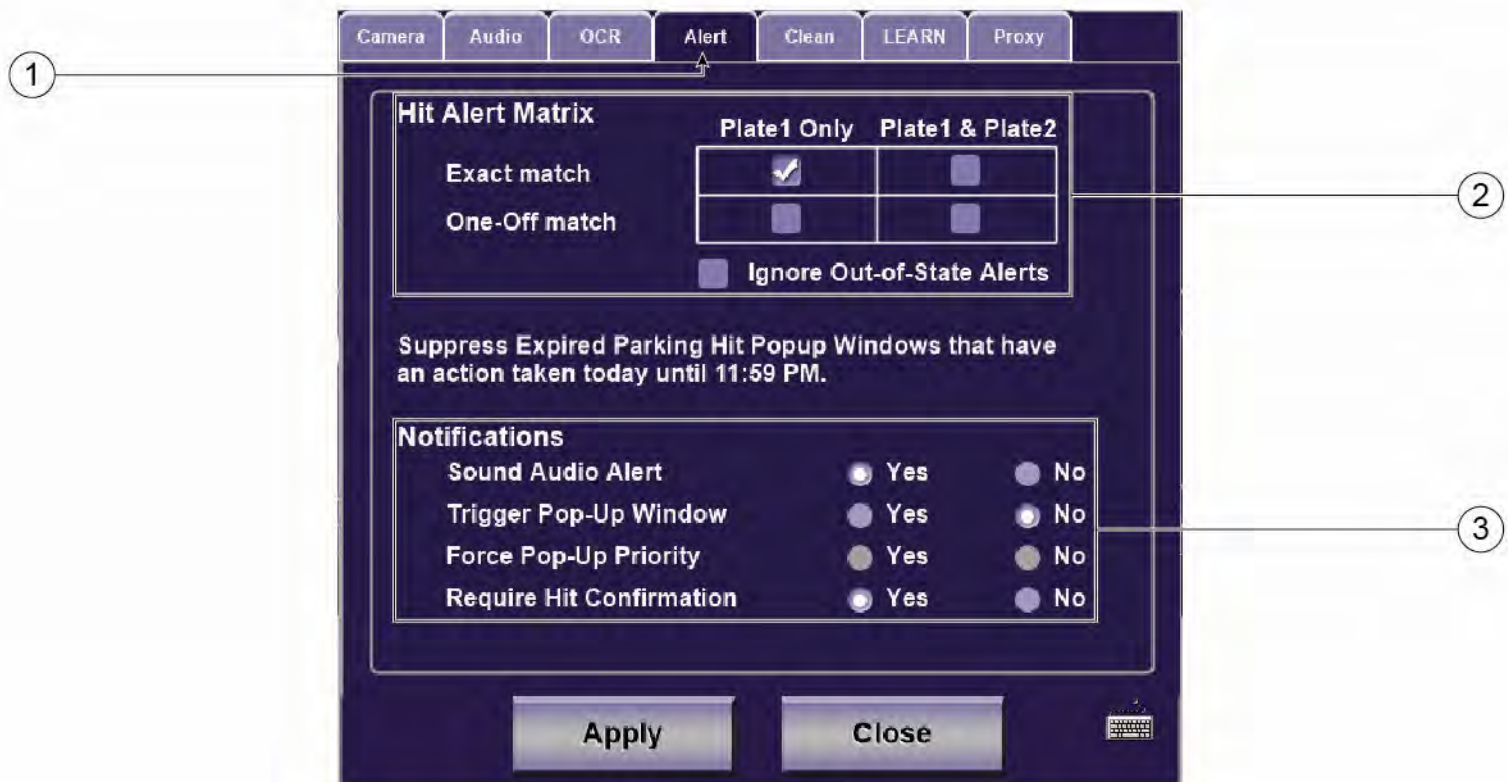


Table 11: Alert Settings Menu Description

Number	Description
1	Alert tab
2	Define method of matching detected plates to hot lists
3	Notification type: audio, pop ups and require hit confirmation

Plate 1 vs Plate 2

Plate 1 is the first interpretation the engine read the plate to be and Plate 2 is the second interpretation of the same plate. They are not separate detections.

Exact match + Plate 1 only

Make an alarm sound when any detected plate number on Plate 1 column exactly matches all characters of a plate number in the hot list.

Exact match + Plate 1 & Plate 2

Make an alarm sound when any detected plate number on Plate 1 column and Plate 2 column exactly matches all characters of a plate number in the hot list.

One-off match + Plate 1 only

Make an alarm sound when any detected plate number on Plate 1 column, which has only one-character difference from one of those of any plate number in the hot list (including the case of a plate with less or more than one character).

One-off match + Plate 1 & Plate 2

Make an alarm sound when any detected plate number on Plate 1 column and Plate 2 column, which has only one-character difference from one of those of any plate number in the hot list (including the case of a plate with less or more than one character).

3.1.5

Configuring Clean Settings

Procedure:

- 1 Configure your database cleanup within the Mobile LPR application.
- 2 Indicate the cleanup cycle and click **Apply** to save your preferences.

Figure 12: Clean Settings Menu

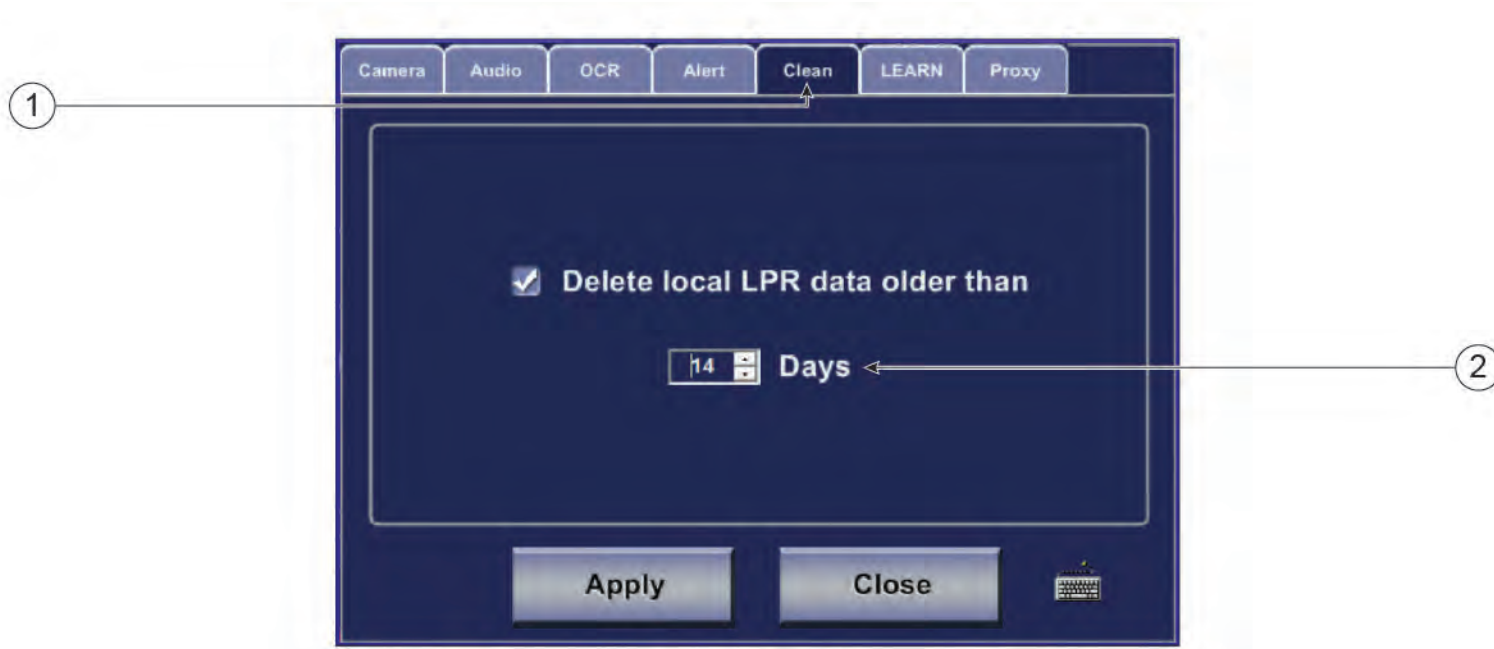


Table 12: Clean Settings Menu Description

Number	Description
1	Clean tab
2	Indicate cleanup cycle

Delete local LPR data older than [X] days

Check to enable Archive Maintenance. Specify the maximum number of days for the archive to hold. All data older than 'X' days will be deleted.



NOTICE: Detection records remain in Vigilant PlateSearch after local data is deleted.

3.1.6

Configuring LEARN Settings

Procedure:

Connect to the Vigilant PlateSearch Server for advanced database features.

Figure 13: LEARN Settings Menu

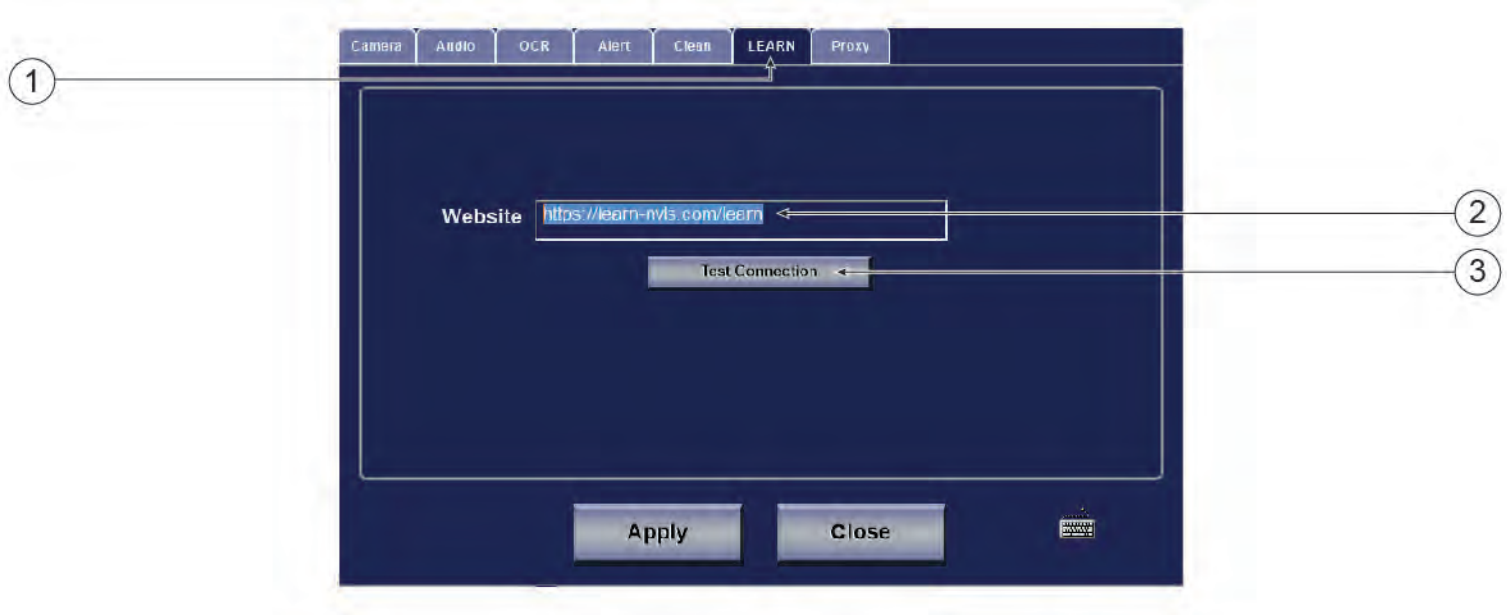


Table 13: Clean Settings Menu Description

Number	Description
1	LEARN tab
2	Vigilant PlateSearch server IP address is created in Vigilant Server and cannot be changed
3	Verify valid connection to server

Establishes data transfer from and to LEARN server.

3.1.7

Configuring Proxy Settings

Procedure:

- 1 Proxy settings are only needed if your connection to the internet requires it.

Figure 14: Proxy Settings Menu



Table 14: Proxy Settings Menu Description

Number	Description
1	Configure proxy settings



NOTICE: Ask your IT Department if you are having problems connecting to the internet.

Establishes data transfer from and to LEARN server.

3.2

Locations

3.2.1

Viewing Locations

This feature has the ability to view current locations set up and choose your location.

Procedure:

- 1 Click the **Locations** button.
- 2 Select one of the following tabs:
 - No Zone
 - Geo-Zone



NOTICE: No-Zone locations will automatically sort based on your GPS and the address that you set up when creating this location.

- 3 Clicking on the location will show thumbnail image of the geo-location for this location.

Figure 15: No Zone Location

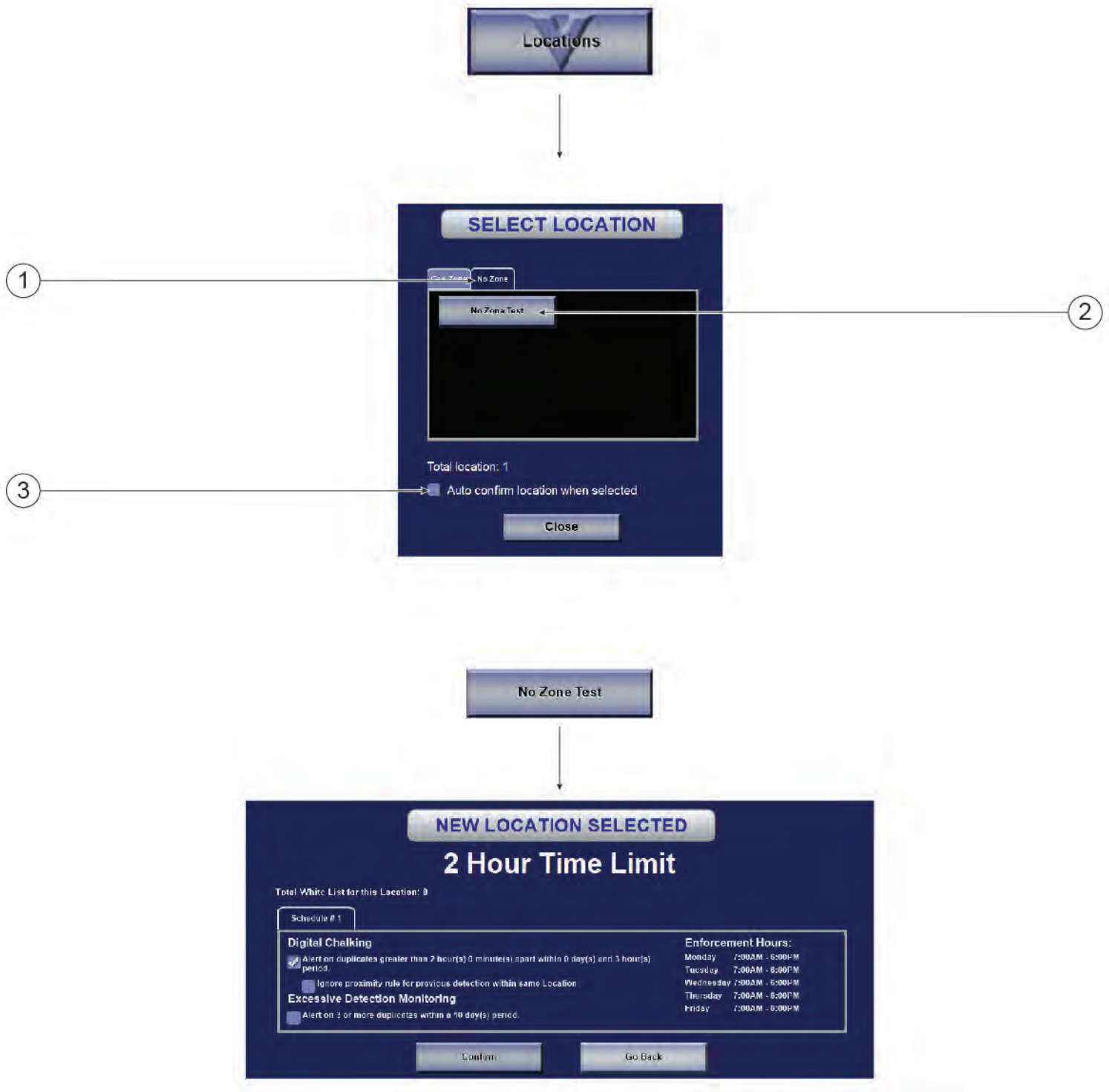


Table 15: No Zone Location Description

Number	Description
1	Select location (no zone)

Number	Description
2	Red button letters indicate that you are in that location
3	Check this box if you would like Mobile LPR to automatically place you in the location on first click

Figure 16: Geo Zone Location

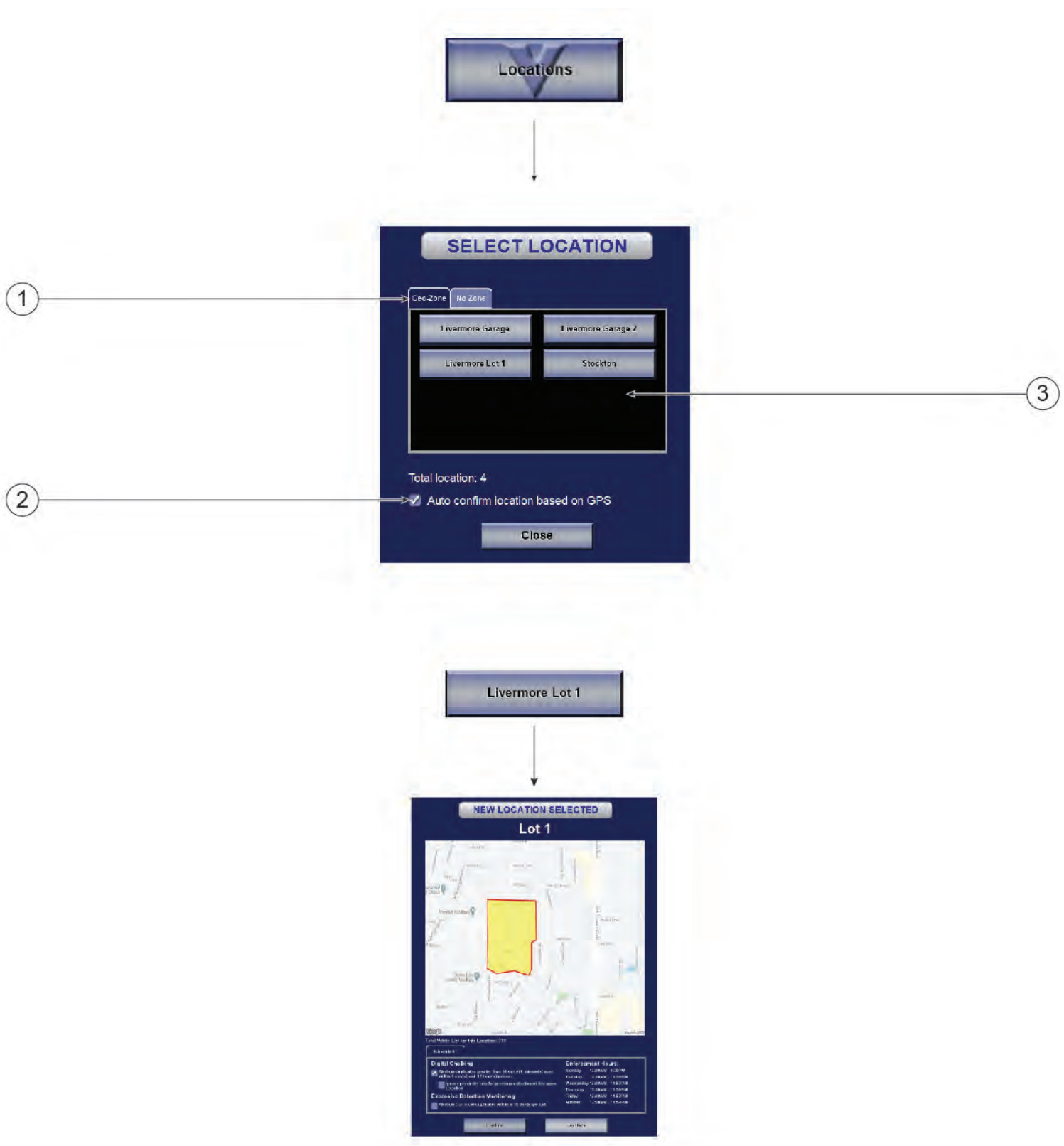


Table 16: Geo Zone Location Description

Number	Description
1	Select location (Geo zone)

Number	Description
2	Check this box to let Mobile LPR auto-confirm your location based on GPS
3	Grey location button indicates that you are in that location

3.2.2

Viewing New Locations

Procedure:

- 1 When Mobile LPR detects that your GPS has entered a location from your location list, an alert will pop up.

Figure 17: New Location Alert

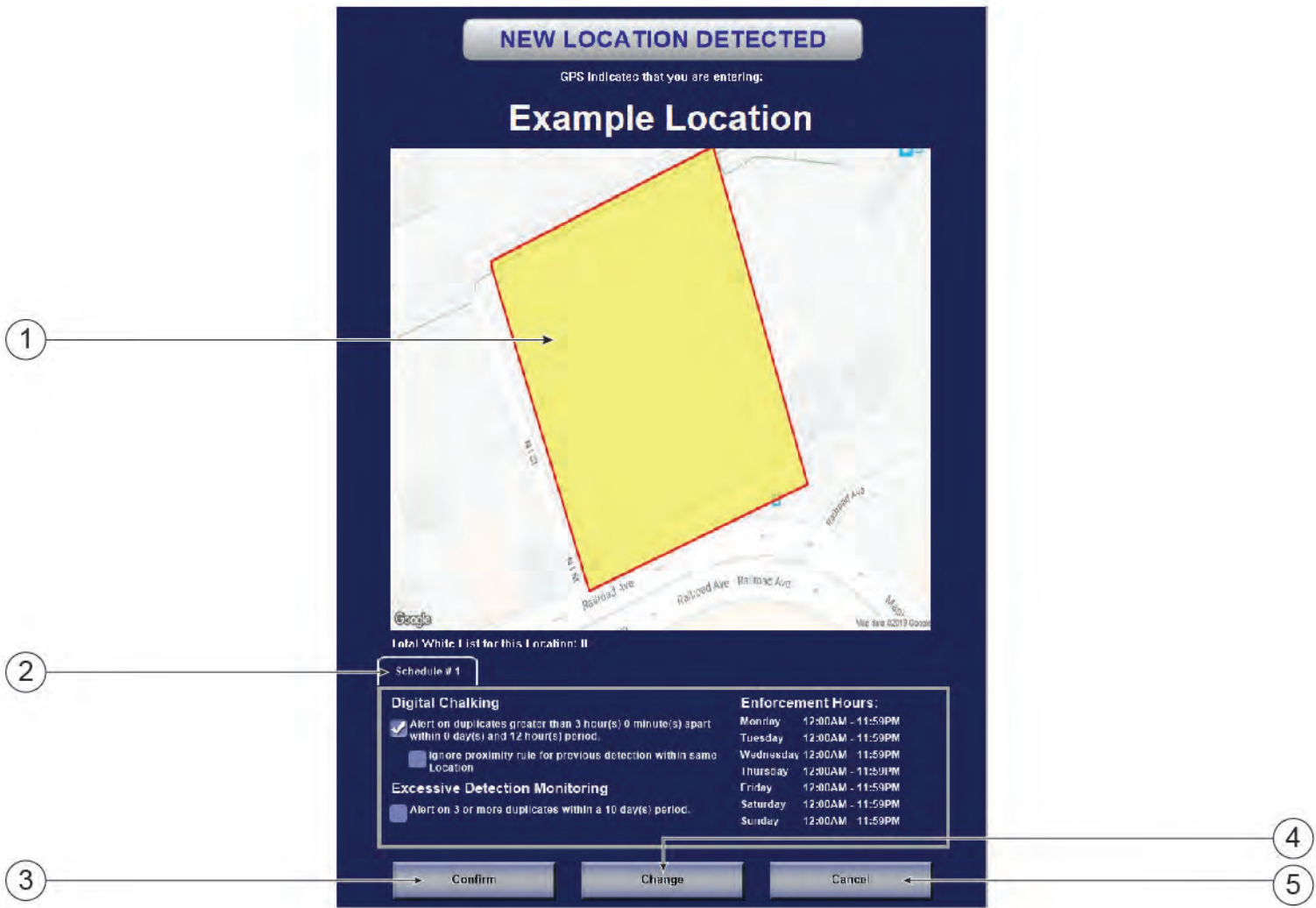


Table 17: New Location Window Description

Number	Description
1	Thumbnail image of the geo-location for this location
2	Current white list plates for this location
3	Confirm this is the correct location
4	Change to a different location. This will bring back up the location list to select the location you want.
5	Cancel location



NOTICE: A warning message pops up when system exits a location.

Figure 18: Location Exit Warning Message



3.3

Import Hot List

This allows you to import a hot list that is local to the system.

Figure 19: Import Hot List Window



Table 18: Import Hot List Window Description

Number	Description
1	Select location (geo-zone)
2	Create expiration for hot list period
3	Locate hot list

This is also where you would upload your BHL file from LEARN if you are doing a Make Base Hot List to load your hot list. Please contact your Agency Manager for more information.

3.4

Start or End Shift

Bookmark detection period to create reports or export data for review. License plate data collection is independent of Start/End Shift function.

Figure 20: Start Shift Window

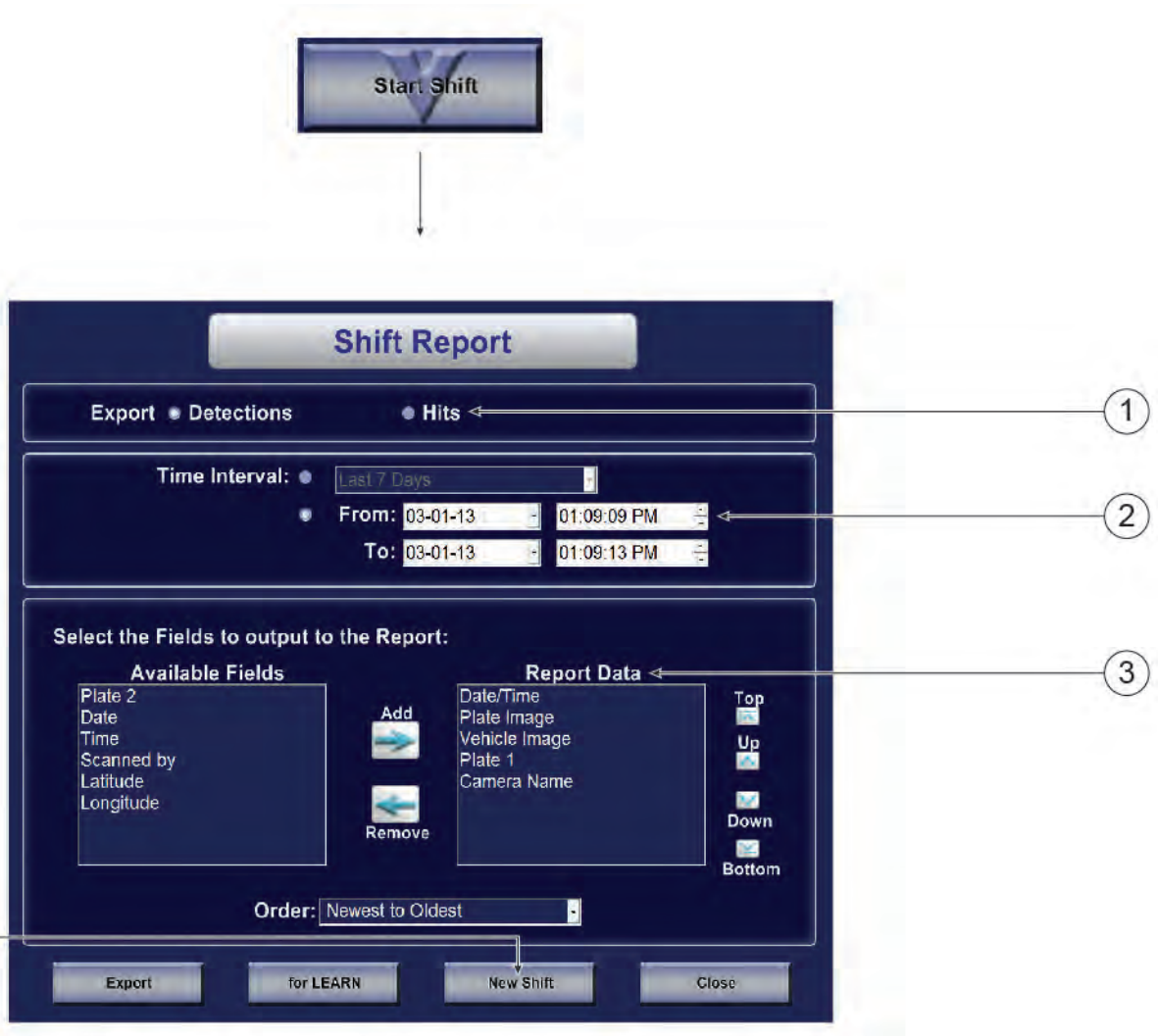


Table 19: Start Shift Window Description

Number	Description
1	Identify desired data
2	Select detection time period
3	Create report elements
4	Reset shift

Ability to export detections and hits to be uploaded to Vigilant PlateSearch. This is used if system is unable to have continuous connection to Vigilant PlateSearch.

3.5

Add Plate

Easily add an individual license plate to the hot list database. Add license plate to local vehicle only or distribute to all other LPR vehicles within an agency.

Figure 21: Add Plate Window

The screenshot shows a software window titled "Add Hot Plate" in red text. The window is divided into several sections:

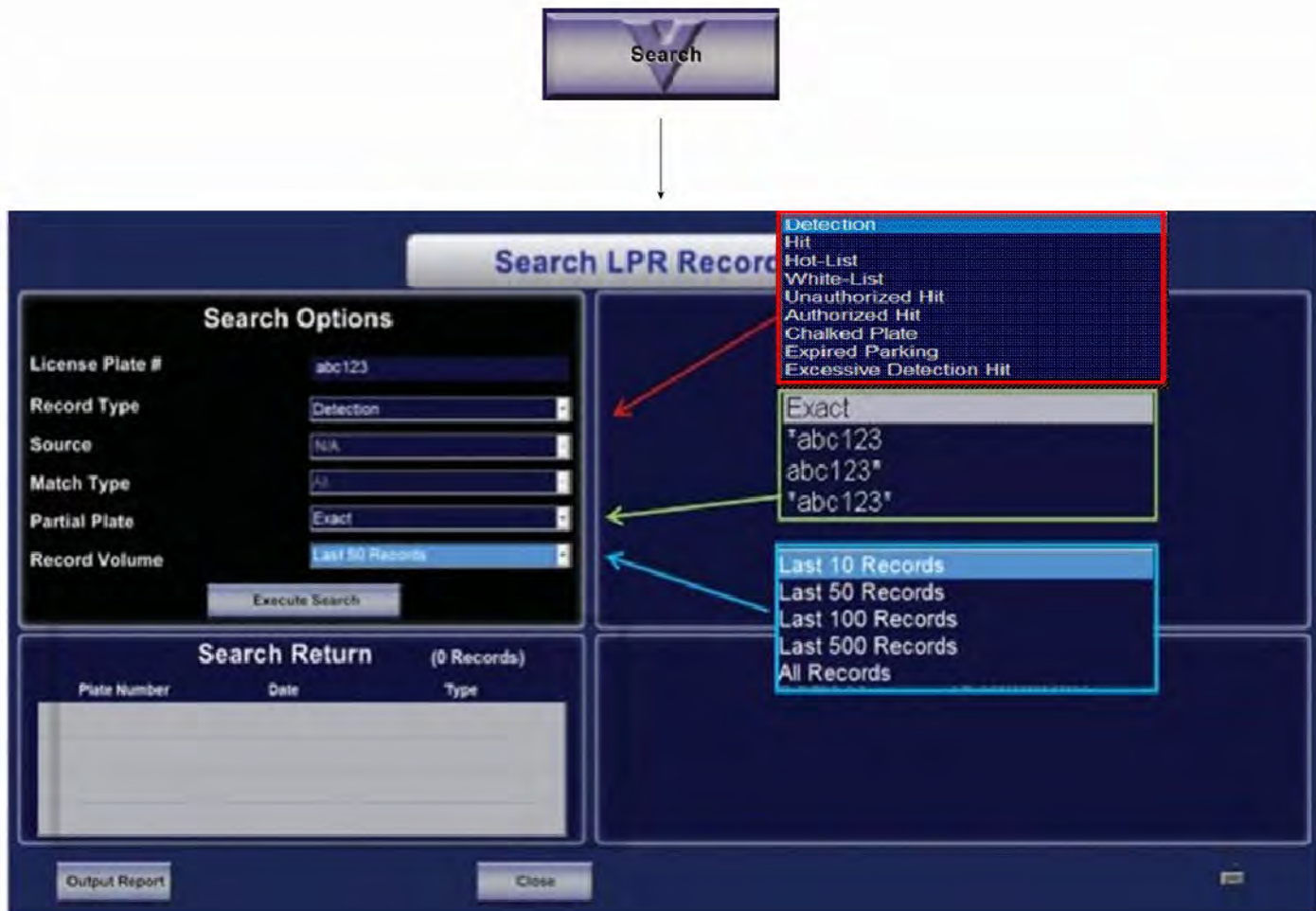
- Top Section:** A large red title bar with the text "Add Hot Plate".
- Left Section:** Contains input fields for "License Plate #" (with "TESTING" entered), "State" (with "CA" selected in a dropdown), "Owner / VIN", "Year / Make / Model", "Alert Type" (with "Abandoned Vehicle" selected), and "Alarm Priority" (with "Medium Level" selected). There is also an "Add Alert Type" button.
- Right Section:** Contains a "Subject" dropdown (with "Suspicious" selected) and a "Comments / Message / Log" text area (with "This Vehicle seen each Friday evening at Approximately 7:00PM near 7-11 on 5th Street" entered).
- Bottom Left Section:** Titled "Add Additional Hot-List Fields", it contains a table with "Title" and "Field Entry" columns. The table has three rows: "Make" with "Toyota", "Name" with "John Doe", and an empty row. Below the table is a note: "Enter Details - Notes; Case #; Suspect Info; etc."
- Bottom Right Section:** Contains a "Distribute Hot-List" section with two radio buttons: "Current User Only" (selected) and "All Agency LPR Systems". Above this is an "Expire After" section with a checked checkbox, a spinner set to "96", and "Hours" selected, and another spinner set to "0" and "Days" selected.
- Bottom Bar:** Contains two buttons: "Add Hot Plate" and "Cancel".

3.6

Search

This feature is to perform search among detections, hot lists, and hits for CDMS LPR data.

Figure 22: Search Window



NOTICE: White list plates are only searchable while you are in a valid location.

3.6.1

Searching for Detections

Varying data is available when searching detections within the Mobile LPR Application.

Procedure:

- 1 Select the **Record Type** to **Detection**.
- 2 From the search results, select any record to view.
- 3 Click **Location** to view the nearest address.

Figure 23: Detections Window

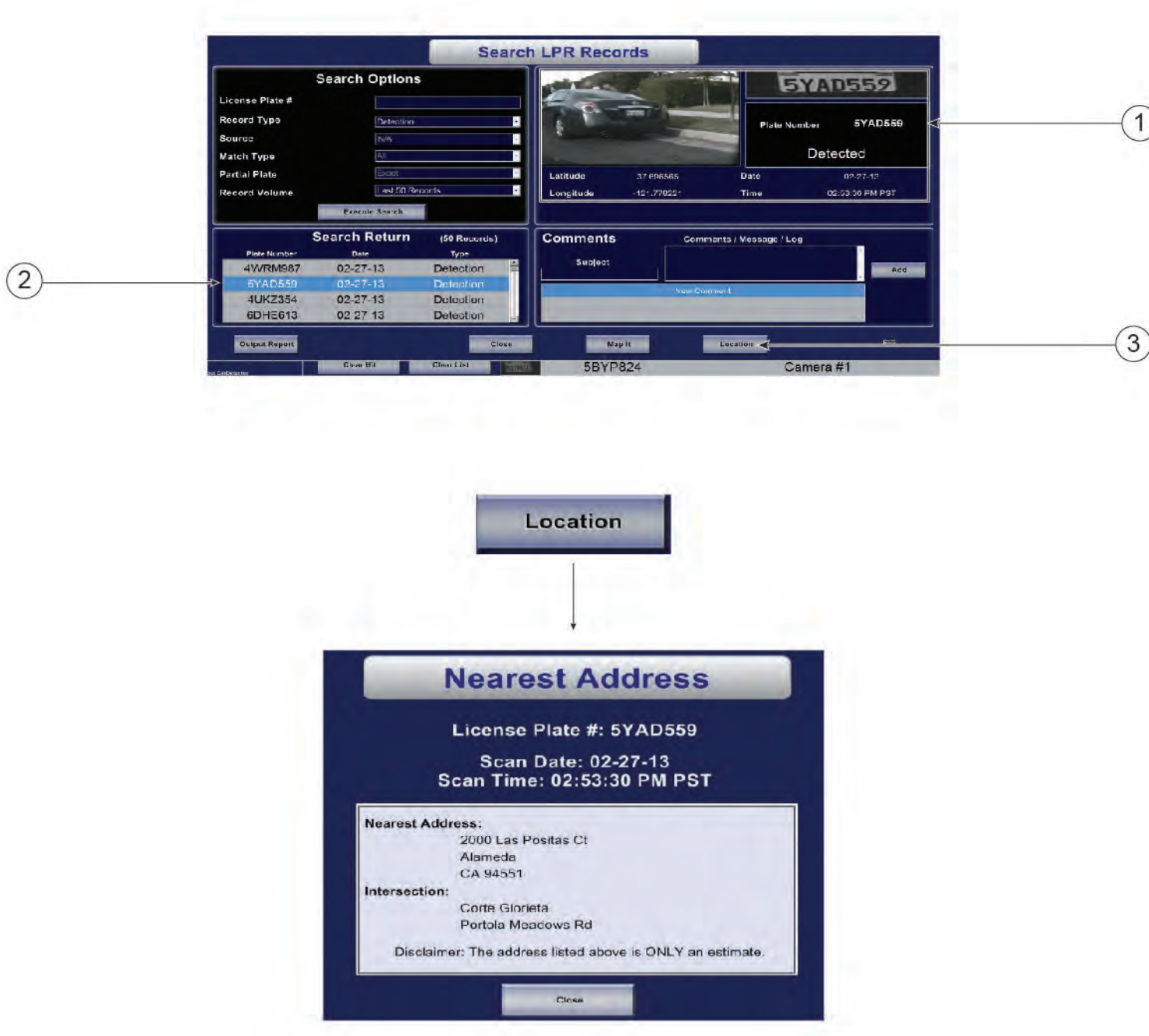


Table 20: Detections Window Description

Number	Description
1	Record detail
2	Select a record to view
3	Select to view a record

3.6.2

Searching for Hot List Records

Varying data is available when searching hot list records within the Mobile LPR application.

Procedure:

Select the **Record Type** to **Hot-List**.

Figure 24: Hot List Record Window

Table 21: Hot List Record Window Description

Number	Description
1	Select a search criteria
2	Hot List record detail
3	Add and view hot list record comments

3.6.3

Searching for Hits Window

Varying data is available when searching hit records within the Mobile LPR Application.

Procedure:

Select the **Record Type** to **Hit**.

Figure 25: Hits Window



Table 22: Hot List Record Window Description

Number	Description
4	Select record type Hit
5	Hit type
6	GPS, date and time
7	Select a record to view
8	Comments select a record to view sent to Vigilant Server

3.6.4

Searching for White List Records

Varying data is available when searching white list records within the Mobile LPR application.

Procedure:

- 1 Select the **Record Type** to **White list**.

Figure 26: White List Record

The screenshot shows a software window titled "Search LPR Records". It is divided into several sections:

- Search Options (Callout 1):** Located on the top left, it contains several input fields and dropdown menus: "License Plate #" (empty), "Record Type" (set to "White List"), "Source" (set to "All"), "Match Type" (set to "All"), "Partial Plate" (set to "Exact"), and "Record Volume" (set to "Last 50 Records"). Below these is an "Execute Search" button.
- Hot-List File Record (Callout 2):** Located on the top right, it displays details for a specific record. The title is "Hot-List File Record" and the record number is "274AX0". Below this, there are two columns of data: "Alarm Priority" (05-18-17) and "Medium Level" (05-18-17).
- Search Return (50 Records) (Callout 3):** Located on the bottom left, it is a table with three columns: "Plate Number", "Date", and "Source". It contains four rows of data:

Plate Number	Date	Source
274AX0		White-List Demo
4204		White-List Demo
4-HYZC		White-List Demo
4PWB342		White-List Demo
- Comments (Callout 3):** Located on the bottom right, it contains a "Subject" field with the text "Testing", a "Testing Comments" field, and a "Comments / Message / Log" section with a scroll bar. There are also "Add" and "Edit" buttons.

Table 23: White List Record Window Description

Number	Description
1	Select a search criteria
2	White List record detail
3	Add and view white list record comments



NOTICE: You will only be able to search the white list associated with the location you are currently in.

Figure 27: Unauthorized Alert Search

Search LPR Records

Search Options

License Plate #

Record Type

Unauthorized Hit

Source

N/A

Match Type

All

Partial Plate

Exact

Record Volume

Last 50 Records

Execute Search



Detected Plate:

6DET142

Unauthorized

Latitude

35.9469680786

Date

11-17-2020

Longitude

-84.0745697021

Time

04:32:43 PM EST

Search Return (5 Records)

Plate Number	Date	Source
6DET142	11-17-2020	Unauthorized
4FYK356	11-17-2020	Unauthorized
571VZB	11-17-2020	Unauthorized
4PFN659	11-17-2020	Unauthorized

Output Report

Comments

Comments / Message / Log

Subject

Save

Close

Map It

Location

35

3.6.5

Searching for Digital Chalking Records

Varying data is available when searching Digital Chalking records within the Mobile LPR Application.

Procedure:

Select the **Record Type** to **Digital Chalking** or **Chalked Plate**.

Figure 28: Digital Chalking Record

The screenshot displays the 'Search LPR Records' interface. On the left, the 'Search Options' section includes fields for 'License Plate #', 'Record Type' (set to 'Digital Chalking'), 'Source' (set to 'N/A'), 'Match Type' (set to 'All'), 'Partial Plate' (set to 'Exact'), and 'Record Volume' (set to 'Last 50 Records'). A 'Execute Search' button is at the bottom of this section. The main area features a photo of a red SUV, the license plate '6BCR581', and a red 'Expired Parking' warning. Below the photo, location data is shown: Latitude 37.864105, Longitude -121.700204, Date 06-27-2018, and Time 10:14:10 AM PST. At the bottom, a 'Search Return' table lists one record: Plate Number 6BCR581, Date 06-27-2018, and Type Digital Chalking. To the right of the table is a 'Comments' section with a 'Subject' field and a 'Comments / Message / Log' text area, with a 'Save' button. Navigation buttons 'Close', 'Map It', and 'Location' are at the bottom.

Plate Number	Date	Type
6BCR581	06-27-2018	Digital Chalking

Figure 29: Chalked Plate Record

The screenshot displays the 'Search LPR Records' interface. On the left, the 'Search Options' section includes fields for 'License Plate #', 'Record Type' (set to 'Chalked Plate'), 'Source' (set to 'N/A'), 'Match Type' (set to 'All'), 'Partial Plate' (set to 'Exact'), and 'Record Volume' (set to 'Last 50 Records'). A 'Execute Search' button is at the bottom of this section. The main area features a photo of a black sedan, the license plate '4HLP037', and the text 'Chalked Plate'. Below the photo, location data is shown: Latitude 37.664235, Longitude -121.767731, Date 10-22-2018, Time 11:51:21 AM PST, and Time Limit 1 days and 0 hours. At the bottom, a 'Search Return' table lists one record: Plate Number 4HLP037, Date 10-22-2018, and Source Chalked Plate. To the right of the table is a 'Comments' section with a 'Subject' field and a 'Comments / Message / Log' text area, with a 'Save' button. Navigation buttons 'Close', 'Map It', and 'Location' are at the bottom.

Plate Number	Date	Source
4HLP037	10-22-2018	Chalked Plate

3.7

Adjusting Day or Night Mode

Procedure:

To toggle between Day Mode and Night Mode, click **Day/Night**.

Figure 30: Day and Night Mode



Table 24: Day and Night Mode

Number	Description
1	Day mode
2	Night mode

3.8

Camera Navigation Bar

Figure 31: Camera Navigation Window



Table 25: Camera Navigation Window Description

Number	Description
1	Each camera tab allows the operator to view the active video of corresponding camera unit
2	Show/hide video
3	Toggle Between Color and IR Video
4	Camera aiming tool
5	Manual LPR capture tool
6	Mobile hit hunter tool
7	Take a “snapshot” of the active camera view



WARNING: Live video rendering should only be used while aiming cameras. This helps to preserve computer resources.

3.8.1

Utilizing the Camera Aiming Tool

Procedure:

From the **Camera Navigation Bar**, click the **Camera Aiming** tool icon.

All cameras will render simultaneously and allow user to correctly aim each camera.

Figure 32: Camera Aiming Tool



Table 26: Camera Aiming Window Description

Number	Description
1	Toggle between color and IR views. Aiming should always be conducted while viewing IR video
2	Pixel height box: for proper aiming of the ReaperHD and ReaperSD, reference the

Number	Description
	camera aiming guide for optimal pixel heights for your camera models

3.8.2

Utilizing Manual Capture Tool

Procedure:

From the **Camera Navigation Bar**, click the **Manual Capture** icon.

Figure 33: Manual Capture Tool

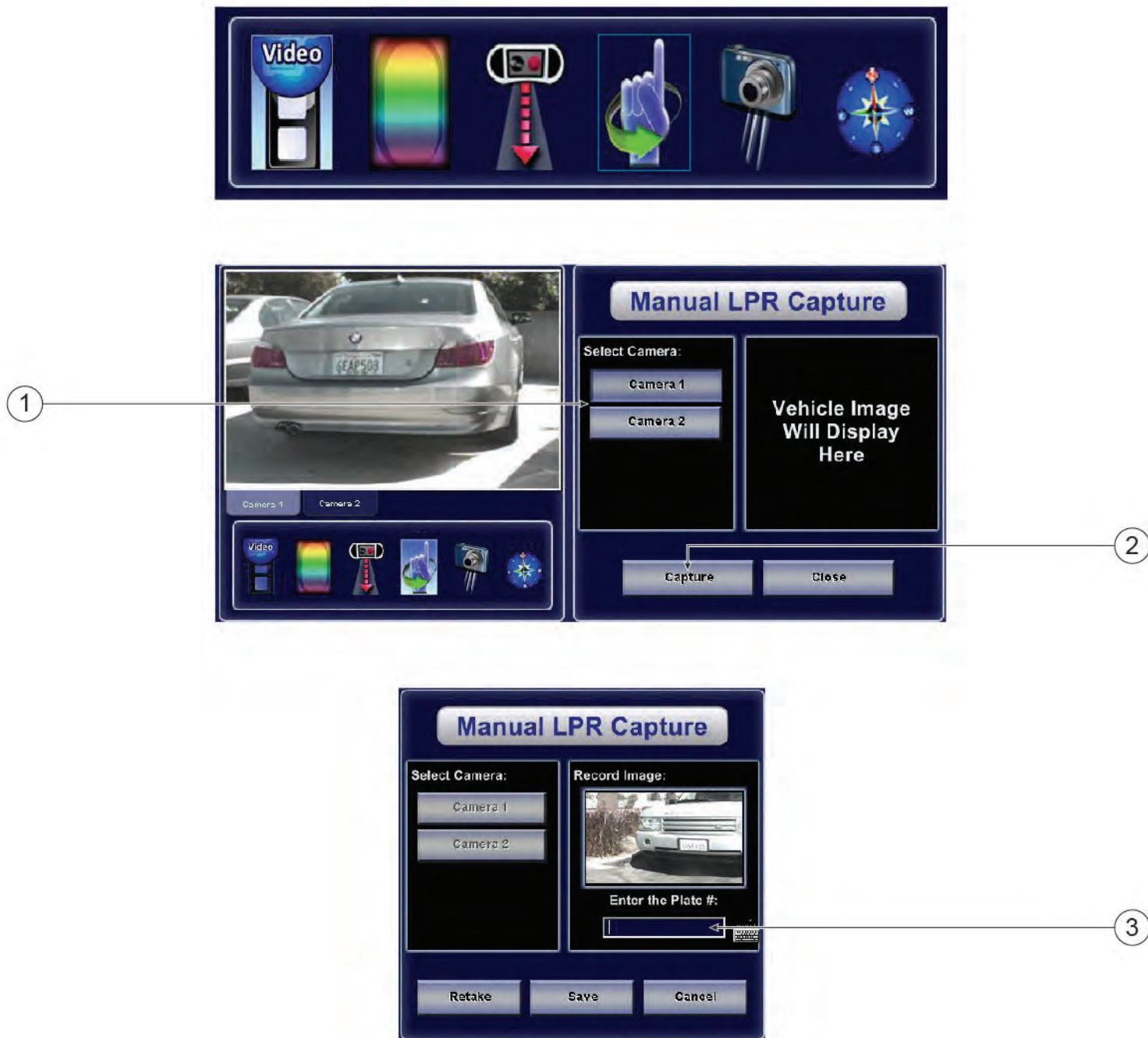


Table 27: Manual Capture Window Description

Number	Description
1	Select camera
2	Aim the camera at the desired license plate and capture the image

Number	Description
3	Enter plate number and save

3.8.3

Utilizing Snap Shot Tool

Procedure:

From the **Camera Navigation Bar**, click the **Snap Shot** icon.

Take a snap shot of live IR or color video.

Figure 34: Snap Shot Tool

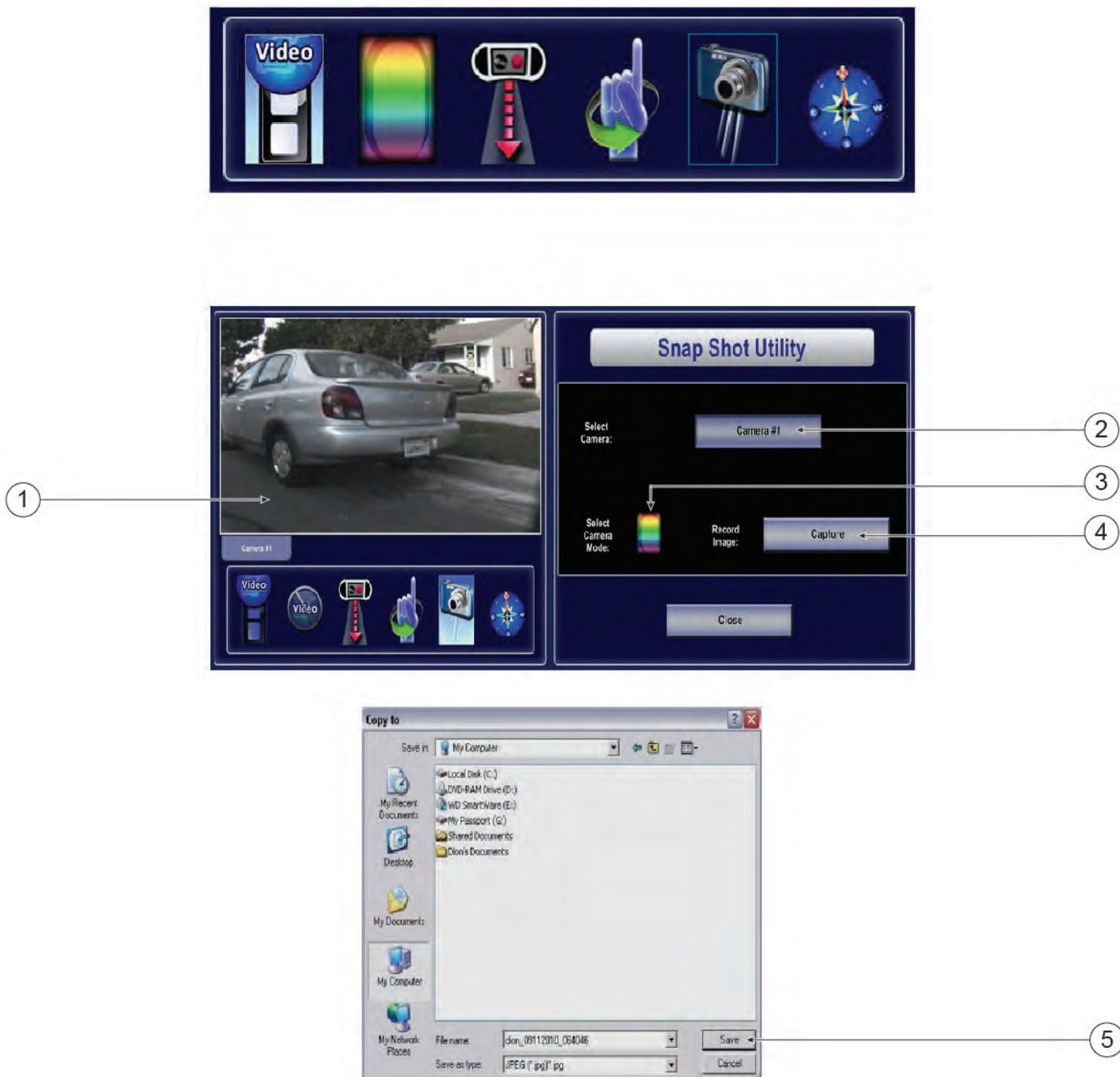


Table 28: Snap Shot Window Description

Number	Description
1	Target image

Number	Description
2	Select camera
3	Select view
4	Capture
5	Save

3.8.4

Utilizing Mobile Hit Hunter

Procedure:

- 1 From the **Camera Navigation Bar**, click the **Mobile Hit Hunter** icon.
- 2 Click on the **tick mark** to get info on the hit.

Figure 35: Mobile Hit Hunter Window

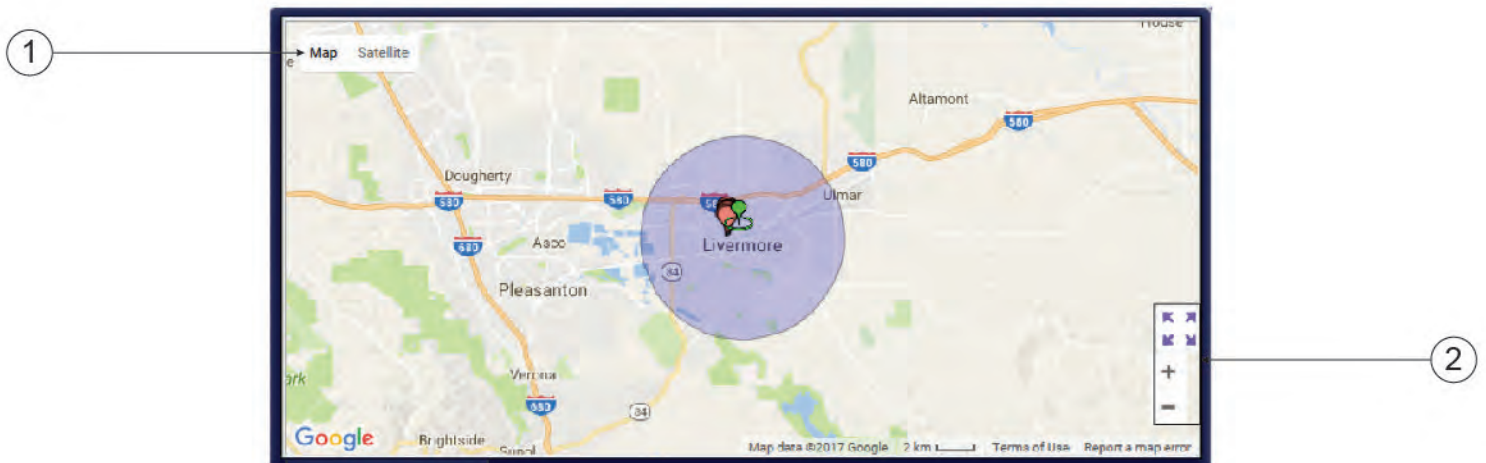


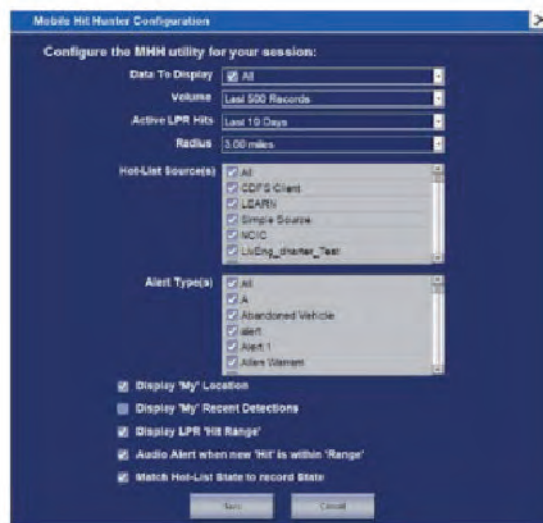
Table 29: Mobile Hit Hunter Window Description

Number	Description
1	Click to toggle between satellite view and map view
2	Take a snap shot of “Live” IR or color video

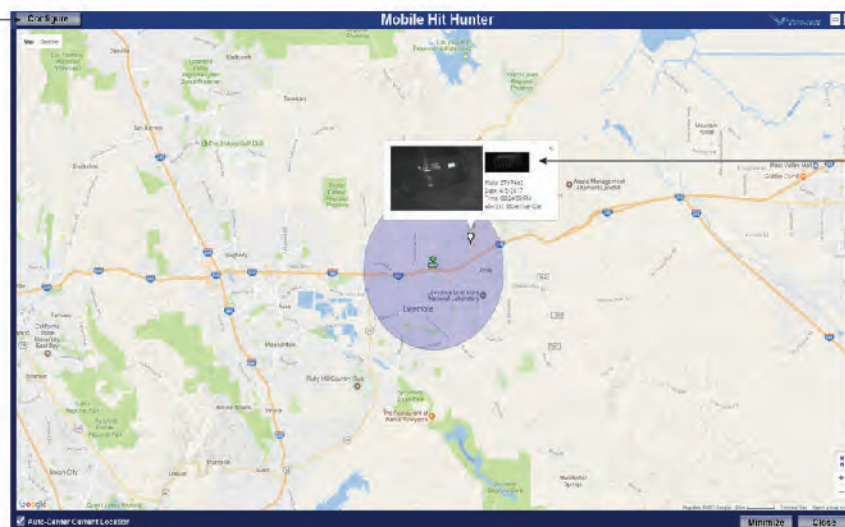
These are the following “tick marks” on the map:

- Green: the position of the user
 - Blue: the position of detected license plates
 - Red: the position of the hit license plate
- 3 To configure Mobile Hit Hunter, click the **Configure** button.

Figure 36: Mobile Hit Hunter Configuration Window



1



2

Table 30: Mobile Hit Hunter Configuration Window Description

Number	Description
1	Configure button
2	Click on “tick mark” to get info on the hit

3.9

Detection View

3.9.1

LIVE View

LIVE viewing provides an IR image of the license plate and also the color overview of the vehicle. Verification can be made when the plate number matches the OCR results.

Figure 37: Detection View



Table 31: Detection View Window Description

Number	Description
1	Color overview
2	IR view
3	OCR results
4	Plate history
5	Camera

3.9.2

Plate History View

Plate History view allows you to:

- Choose hits or detections.
- Shows history of the plate.
- Search by a specified time frame.

- Show the date, time, address, city, state, and zip of locations (if available).



NOTICE: The pin marks on map show a quick-view of detections.

Figure 38: Plate History View

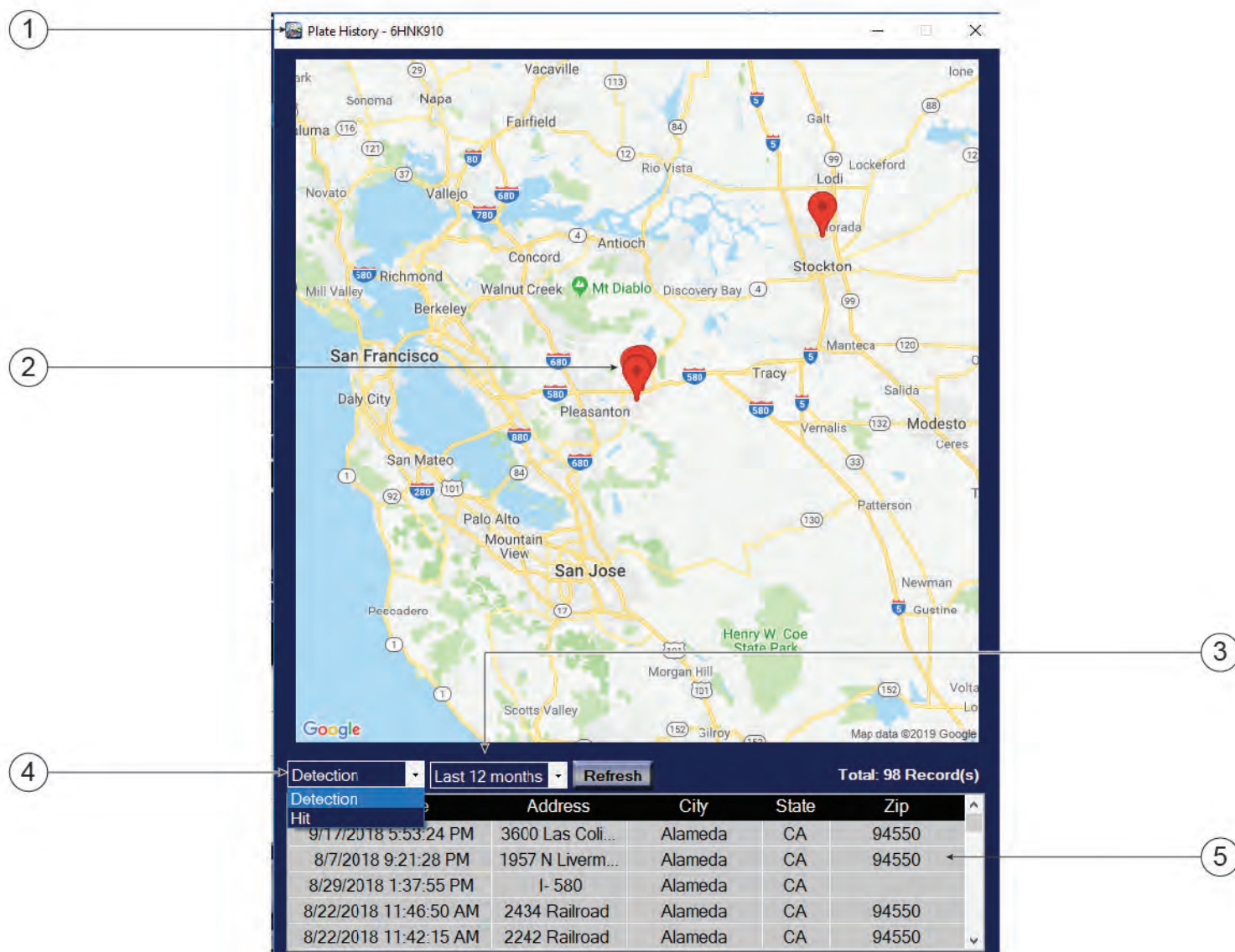


Table 32: Plate History View Window Description

Number	Description
1	Plate history
2	Pin marks on map show a quick-view of detec-tions
3	Search by a specified time frame

Number	Description
4	Choose hits or detections
5	Date, time, address, city, state, and zip of locations

3.9.3

Detection List View

From the Detection List, LPR Record Data includes vehicle images, OCR results, GPS data, Date/Time stamp, and camera data.

Figure 39: LPR Record Data Window

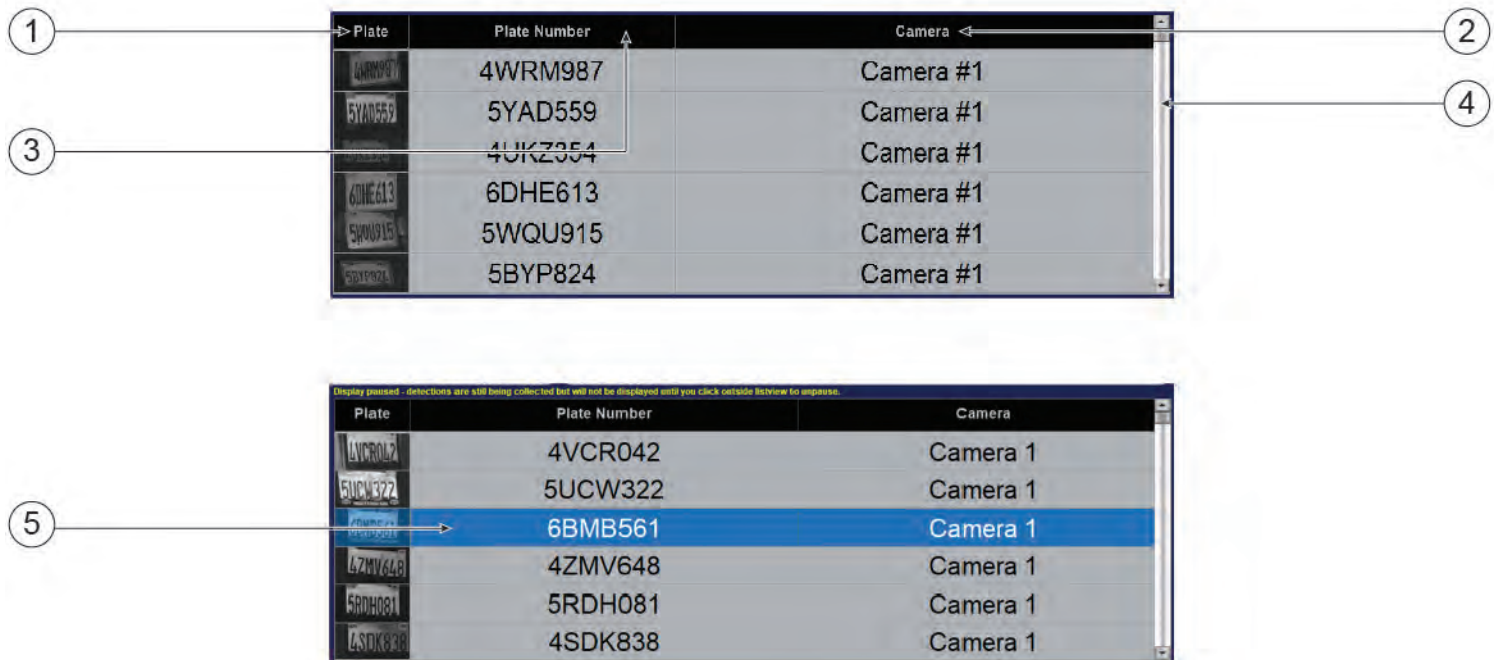


Table 33: LPR Record Data Window Description

Number	Description
1	Plate image
2	Capture camera
3	OCR results
4	Scroll to view more records
5	Click on a detection from the detection list to pause the detection scroll

Double-click on any record to see all relevant information.

Figure 40: Detection Relevant Information



Table 34: Detection Relevant Information Window Description

Number	Description
1	Ability to edit the plate here if the user has valid Vigilant Server permissions

Manually chalk a plate or add plate to hot list by right-clicking on a detection.

Figure 41: Detection Window

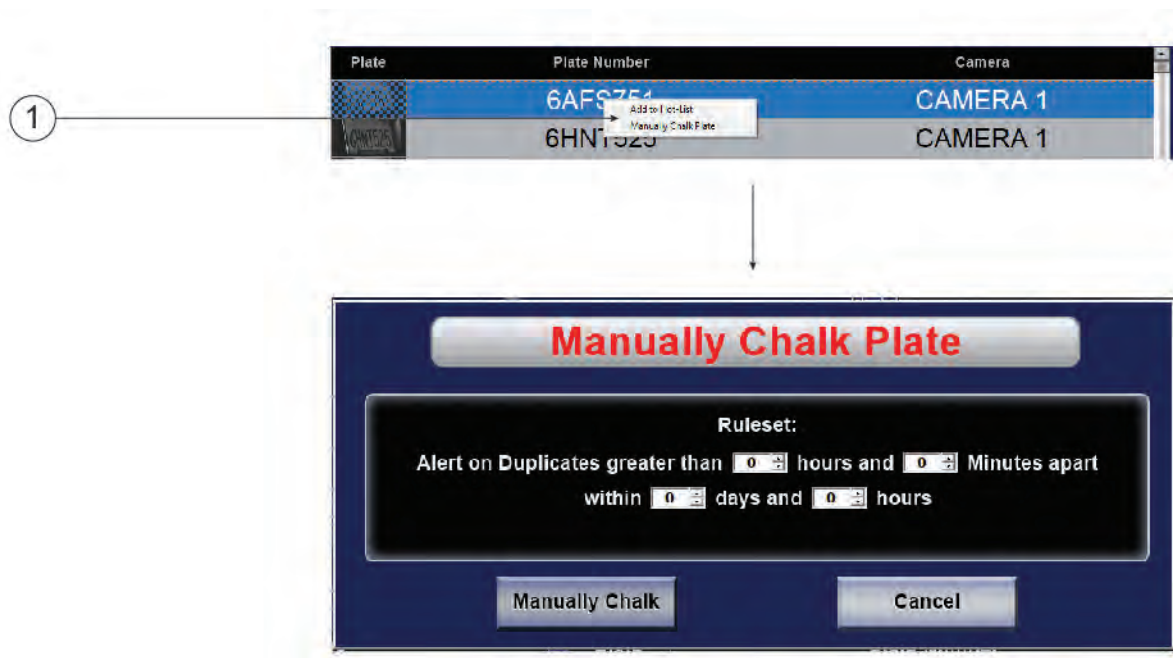


Table 35: Detection Window Description

Number	Description
1	Right-click to manually chalk a plate or add plate to hot list

3.10

HIT View

3.10.1

HIT View LIVE

This feature allows you to:

- View the type of Match IR image.
- View the Hot list plate and state.
- View the camera that scanned the plate.

Figure 42: HIT View LIVE Window



Table 36: HIT View LIVE Window Description

Number	Description
1	Color overview image
2	Hot list information
3	The color of the text depends on the priority of the alarm
4	Ability to add additional information (age, race, action taken)
5	Correct hit or incorrect hit buttons

Alarm priority colors:

Red

High

Orange

Medium

Yellow

Low

White
None

3.10.2

LIVE View for Unauthorized Vehicle Hit Views

This feature allows you to:

- View the details of the unauthorized vehicle
- View the IR image.
- View how the OCR read the plate.
- View the camera that scanned the plate.

Figure 43: Unauthorized Vehicle Hit View Window



Table 37: Unauthorized Vehicle Hit View Window Description

Number	Description
1	Color overview image
2	Scan information
3	Alert typeunauthorized vehicle
4	Parking information status – updated. Meaning the plate has been verified as unauthorized after validation against Vigilant Server
5	Ability to note action taken (citation issued, none)
6	Incorrect hit and confirm hit buttons

3.10.3

LIVE View for Additional White List Hit Views

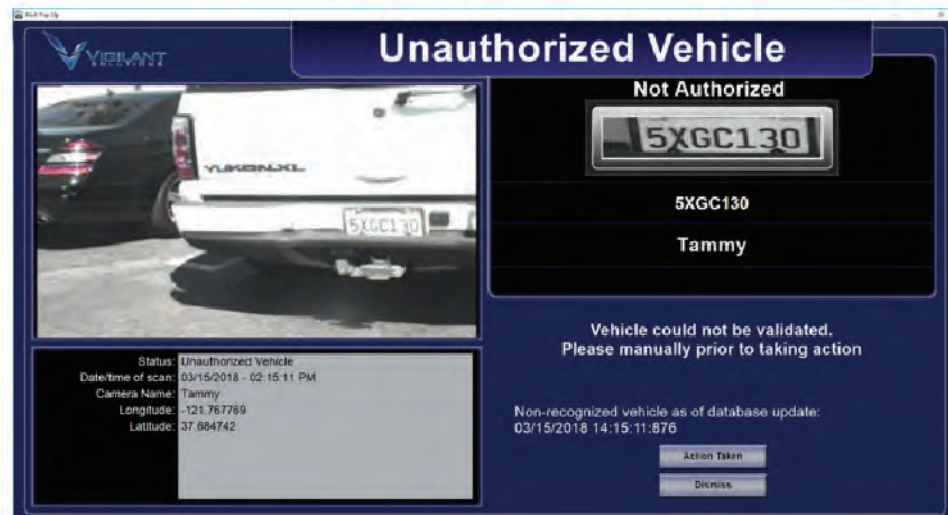
Alert (Unauthorized Vehicle)

Unable to validate due to no connection to Vigilant PlateSearch.

Alert (Authorized Vehicle)

Plate recognized as valid.

Figure 44: White List Hit View Window



3.10.4

LIVE View for Digital Chalking Hit Views

This section explains the different data for a Digital Chalking hit within the Mobile LPR application.

Figure 45: Digital Chalking Hit View Window

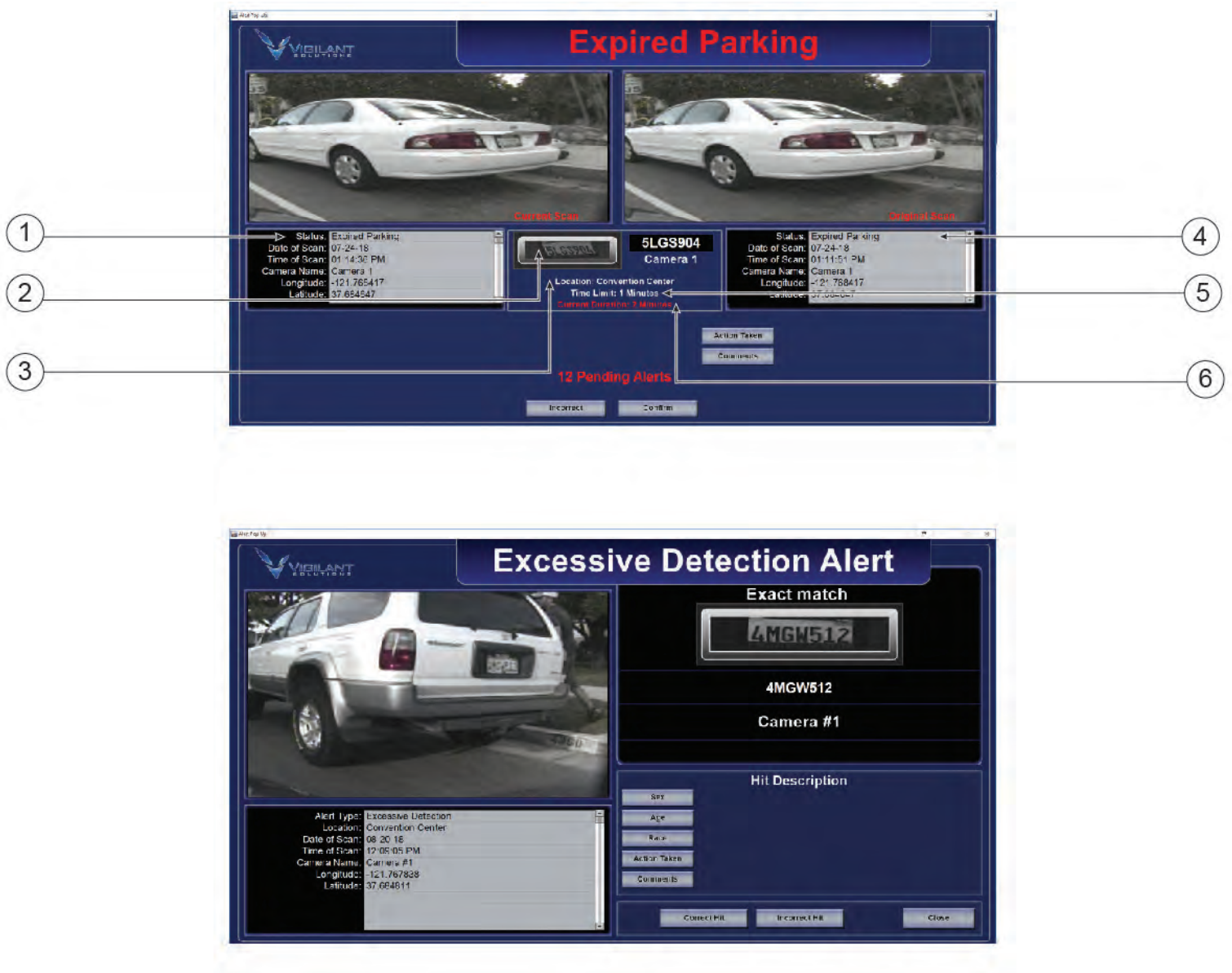


Table 38: Digital Chalking Hit View Window Description

Number	Description
1	Current scan information
2	Current scan IR image and OCR read
3	Digital Chalking location of scans
4	Original scan information
5	Time limit set in current Digital Chalking location
6	Amount of time since original scan

3.10.5

Viewing Hit List

This section explains the different data in the Hit List table within the Mobile LPR application.

Figure 46: Hit List Window



Table 39: Hit List Window Description

Number	Description
1	Displays recent hit records from Mobile LPR activity
2	Clears the individual hit record at client level only
3	Displays hot list alarm type of the vehicle hit match
4	Clears the hit list at client level only

Number	Description
5	Hit alert an audible alert will sound and the alert screen will appear



NOTICE: Alarmed plates are also stored in Vigilant PlateSearch.

Chapter 4

Status Lights Overview

This section lists the connection status of camera, Vigilant PlateSearch connection, GPS, and system functions.

Figure 47: Status Lights



Status Descriptions:

Green

Good connection

Red

Bad or No connection

Figure 48: ReaperHD as IP Model Flow Chart Process

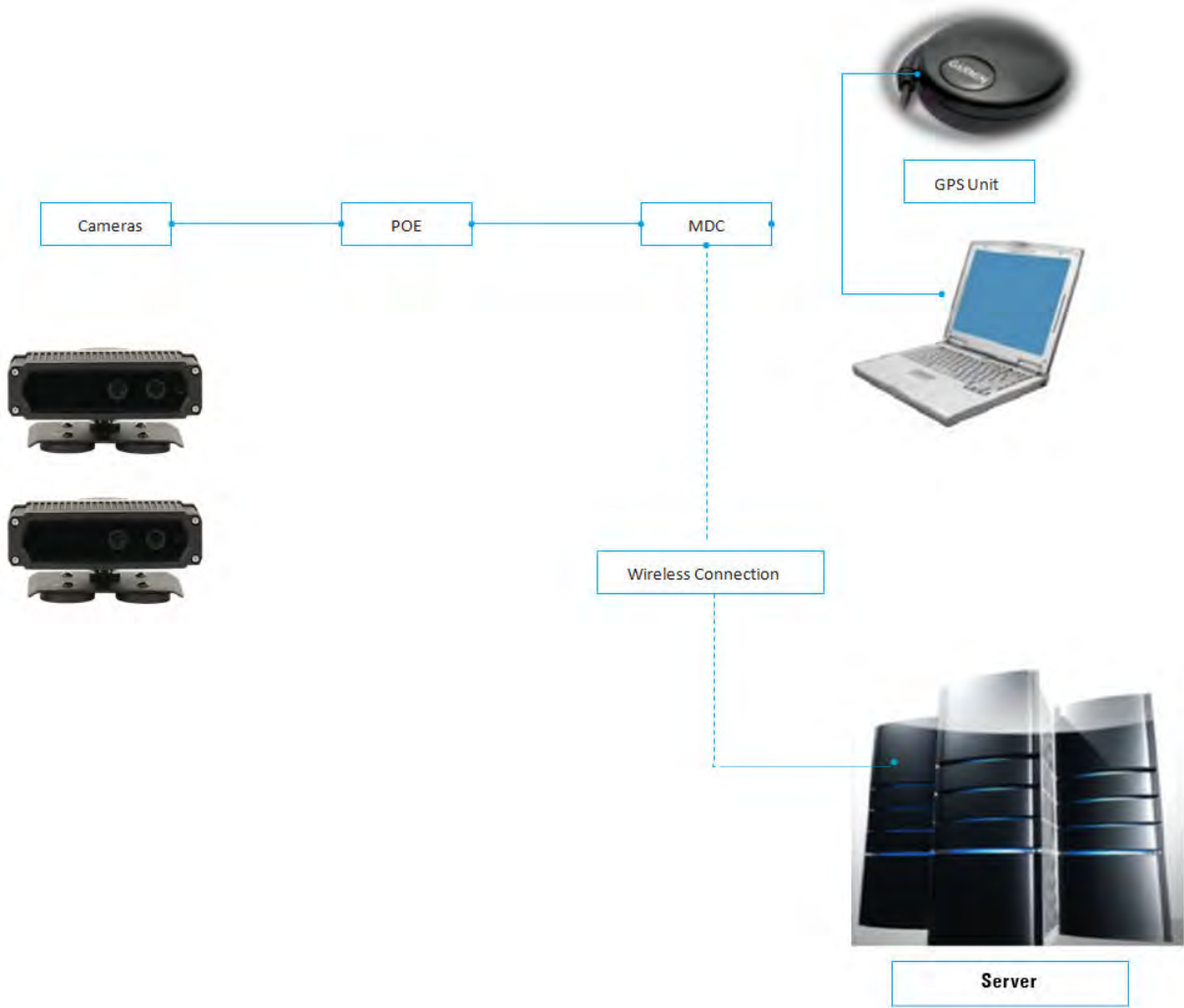


Figure 49: ReaperHD Flow Chart Process

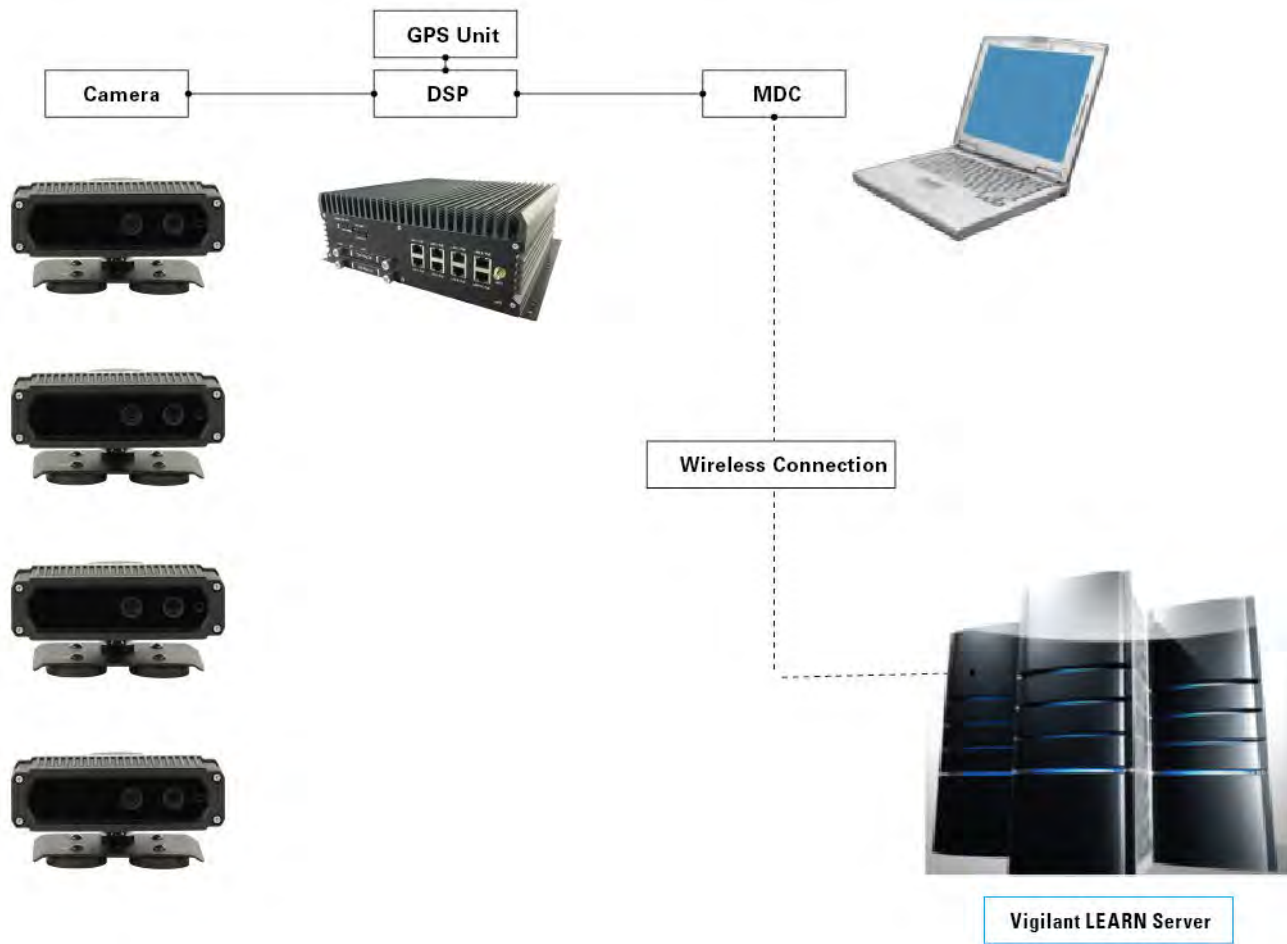
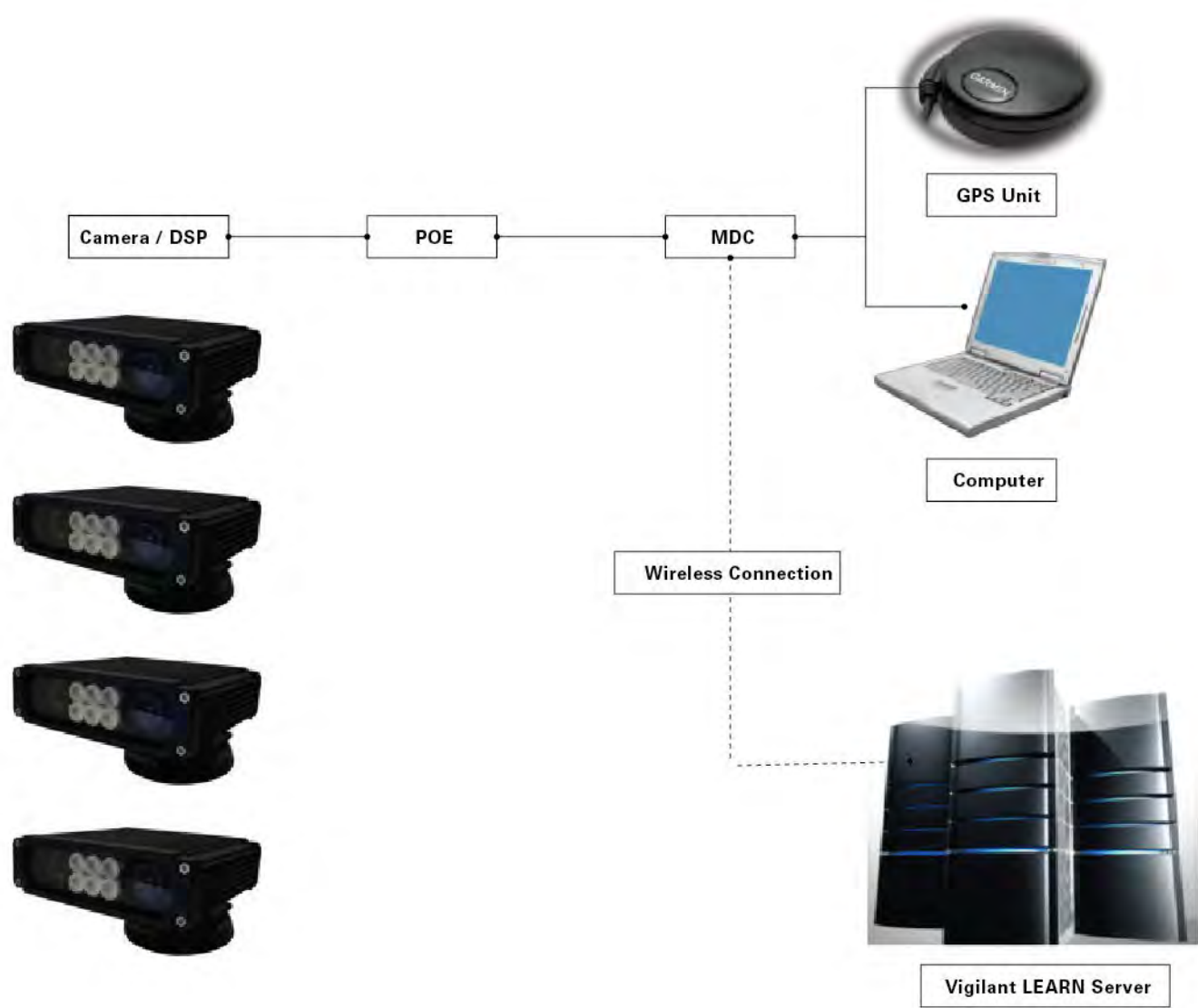


Figure 50: ReaperSD Flow Chart Process



4.1

Camera Status Lights

This section explains the different data under the Camera Status Lights within the Mobile LPR application.

Figure 51: Camera/Connection Status Window

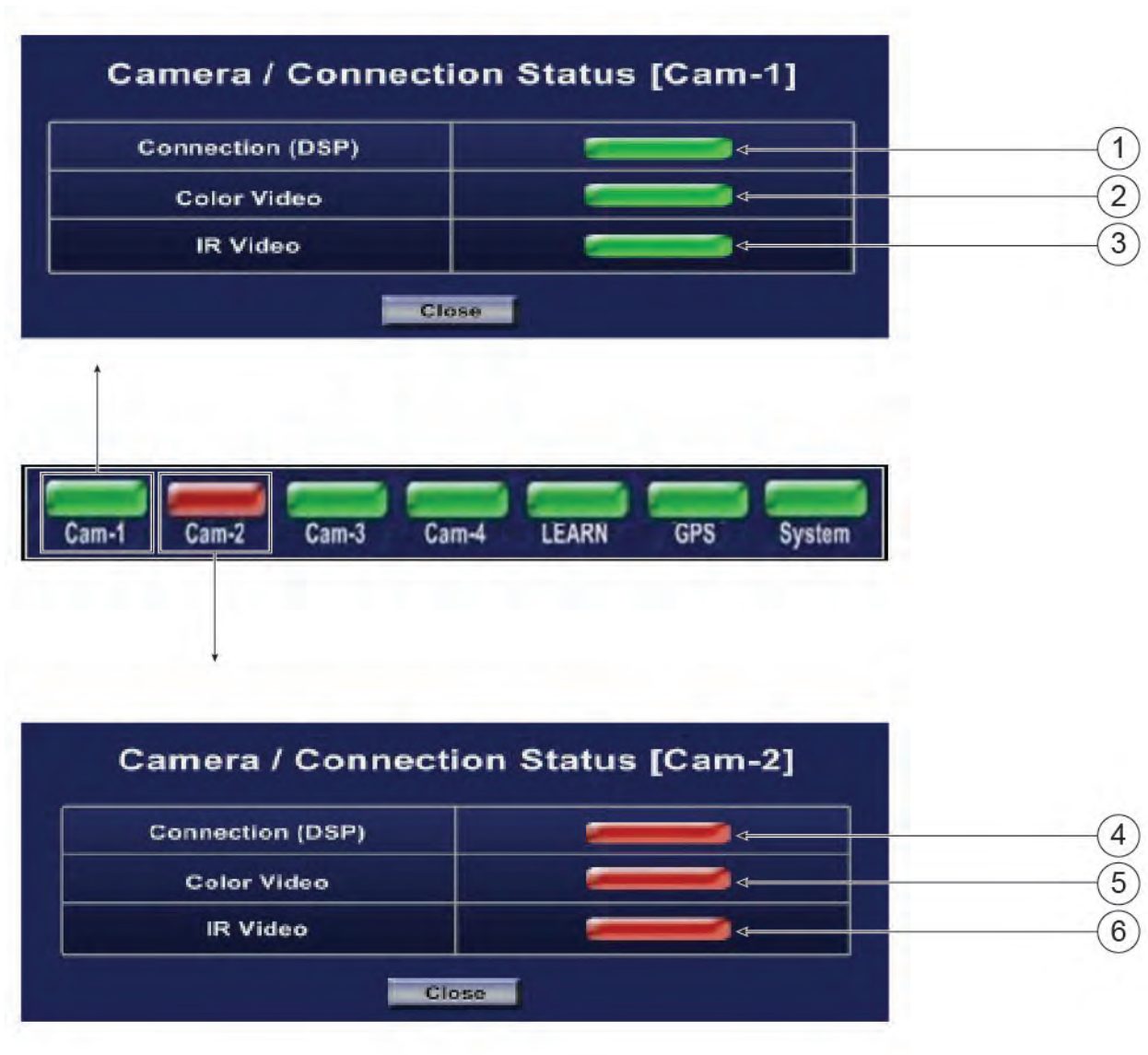


Table 40: Camera/Connection Status Window Description

Number	Description
1	Good DSP connection
2	Good color video feed
3	Good IR video feed
4	Bad DSP connection
5	Bad color video feed

Number	Description
6	Bad IR video feed

4.2

Vigilant Server Status Lights

Green Indicator Lights

Good Vigilant Server Connection.

Red Indicator Lights

No Connection.

- No detections sent to Vigilant Server.
- No hot list sent from Vigilant Server to vehicles.

Figure 52: Communication Status Window



4.3

GPS Status Lights

This section explains the different data under the GPS status light within the Mobile LPR application.

Figure 53: GPS Receiver Status Window

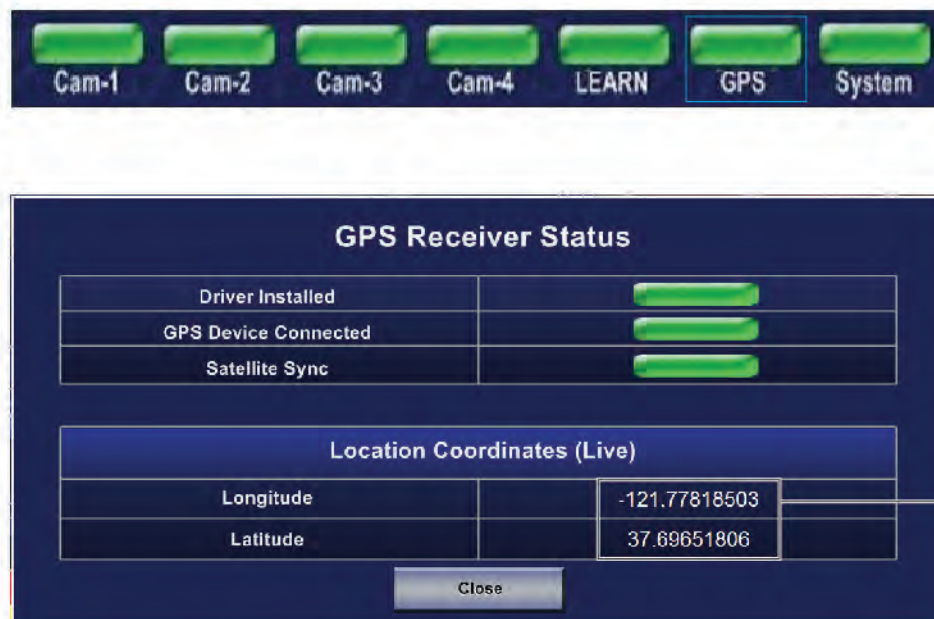


Table 41: GPS Receiver Status Window Description

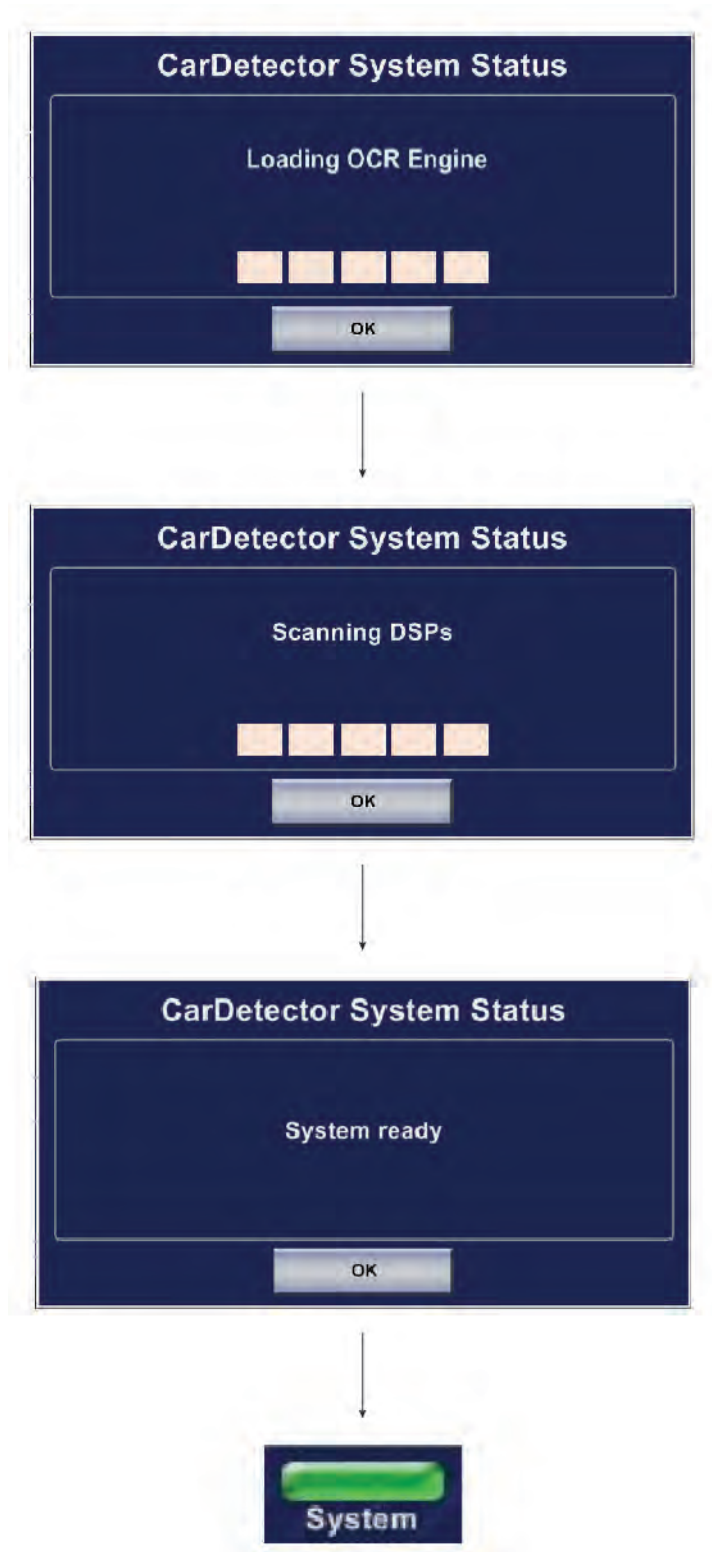
1	GPS location
2	Nearest address

4.4

System Status Lights

System Startup Process functions to check system components. If system light is red, LPR system cannot function.

Figure 54: CarDetector Status Window





REAPERHD FIXED

INSTALLATION AND CONFIGURATION GUIDE



VIGILANT LPR TRAILER CONFIGURATION GUIDE

TRAILER OVERVIEW AND TABLET COMPUTER CONFIGURATION



VIGILANT LPR TRAILER

OVERVIEW

The Vigilant LPR Trailer is a portable solar-powered roadside speed trailer equipped with an integrated Reaper/ReaperHD camera system and a self-contained power solution.

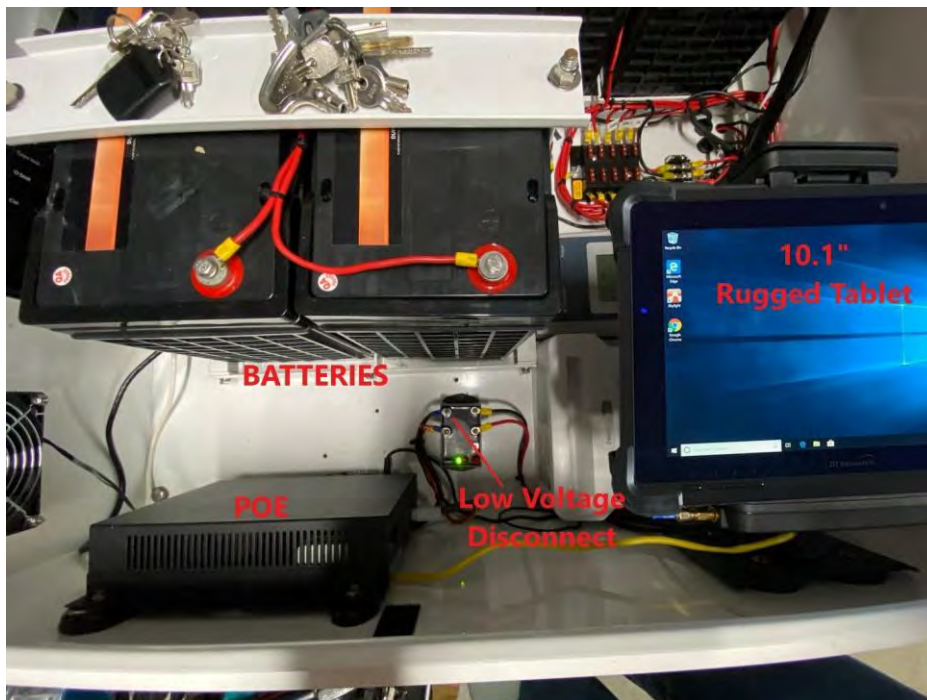
COMMON COMPONENTS

All trailer configurations feature:

- Tablet Computer - 10.1" rugged tablet for running the **Car Detector Mobile (CDMP RHD IP)** software and a LEARN connection
- Batteries charged by a 80W - 235W solar array
- Low voltage disconnect
- Power over Ethernet (PoE) switch for powering and communicating with the Reaper cameras.
- **Car Detector Mobile (CDMP RHD IP)** software for use with the tablet.

Commented [1]: I also would add CDF with Tas

Commented [2]: @steven.shults@motorolasolutions.com Not sure what you mean. CDF needs to be installed along with CDM? Does TAS need to be installed on the tablet?





TRAILER CONFIGURATION PARTS LISTING

The Vigilant LPR Trailer system is available in four configurations. An upgrade (upfit) kit is also available for customers with an existing trailer. Each Vigilant LPR Trailer configurations include these common components:

- Trailer Chassis
- 1x 16mm RHD
- 1x 25mm RHD
- 2x RHD Camera Cables
- Tablet Computer - 10.1" Rugged Tablet w/ PSU and Docking Station w/ Wiring Harness
- REAPER PoE Enclosure
- REAPER PoE Wiring Harness
- Low Voltage Disconnect
- GPS/4G Antenna

Commented [3]: IS this the BOM for the trailer having a 16mm?

Commented [4]: @steven.shults@motorolasolutions.com This entire page is lifted directly from the original VS Trailer Install Checklist:
<https://drive.google.com/file/d/1ABv8XeFKz66GxTCIDx6omEOnXVVXXPTE/view?usp=sharing> Any changes to the BOM or Parts numbers since will have to be sent to me and updated.

Commented [5]: _Marked as resolved_

Commented [6]: _Re-opened_

- VS-ST-RU-BS-01RHD: Vigilant Basic Solar 2-Camera HD LPR Trailer with 80W panel
 - 80W Solar Panel
 - Extended Battery
- VS-ST-RU-PS-01RHD: Vigilant Premium Solar 2-Camera HD LPR Trailer 140W + Battery Upgrade
 - 80W Solar Panel
 - Premium Extended Battery
- VS-XL-RU-ASM01RHD: Vigilant Advanced Solar 2-Camera HD LPR Trailer with Message Board 140W
 - 140W Solar Panel
 - Extended Life Battery
- VS-XL-RU-PSM01RHD: Vigilant Premium Solar 2-Camera HD LPR Trailer with Message Board 295W + Battery Upgrade
 - 295W Solar Panel
 - Premium Extended Battery
- Trailer Upfit Kit
 - 1x 16mm RHD
 - 1x 25mm RHD
 - Reaper HD POE Enclosure
 - Reaper HD POE Enclosure Wiring Harness
 - Tablet Computer - 10.1" Rugged Tablet w/ PSU and Docking Station
 - Low Voltage Disconnect
 - GPS/4G Antenna

Upfit Kit Trailer Considerations:

- Existing unit must contain a 12V PSU
- Internal Mounting Space for 10.1" Tablet Computer
- Suitable mounting location for LPR cameras



TABLET COMPUTER

OVERVIEW

The LPR computing solution included with all configurations of the Vigilant LPR Trailer is a rugged 10.1" touchscreen tablet that runs the custom Vigilant **Car Detector Mobile (CDMP RHD IP)** software and provides LEARN connectivity. The tablet comes preloaded from the manufacturer with the Microsoft Windows 10 operating system.

TABLET FEATURES

Each tablet features:

- An Intel 8th Gen i7 processor.
- Wi-Fi / Bluetooth / GPS / 4G Connectivity.
- A 1920x1200 touch screen.
- A 60W Battery.
- A rear CMOS Camera.





CONFIGURING THE TABLET COMPUTER

An unconfigured tablet requires additional driver installation and Windows 10 configuration to be performed before operation in the Vigilant LPR Trailer. At minimum, a SIM card must be installed and a licensed version of the **Car Detector Mobile (CDMP RHD IP)** software must be configured and tested with a **LEARN** connection file and an active **LEARN** account.

NOTE: Contact a **LEARN** Agency Manager to obtain a **LEARN** account and connection file.

To provide the tablet with cellular Internet access, a customer provided SIM card must be installed. The tablet accepts a Nano-SIM (4FF) size SIM card and supports AT&T or Verizon cell carriers. A small phillips-head screwdriver is required to open the SIM card bay.

INSTALLING A SIM CARD

If the tablet already has a SIM card installed, skip to the next section.

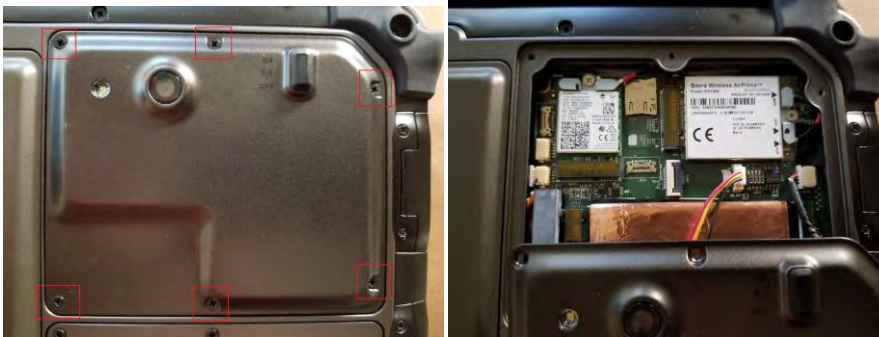
1. Remove the tablet, PSU, and power cable from its packaging. Close the cardboard box. Place the tablet on top of the cardboard box (to protect the screen) with the screen side face down.



2. Unlatch the top of the rear silicone harness by sliding the top right and top left eye-latches up towards the tablet's handle, and pulling the eye-latches up and off of the screws. Fold the silicone harness down and under the tablet to hold the harness out of the way.

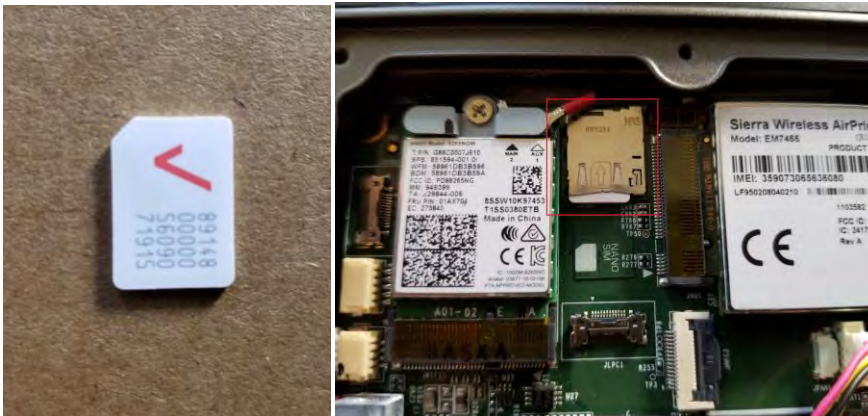


3. Remove the six small screws that border the panel of the SIM card bay. (The SIM card bay is under the panel with the camera lens on it.) Place the screws aside somewhere they will not be lost.
4. GENTLY lift the SIM card bay panel. DO NOT pull the panel completely away - the panel is attached to the tablet by two internal wires. Gently slide the panel down and away.



NOTE: When removing the panel, it may help to tilt the tablet up on its side and carefully let the panel tilt out.

5. Gently insert the Nano-SIM card into the SIM card slot and press in until a click is felt.



6. Replace the SIM card bay panel. Replace the six small panel screws and gently tighten them.

NOTE: The tablet packaging can now be discarded.

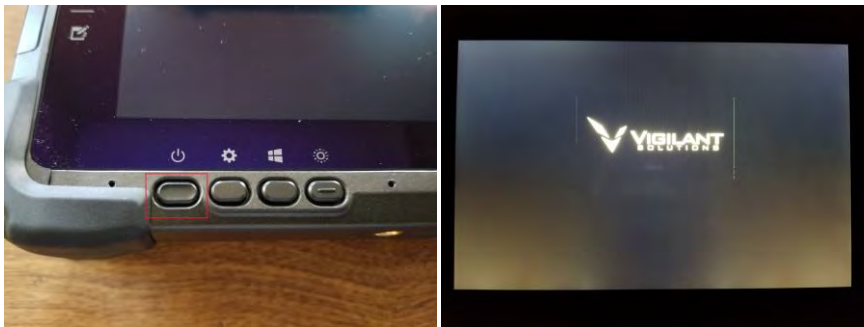
POWERING ON THE TABLET

If the tablet has already been plugged in and powered on, skip to the next section.

1. Locate the USB door on the left side of the tablet. Flip the switch to the left to unlatch the door and expose the USB-C charging port. Plug the included USB-C cable from the PSU into the charging port. Plug in the PSU.



2. Once powered, the tablet will boot up in several seconds. If it does not, press and hold the power button for a few seconds until the touch screen lights up and the Vigilant logo displays.



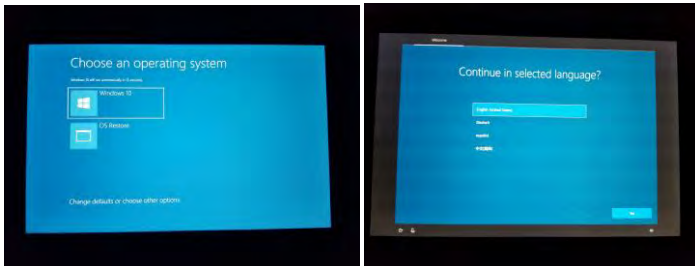
PERFORMING INITIAL WINDOWS 10 SETUP

When the tablet computer is received directly from the manufacturer in its OEM packaging, initial Windows 10 setup will be performed upon the first boot up. If initial setup has already been performed, the Windows 10 login screen will display instead.

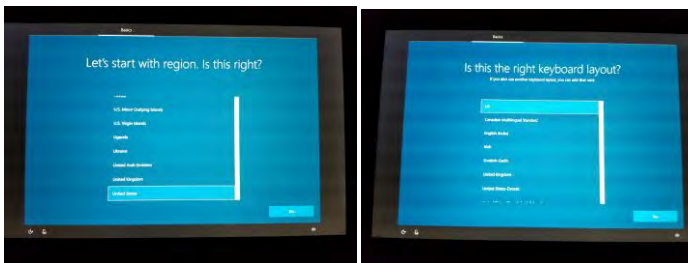


If the Windows 10 login screen displays, swipe up on the screen and enter the Windows password to login, then skip to the next section.

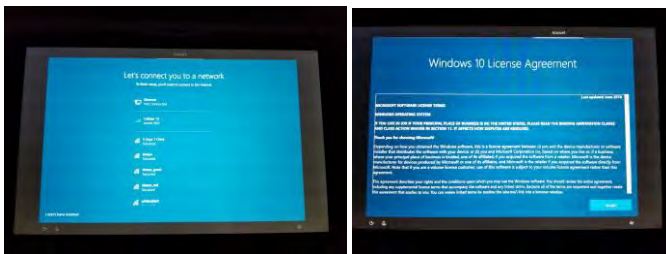
1. Under **Choose an operating system** select Windows 10. Select **English** and tap **OK**.



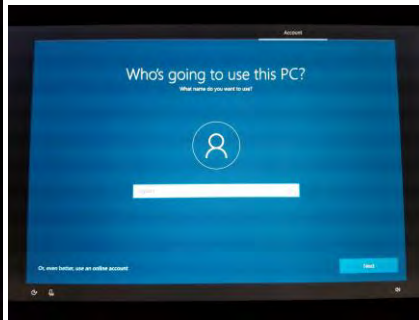
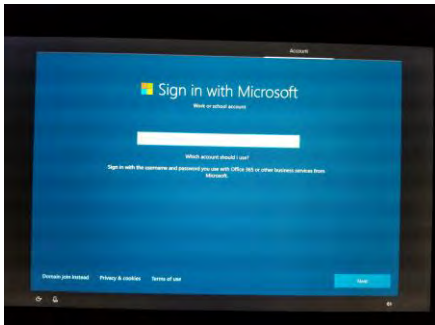
2. Select **United States** as the region and **US** as the keyboard layout.



3. If possible, select a Wi-Fi network to connect to and enter a password if necessary. If there are no Wi-Fi networks available, select **I don't have internet**. Tap **OK** to accept the Windows 10 license agreement.



4. If no Microsoft account has been supplied, tap **Domain join instead**. Enter **Vigilant** as the username. Set the account password as **Vigilant1!** (If desired, a customer provided name and password can be used instead.)



5. Select **No** and **Decline** respectively.



6. Wait for the Windows 10 desktop to appear.

OBTAINING THE TABLET SOFTWARE

Look for a folder called **Tablet Software** on the Windows desktop of the tablet. If the folder is present, skip to the next section. If the **Tablet Software** folder is not present, download the software from the DRN Partner/Field Services Portal:

Portal: https://sftp.drndata.com/public/folder/Hq_RdXrD8ECDC5fbgKsb2A/Partners

Password: Partner2020

- If the tablet has Internet access, use **Microsoft Edge** on the tablet Windows desktop to download and tablet software.
- If the tablet does not have Internet access, download the tablet software on another computer and copy the files to a USB thumb drive to transfer the software to the tablet.

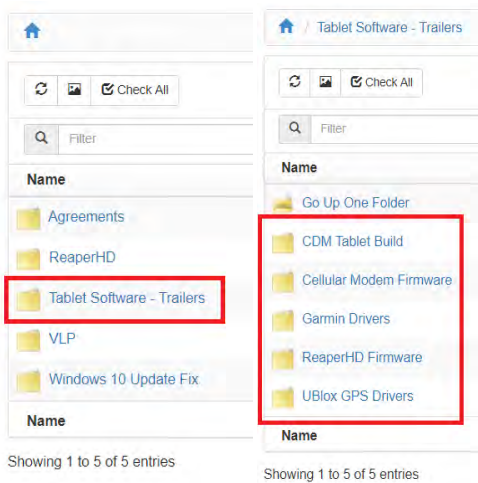
1. Open a web browser and enter the DRN Partner/Field Services Portal URL:

https://sftp.drndata.com/public/folder/Hq_RdXrD8ECDC5fbgKsb2A/Partners



2. Enter the password portal password: **Partner2020** and click (or tap) **Open**.

3. Click (or tap) on the **Tablet Software - Trailers** folder. Click (or tap) each sub-folder inside of the **Tablet Software - Trailers** folder and download each file inside by clicking the filename.



NOTE: There are eight (8) files total to download.

INSTALLING THE TABLET DRIVER SOFTWARE

There are 5 driver installation files that must be installed:

- 9999999_9904594_SWI9X30C_02.32.11.00_00_ATT_002.070_002.exe **OR**
9999999_9904780_SWI9X30C_02.33.03.00_00_VERIZON_002.079_001.exe
- USBDrivers_2312.exe
- ubloxGnss_sensorDeviceDriver_windows_3264_v2.40.exe
- ubloxGnss_vcpDeviceDriver_windows_3264_v3.10.exe
- ubloxGnss_usbcdc_windows_3264_v1.2.0.8.exe



Installing the AirPrime EM7455 4G/LTE Modem Firmware

The tablet is equipped with a Sierra Wireless EM7455 4G/LTE Modem for cellular Internet access. The modem supports AT&T or Verizon cellular carriers, and a specific firmware version must be installed to support which carrier specific SIM card that the customer is supplying.

If the cell carrier is **AT&T**, double-tap this file to run the AT&T firmware installer:

- 9999999_9904594_SWI9X30C_02.32.11.00_00_ATT_002.070_002.exe

If the cell carrier is **Verizon**, double-tap this file to run the Verizon firmware installer::

- 9999999_9904780_SWI9X30C_02.33.03.00_00_VERIZON_002.079_001.exe

NOTE: Only run ONE file. Do NOT run both files.

Double-tap on the .exe file to start the installation. Wait for the installation to complete.

1. When **Press enter to continue...** appears in the command prompt window, the installation is complete. Tap the **X** in the upper right corner of the window to close the window.

```

C:\Users\Vigilant\AppData\Local\Temp\FDT\fdt2.exe
Flashing image /
Awaiting adapter ...
Checking update status ...
Enabling selective suspend ...
Firmware image download succeeded.
Final Firmware update succeeded.

Preexisting images information:
Current:
    Firmware:
        ImageId: 002.026.000
        BuildId: 02.24.05.06_GENERIC
    Configuration:
        ImageId: 002.026.000
        BuildId: 02.24.05.06_GENERIC
Final images information:
Current:
    Firmware:
        ImageId: 002.079.001
        BuildId: 02.33.03.00_VERIZON
    Configuration:
        ImageId: 002.079.001
        BuildId: 02.33.03.00_VERIZON

OEM PRI: 9907469 001.000 Generic-M2M
IMEI: 359073065636080

Total time elapsed: 112922 ms.
Time to switch to boot mode: 18688 ms.

Images downloaded:
    Image ID: ?_?
    Build ID: 02.33.03.00_?
        write time: 4672 ms
        additional flash time: 60797 ms
    Image ID: 002.079.001
    Build ID: 02.33.03.00_VERIZON
        write time: 0 ms
        additional flash time: 47 ms

Time to reset to application mode: 27781 ms.
Press Enter to continue ...

```

Installing the Garmin USB GPS Driver

The **Car Detector Mobile** software uses the Garmin USB GPS driver to activate the GPS light in the software. Without this driver, the GPS light will always stay red.

- USBDrivers_2312.exe

1. Double-tap on the .exe file to start the installation. Follow the on-screen instructions to complete the installation. Tap **Exit** to close the window when setup is complete.



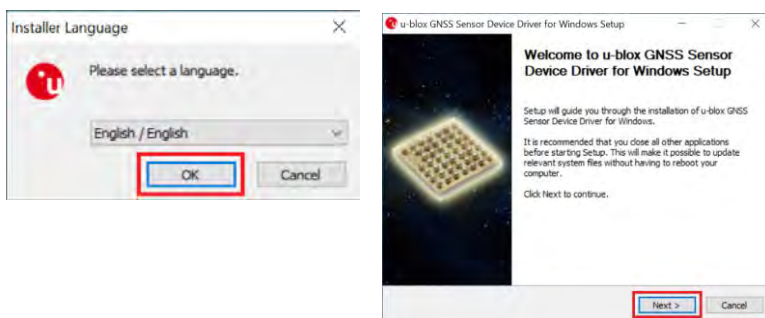
Installing the u-blox M8 GNSS/GPS Module Drivers

There are three (3) u-blox M8 GNSS Module drivers that must be installed. These drivers allow the **Car Detector Mobile** software to communicate with the GNSS/GPS module and receive GPS signals.

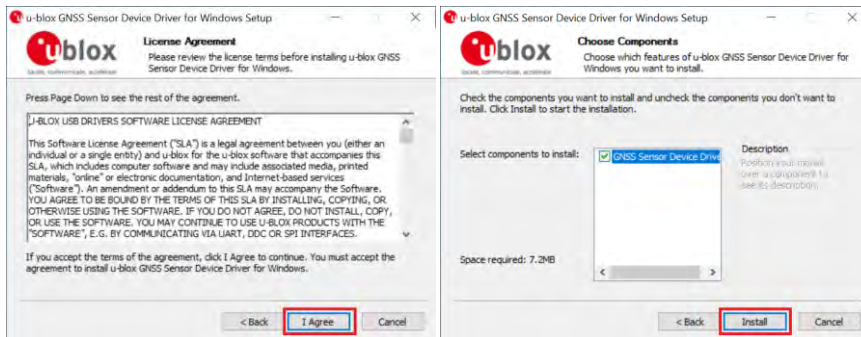
- ubloxGnss_sensorDeviceDriver_windows_3264_v2.40.exe
 - GNSS/GPS module device driver
- ubloxGnss_vcpDeviceDriver_windows_3264_v3.10.exe
 - Virtual Com Port driver for the GNSS/GPS module
- ubloxGnss_usbcdc_windows_3264_v1.2.0.8.exe
 - UART Serial Port emulator over USB

Each driver installation file has the same setup process. Double-tap the first device driver file and follow the on-screen instructions to complete driver installation.

1. Select **English** and tap **OK**. Click **Next**.



2. Tap **I agree** to agree to the license agreement. Tap **Install** to start the installation.



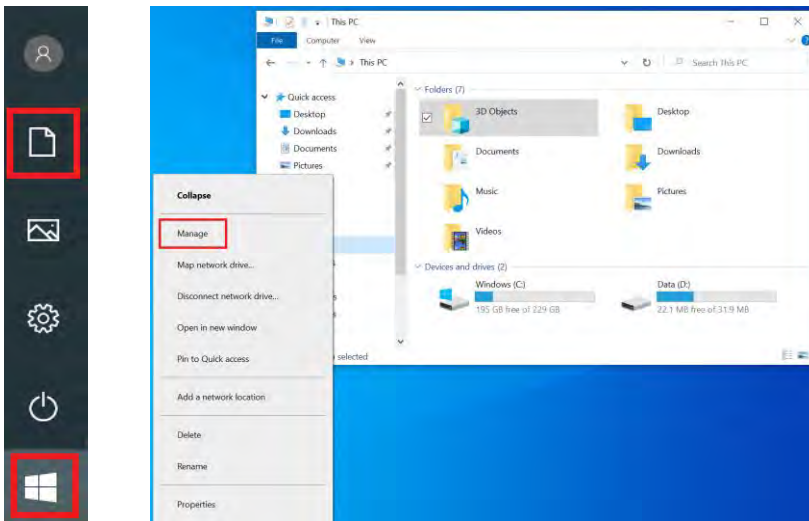
3. A second **Device Driver Installation Wizard** window will open. In the new window, tap **Next**. When the installation completes, tap **Finish**.



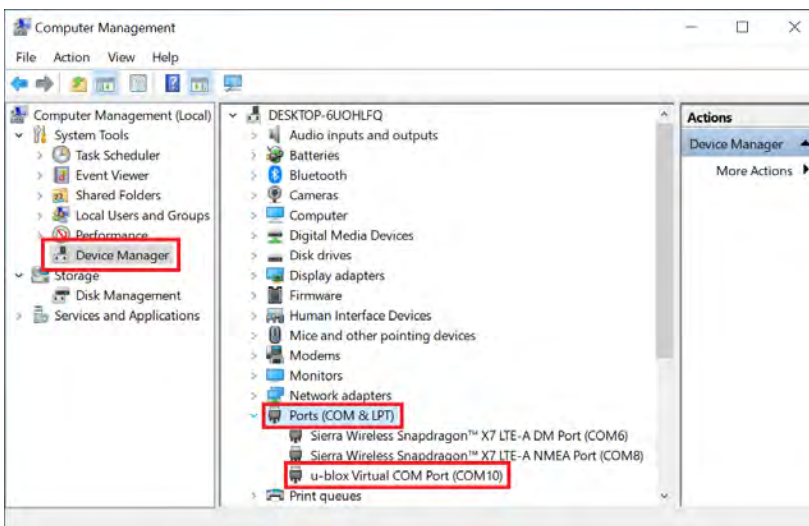
4. Tap **Finish** in the first **u-blox GNSS Device Driver for Windows** window to complete the installation.



5. Repeat the previous steps 1- 5 for the other two driver installation files.
6. Open the Windows File Explorer. Press and hold on **This PC** to open the context menu and tap **Manage**.



7. Tap **Device Manager**. Tap **Ports (COM & LPT)**. Look for a device called **u-blox Virtual COM Port** and note which COM port has been assigned. In this case, **(COM10)**.



NOTE: This COM port will be selected later when setting up the **Car Detector Mobile** software.

CONFIGURING WINDOWS 10

In order for the Windows to operate properly in the LPR Trailer Windows must be activated, automatic updates must be disabled, and a registry value must be modified.

Activating Windows 10

Windows activation will happen automatically when the tablet is connected to the Internet. If Windows has not yet been activated, connect the tablet to a Wi-Fi access point.

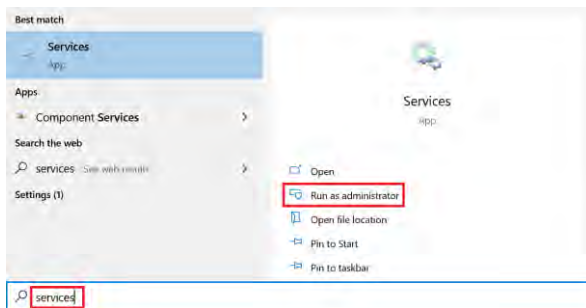
Activate Windows

Go to Settings to activate Windows.

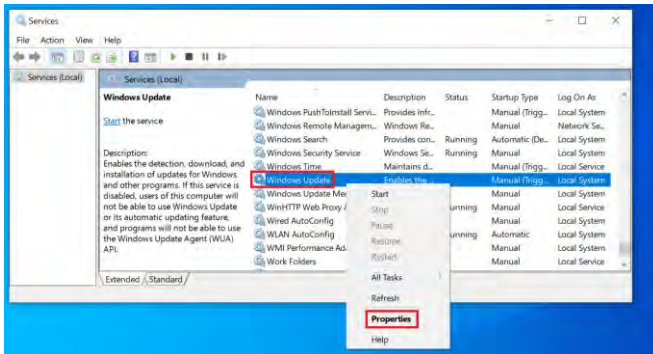
Disabling Windows Updates

Disable Windows Updates to prevent Microsoft from changing the tablet's software configuration with a Windows Update.

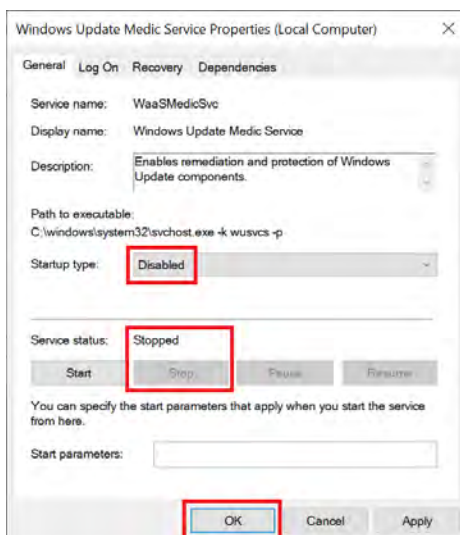
1. Tap the Windows Search Bar and type **services**. Tap **Run as Administrator** to open the **Services** window.



2. Swipe down to the **Windows Update** service. Press and hold to open the context menu and tap **Properties**.



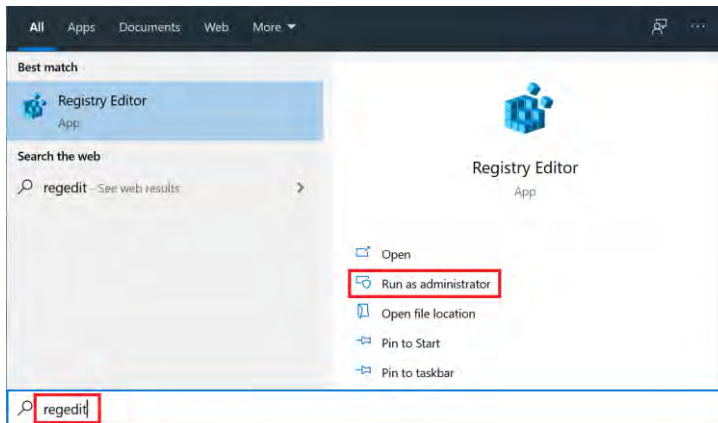
- Next to **Startup Type** select **Disabled** in the drop down menu. Next to **Service status** make sure that the word **Stopped** appears. If it does not, tap the **Stop** button. Tap **OK**.



Editing the Windows Registry

Two Windows registry keys must be modified to allow the tablet to simultaneously use the 4G/LTE Cellular Modem and the Ethernet adapter.

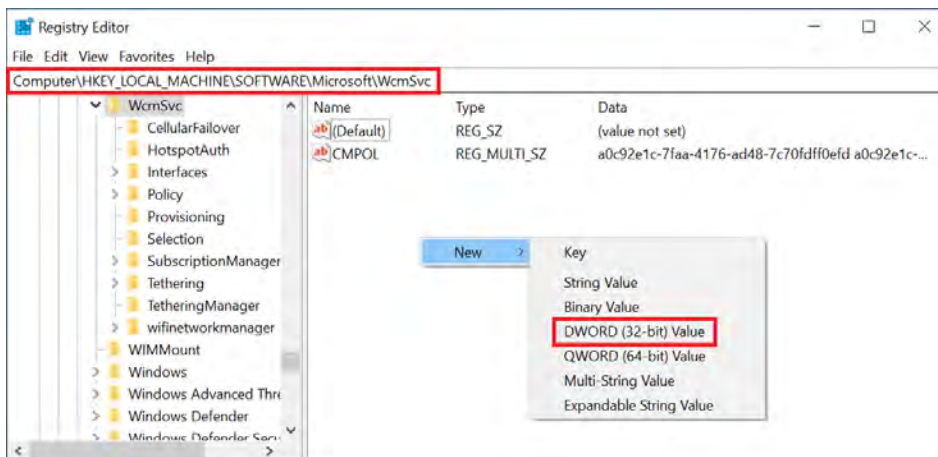
- Tap the Windows Search Bar and type **regedit**. Tap **Run as Administrator** to open the Registry Editor.



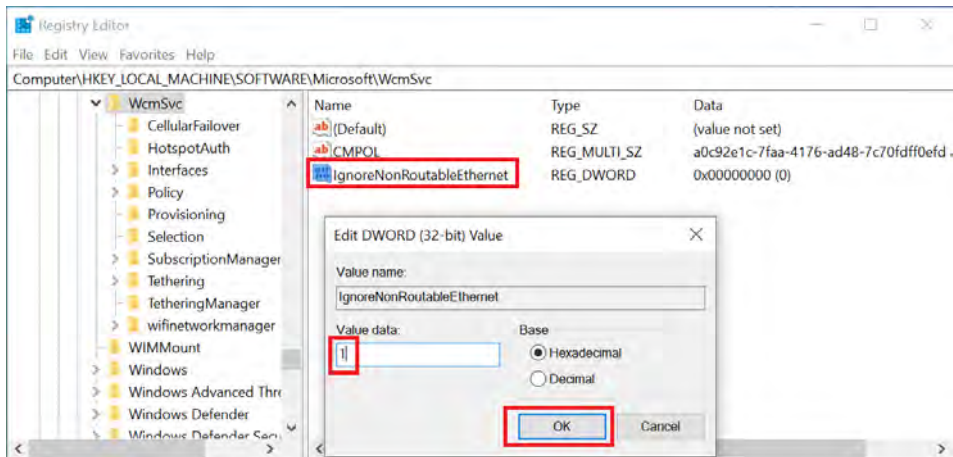
2. In the left navigation pane, navigate to:

- **Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WcmSvc**

3. Press and hold in the right pane to open the context menu. Tap **New**. Tap **DWORD (32-bit) Value**.



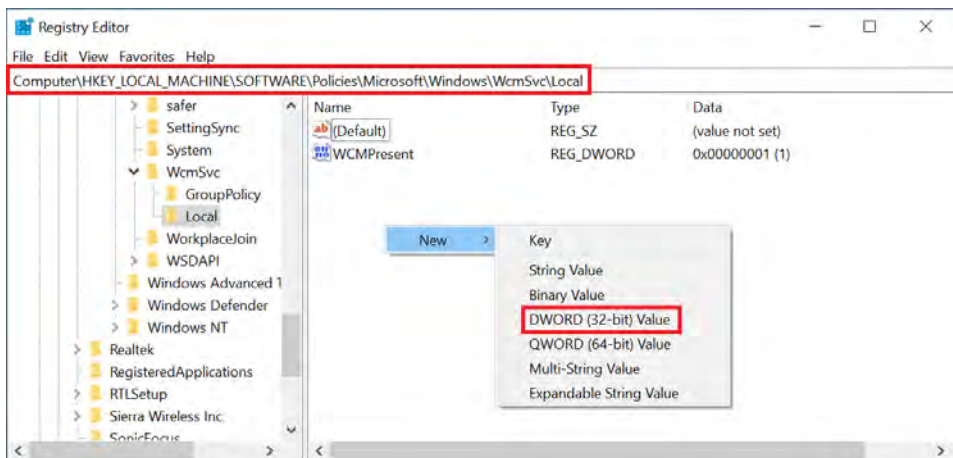
4. Name the new registry value **IgnoreNonRoutableEthernet**. Double-tap the new registry value to edit it. In the **Value data** text field, enter **1**. Tap **OK**.



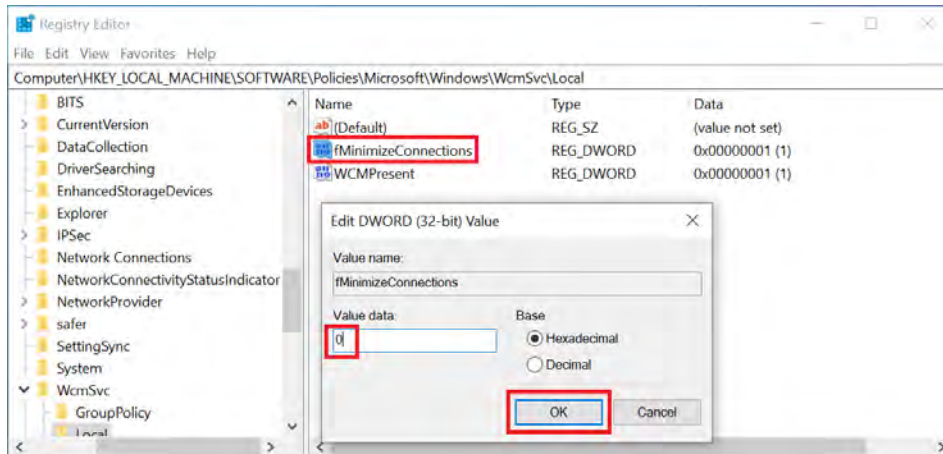
5. In the left navigation pane, navigate to:

- **Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\WcmSvc\Local**

6. Press and hold in the right pane to open the context menu. Tap **New**. Tap **DWORD (32-bit) Value**.



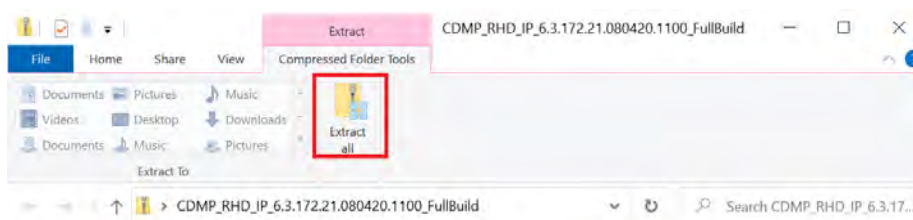
7. Name the new registry value **fMinimizeConnections**. Double-tap the new registry value to edit it. In the **Value data** text field, enter **0**. Tap **OK**.

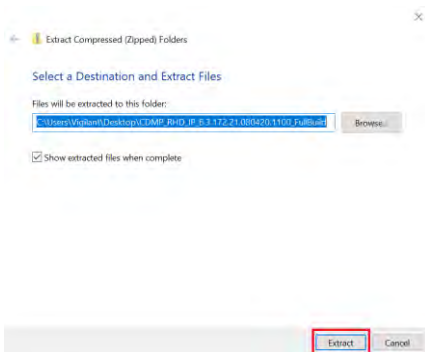


INSTALLING THE CAR DETECTOR MOBILE (CDMP RHD IP) SOFTWARE

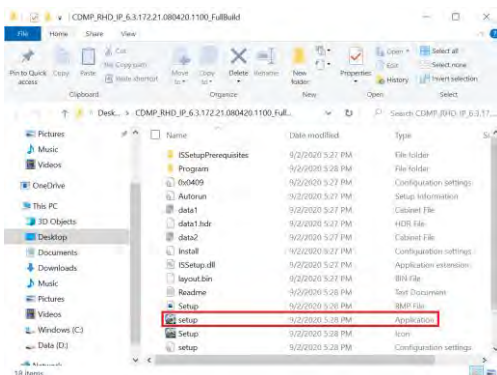
To install the **Car Detector Mobile** software, extract the archive and run the **setup.exe** installer. Follow the on-screen instructions to complete the installation.

1. Double-tap the **CDMP_RHD_IP_6.3.172.21.080420.1100_FullBuild** archive to open it. Tap **Extract all**. Tap **Extract** to extract the archive to a new folder in the current location of the archive. Wait for the extraction to complete.

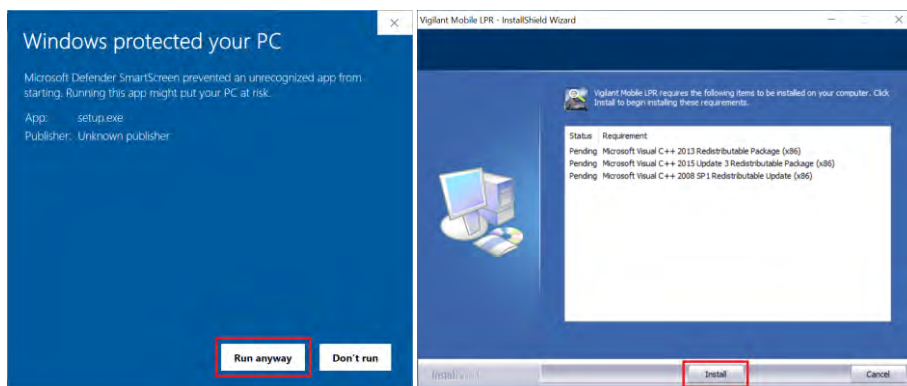




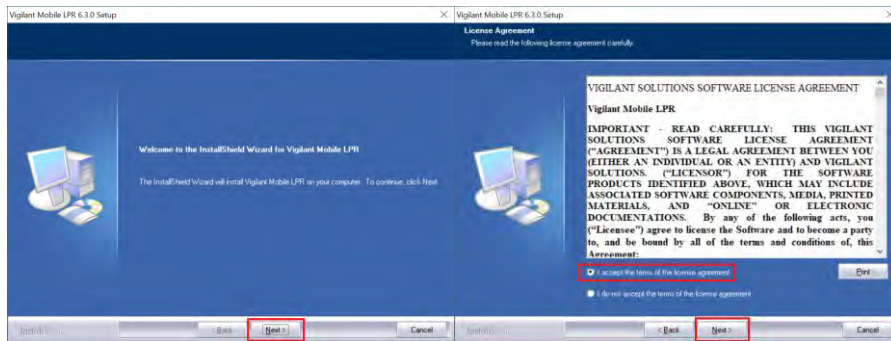
2. The new folder with the extracted archive files will open. Double-tap the **setup.exe** application file.



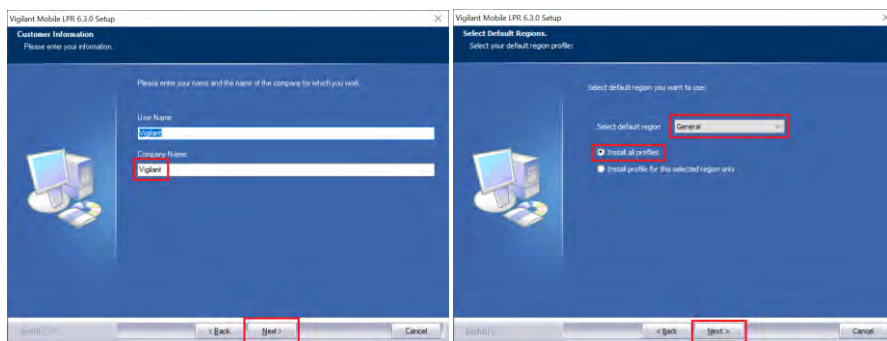
3. Windows 10 will display a SmartScreen warning. Tap **More info**. Then, tap **Run Anyway**. Tap **Install**.



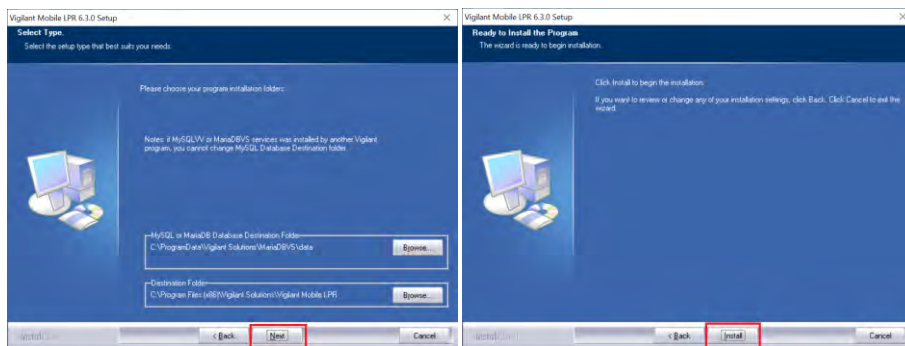
4. Tap **Next**. Tap **I accept the terms of the license agreement**. Tap **Next**.



5. Type a company name into the **Company Name** field. Tap **Next**. In the **Select default region** drop down menu, select the state that the tablet will be operating in. Tap **Install all profiles**. Tap **Next**.



6. Tap **Next**. Tap **Install**. Wait for the installation to complete, then tap **Finish** to close the installer.



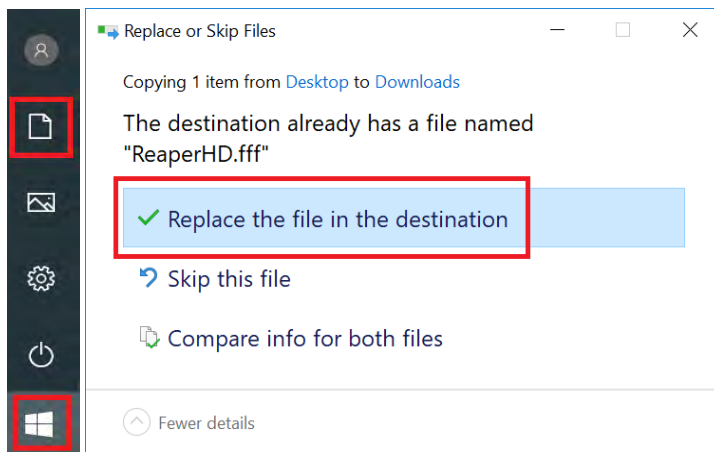
NOTE: A **Car Detector Mobile** shortcut icon will be placed on the Windows desktop.

7. Restart the tablet.

COPYING THE REAPERHD CAMERA FIRMWARE

The **Car Detector Mobile** software will automatically update connected **ReaperHD** cameras with the firmware file that is present in the software's **Tool** folder. To update the firmware, copy the downloaded **ReaperHD.fff** firmware file to the **Tool** folder:

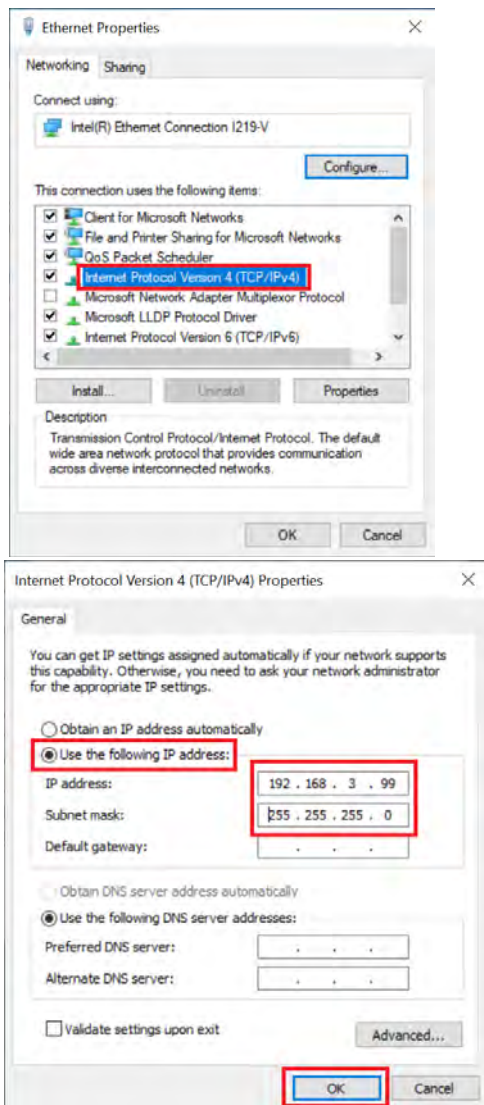
1. Open the Windows File Explorer and navigate to the **Tool** folder:
 - **C:\Program Files (x86)\Vigilant Solutions\Vigilant Mobile LPR\EngineProfiles\General\Tool**
2. Copy the downloaded **ReaperHD.fff** into the **Tool** folder and tap **Replace the file in the destination** to overwrite the existing firmware file.



CONFIGURING THE TABLET ETHERNET ADAPTER IP ADDRESS

The tablet must be on the same subnet as the **ReaperHD** cameras in order for them to communicate with the **Car Detector Mobile** on the tablet. Modify the tablet IP address in Windows:

1. Tap **Windows Icon** → **Settings** → **Network and Internet** → **Change adapter options**
2. Tap and hold on the **Ethernet** adapter. Tap **Properties**. Double-tap **Internet Protocol Version 4 (TCP/IPv4)**
3. Enter **192.168.3.99** into the **IP Address** field. Tap the **Subnet Mask** field to auto-populate the field. Tap **OK** on both windows.



LICENSING THE CAR DETECTOR MOBILE (CDMP RHD IP) SOFTWARE

The **Car Detector Mobile** software must be licensed before extended operation in the LPR Trailer. To obtain a license key, visit the **License Key Request** webpage and fill out the form. The license key will be sent to the **Contact Email Address** provided.

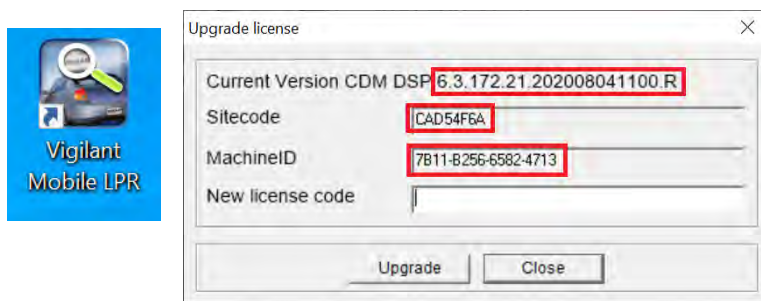
<https://www.vigilantsolutions.com/support/license-key-request/>



The request process requires review by a support representative and may take up to 24 hours to process. If necessary, the CDM software can operate for a limited time without a license for testing.

The license key request form can be completed on the tablet in the Microsoft Edge browser or on another PC.

1. Double-tap on the **Vigilant Mobile LPR** desktop icon. If this is the first time the software has been run, the **Upgrade license** window will appear.



NOTE: If the software has already been run but not licensed, the **Upgrade License** window can be viewed again by tapping on the **About Car Detector** text in the bottom left corner of the screen, and then **Upgrade License**.

2. Open the **License Key Request** page in a web browser and fill out the form. Copy the **Current Version**, **Sitecode** and **MachineID** from the **Upgrade License** window into their respective fields in the request form.
3. Once the license key has been received, copy it into the **New license code** field and tap **Upgrade**.

NOTE: The license key is 80 characters long. It may be easier to copy the key into a text file and transfer the key to the tablet with a USB thumb drive instead of manually typing it in from the support email.

CONFIGURING THE CAR DETECTOR MOBILE (CDMP RHD IP) SOFTWARE

Car Detector Mobile requires a LEARN connection file, GPS configuration, and LPR profile selection before operation in the LPR Trailer.

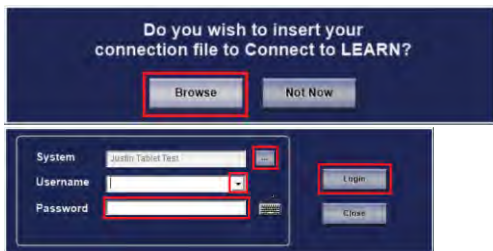
NOTE: Contact a **LEARN** Agency Manager to obtain a **LEARN** account and connection file.

Selecting LEARN Connection File and Log in

1. Double-tap on the **Vigilant Mobile LPR** desktop icon. Tap **Browse**. Browse to the LEARN connection .ini file and double-tap the file to select it.



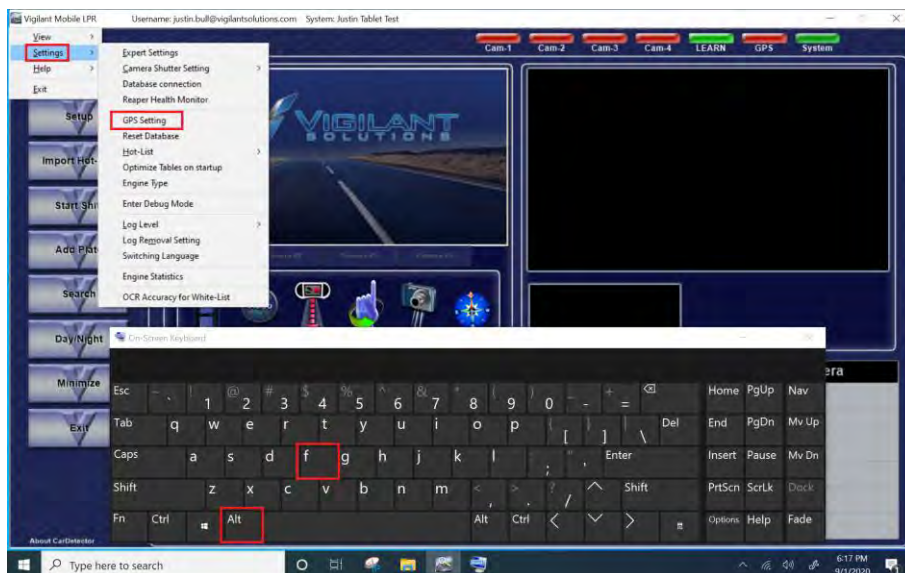
2. Tap the drop-down menu arrow next to the **Username** field to select a LEARN username. Tap the **Password** field and enter the password associated with the selected LEARN Username. Tap **Login**.



NOTE: If a connection file has already been added, a new one can be selected by tapping the three dot button next to the **System** field during login.

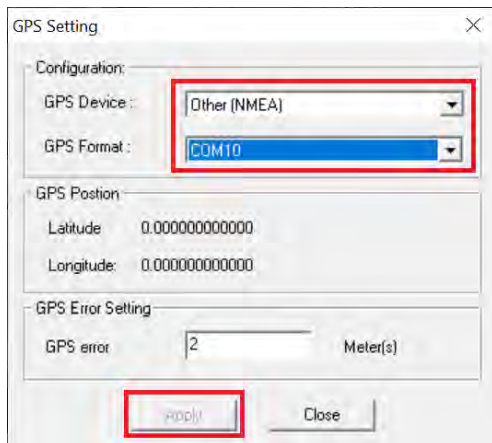
Setting the GPS Device

1. In the Windows search bar, type keyboard and tap the **On-Screen Keyboard** app. Tap the **Vigilant Mobile LPR** window to give it focus, then tap **Alt** and **F** on the onscreen keyboard to open a context menu in CDM. . Tap **Settings - GPS Settings**.



2. In the **GPS Device** drop down menu, select **Other (NMEA)**. In the **GPS Format** drop down menu select the COM port created in step seven of the "Installing the u-blox M8 GNSS/GPS Module

Drivers” section. Tap **Apply**. Close the on-screen keyboard by tapping the **X** in the upper right corner of the keyboard window.



3. Check that the GPS status light in the main **Car Detector Mobile** window is green. Tap on the light to open the **GPS Receiver Status** window. If all lights are not green after a few moments, additional troubleshooting may be required. See **Appendix A** for troubleshooting information.



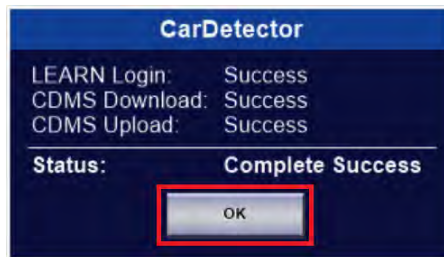

GPS Receiver Status	
Driver Installed	
GPS Device Connected	
Satellite Sync	
Location Coordinates (Live)	
Longitude	-121.9059000000
Latitude	37.7636450000
<button>Close</button>	

Setting an OCR Profile and Verifying the LEARN Connection

1. Tap the **Setup** button on the left of the **Vigilant Mobile LPR** window. Tap the **OCR** tab. Select the state in which the tablet will be operating. Tap **Apply**



2. Tap the **LEARN** tab. Tap **Test Connection**. If the LEARN connection is correctly configured and the tablet is connected to the Internet, the **Status** will be reported as **Complete Success**. Tap **OK**.

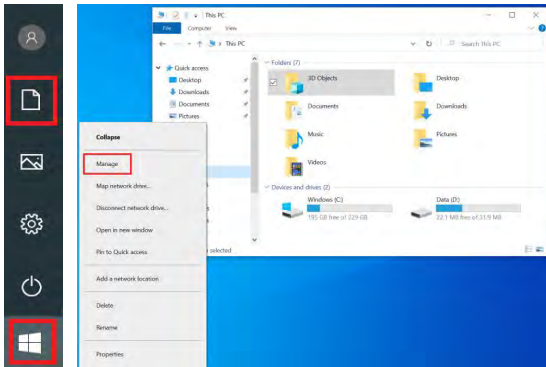


APPENDIX A: GPS TROUBLESHOOTING

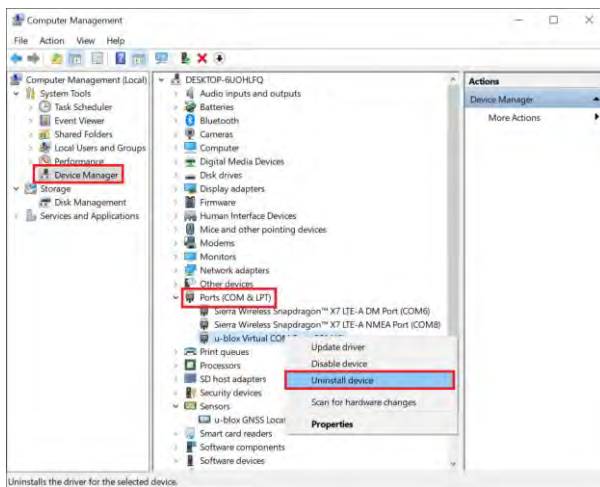
Windows 10 versions 1903 and later will unconditionally treat the u-blox GNSS module driver as a Universal GNSS module driver and render the GPS in **Car Detector Mobile** unable to function. This is due to the new way that Microsoft configures Windows to handle GNSS devices. At the time of this writing, there is no feasible solution for disabling Windows 10 updates indefinitely to prevent these changes.

The u-blox GNSS device manufacturer provides a work around for this issue. If the GPS status light in **Car Detector Mobile** will not turn green after normal set up, perform the following process:

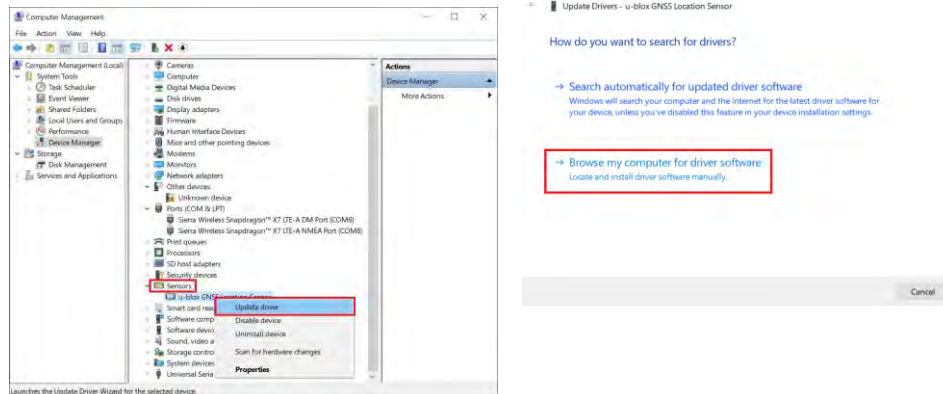
1. Open the Windows File Explorer. Press and hold on **This PC** to open the context menu and tap **Manage**.



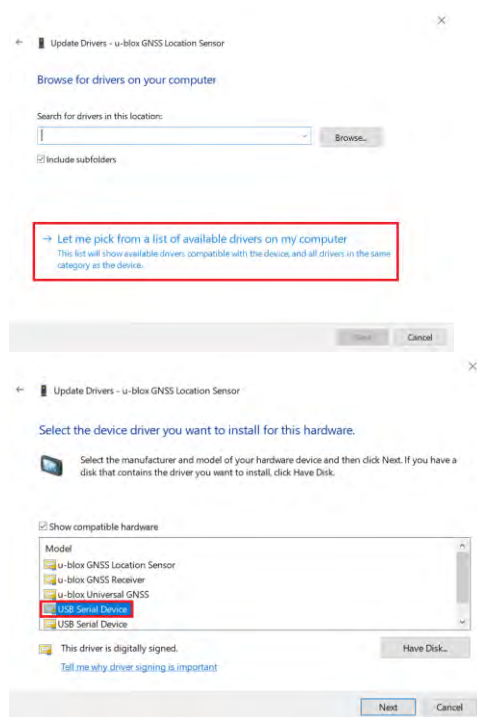
2. Tap on **Device Manager**. Double-tap **Ports**, then tap and hold on **u-blox Virtual COM Port**. Tap **Uninstall device**. Check **Delete the driver software for this device**. Tap **Uninstall**.



- Double-tap on **Sensors**, then tap and hold on **u-blox GNSS Location Sensor**. Tap **Update driver**. Tap **Browse my computer for driver software**.



- Tap **Let me pick from a list of available drivers on my computer**. Double-tap **USB Serial Device**.



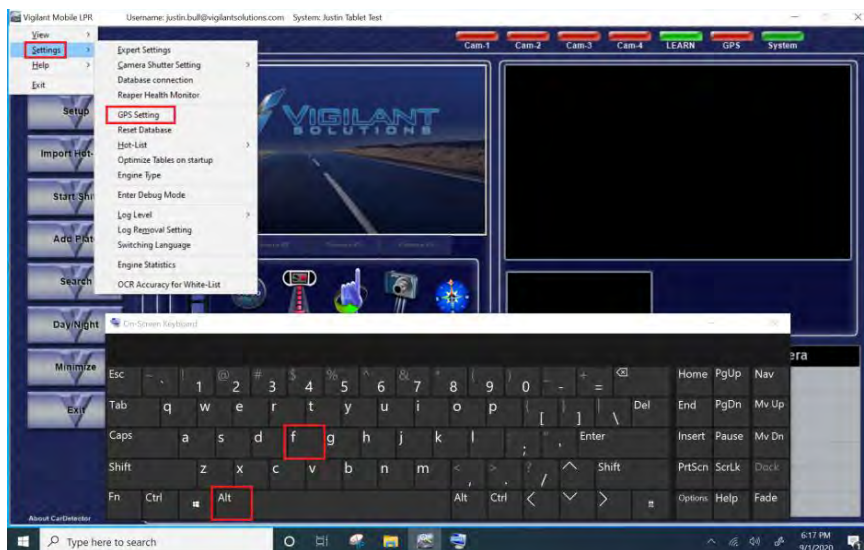
- Reinstall the three **u-blox M8 GNSS/GPS** module drivers in this order:

- **First:** ubloxGnss_sensorDeviceDriver_windows_3264_v2.40.exe
- **Second:** ubloxGnss_vcpDeviceDriver_windows_3264_v3.10.exe
- **Third:** ubloxGnss_usbcdc_windows_3264_v1.2.0.8.exe

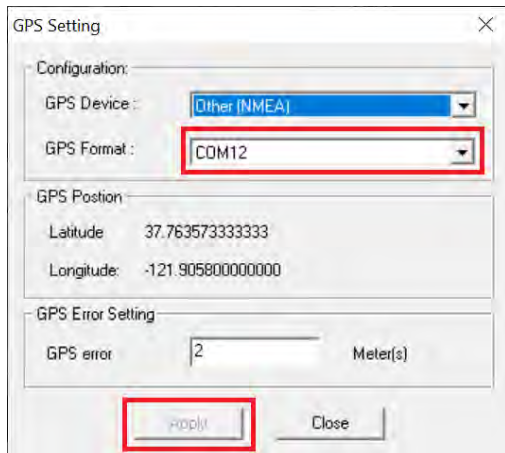
6. Note the new **u-blox Virtual COM Port**. In this case, **(COM12)**



7. Restart Windows and log back in. When Windows reboots, launch the **Car Detector Mobile** software and open the **GPS Settings** menu.



8. In the **GPS Setting** window, select the new COM port in the **GPS Format** drop down menu. Tap **Apply**.



GPS Setting

Configuration:

GPS Device : Other (NMEA)

GPS Format : COM12

GPS Position:

Latitude: 37.763573333333

Longitude: -121.905800000000

GPS Error Setting:

GPS error: 2 Meter(s)

Apply Close

9. The GPS status light in **Car Detector Mobile** should now light up green.



TABLE OF CONTENTS

1. GETTING STARTED WITH REAPERHD.....	3	4. VLP COMMS BOX INSTALLATION.....	11
2. SHIELDED CAT6 TERMINATION GUIDE.....	4	5. CONFIGURING REAPERHD FOR VIGILANT LEARN – WINDOWS AND LINUX.....	15
3. CAMERA BRACKET ASSEMBLY – UNI POLE AND DUAL UNI POLE	8	6. REAPERHD CAPTURE DISTANCE.....	32

1. GETTING STARTED WITH REAPERHD

PARTS TYPICALLY SUPPLIED BY THIRD PARTY INSTALLER (EACH INSTALL MAY VARY):

- 3/4" and 1/2" liquid tight connectors and flex conduit. 1/2" for 120VAC power, 3/4" for Cat6/data cable to cameras. Metal banding & clips: (2) per Comms box (simple banding is supplied for small diameter poles but most contractors opt to use their own banding rated for large diameter traffic poles).
- Metal cord grip: 1/2" or 3/4" for the camera cables that taps into the pole. (1) per camera.
- If no pre-made Cat6 cables were ordered, the contractor will need to supply outdoor/UV rated Cat6 cable and RJ45 connectors for each camera. Pre-made cables are available for order in 15', 30' and 60' lengths.
- 120VAC power: Copper cabling to pull 120VAC power from pole, photocell or pedestal into the communications box (lengths vary by installation type).

IN ORDER TO WORK WITH THIS KIT, THESE ADDITIONAL TOOLS ARE NEEDED:

TOOLS

Wire cutter or box cutter

Cable stripping tool

Needle nose pliers

Crimp tool for shielded RJ45 plugs with a removable die

EXAMPLE PARTS LIST (COMMON PARTS SUPPLIED BY THE INSTALLER)

ITEM	PART #	SUPPLIER	QTY
Stainless Steel Banding	S-14377	ULINE	2 per box
Stainless Steel Banding Clips	S-14378	ULINE	2 per box
UV Rated Outdoor Cat6	J362404DB	Omni	15-60 ft. per camera
Cat6 Metal Cord Connector	LPCG503	Arlington	1 per camera
1/2" Flexible Conduit	LTCUA050GY	Liquidtight	2-3 ft. per box
1/2" Flexible Conduit Connector	NMLT50	Arlington	1 per box
3/4" Flexible Conduit	LTCUA075GY	Liquidtight	2-3 ft. per box
3/4" Flexible Conduit Connector	NMLT75	Arlington	1 per box
UV Tie Wraps	DTP6	Dottie	Varies
1/4-20 Machine Screws	254 002	Everbilt	2 per camera
1/4-20 Locking Nuts	571 569	Everbilt	2 per camera
POWER			
#12 Wire White	#12 Wire White	Southwire	Varies
#12 Wire Black	#12 Wire Black	Southwire	Varies
#12 Wire Green	#12 Wire Green	Southwire	Varies
Fuse Holder	Fuse Holder	Bussman	1 per box
Fuses 10 Amp	Fuses 10 Amp	Bussman	1 per box

2. SHIELDED CAT6 TERMINATION

When you need to terminate your cable, please follow these instructions for the specifications included below:

SPECIFICATIONS	
Connectors:	RJ45 Plugs
Rating:	Cat6A
Compatibility:	22-24 AWG stranded STP cable or ReaperHD Camera Cable

CABLE PAIR COLORS				
W	G	O	BL	BR
White	Green	Orange	Blue	Brown

TOOLS
Wire cutter or box cutter
Cable stripping tool
Needle nose pliers
Crimp tool for shielded RJ45 plugs with a removable die

1	2	3	4	5	6	7	8
WO	O	W-G	BL	W-BL	G	W-BR	BR

Destination TS688 8-Position jack pin/pair assignments



Image: 568B Wiring Example

STEP 1

- Prepare the cable (Image 1)
- Slide the strain relief boot onto the cable
- Secure with removable tape



Image 1

STEP 2

- Trim the cable jacket back about 1.5" (Image 2)
- Unbraid stranded ground wires, coil together, and move to the side (Image 3)
- Cut the center spline (Image 4)
- Trim the foil and green paper shielding (Image 4)

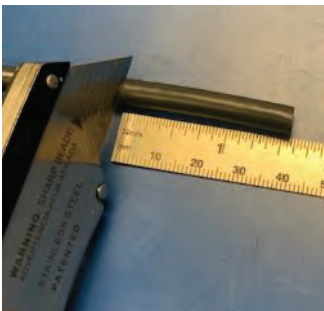


Image 2

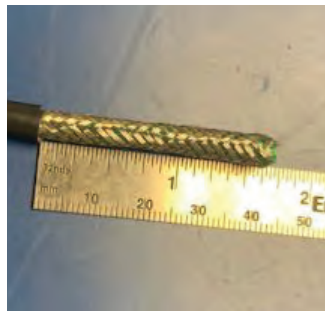


Image 3

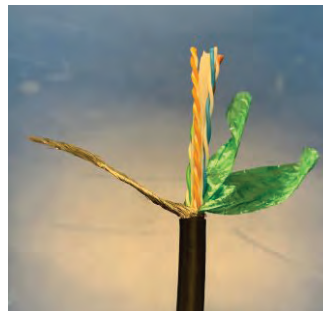


Image 4

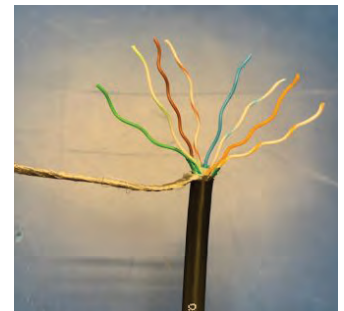


Image 5

STEP 3

- Orient the load bar to mate with the connector (Image 6)
- Insert narrow end first
- Ensure ridges are facing up

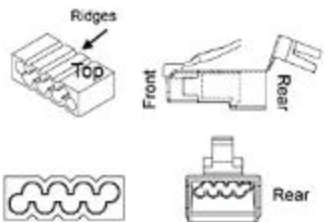


Image 6

STEP 4

- Trim the wires at an angle and gently insert the wires into the wide end (Image 7)
- Trim the wires flush with the load bar (Image 8)
- Check that the cable jacket fits into the plug housing

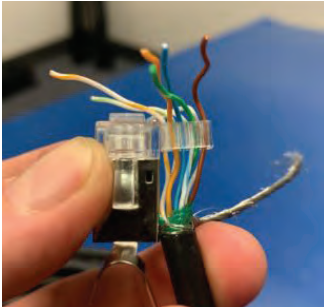


Image 7



Image 8

STEP 5

- Insert the load bar and wires into the connector (Image 9)
- Wrap the ground wire around the grounding collar (Image 10)



Image 9

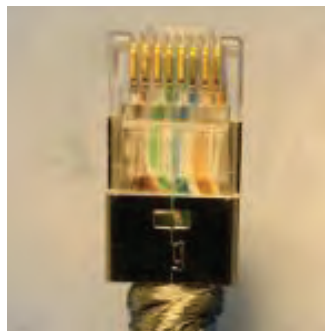


Image 10

STEP 6

- Use a crimp tool with a removable punch die so the housing is not pierced (Image 11)
- Firmly crimp the connector (Images 12-13)



Image 11

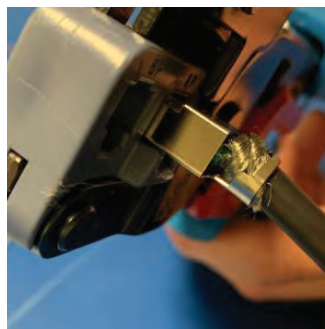


Image 12

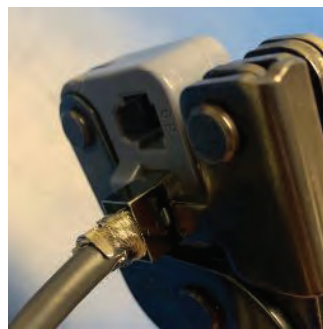


Image 13

STEP 7

- Visually check that the wires are fully inserted (Images 14-15)
- W/O-O-W/G-BL-W/BL-G-W/BR-BR



Image 14

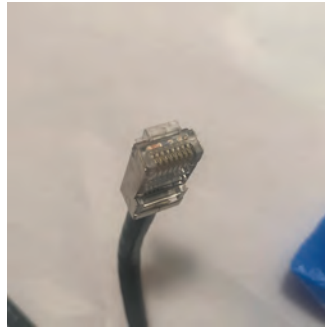


Image 15

STEP 8

- Verify the ground collar is wrapped around the cable with pliers (Image 16)
- Pull the strain relief boot over the connector (Image 17)



Image 16



Image 17

**IF CABLE TERMINATION IS NOT NEEDED CONTINUE TO
SECTION 3: CAMERA BRACKET ASSEMBLY – UNI POLE AND DUAL UNI POLE**

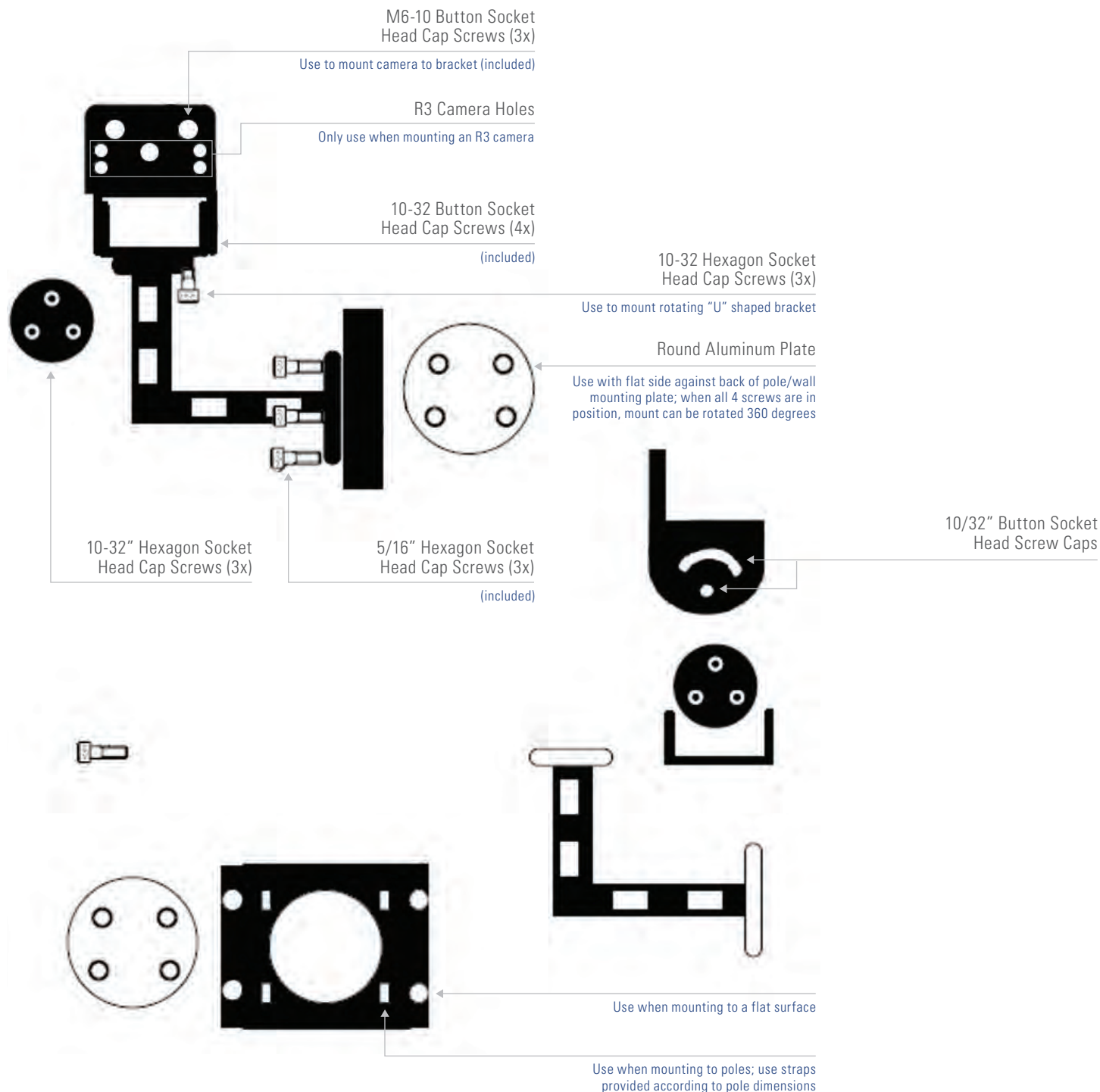


3. CAMERA BRACKET ASSEMBLY – UNI POLE AND DUAL UNI POLE

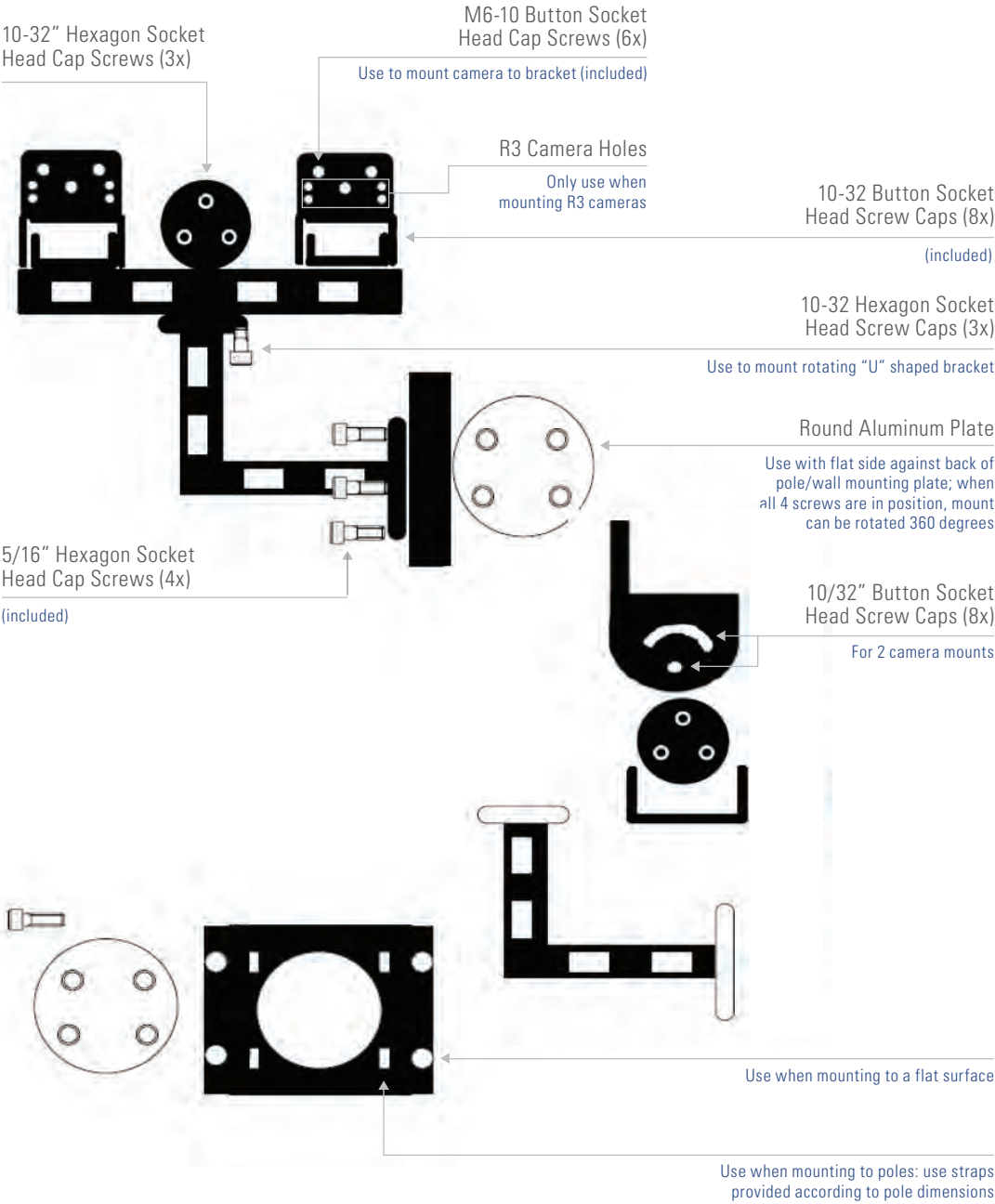
**SAMPLE INSTALLATION FOR UNI POLE AND DUAL UNI POLE
MOUNTING BRACKETS**

CAMERA BRACKET ASSEMBLY – UNI POLE AND DUAL UNI POLE

3.1 UNI POLE ASSEMBLY INSTRUCTIONS



3.2 DUAL POLE ASSEMBLY INSTRUCTIONS





4. VLP COMMS BOX INSTALLATION

HOW TO INSTALL THE VLP COMMS BOX IN 5 STEPS

VLP COMMS BOX INSTALLATION

HOW TO INSTALL THE VLP COMMS BOX IN 5 STEPS

STEP 1: SETUP THE VLP COMMS BOX

- Place straps through the top and bottom bracket (Image 18)



Image 18

STEP 2: CONFIGURE THE VLP COMMS BOX

- Once straps are run through the top and bottom bracket, raise the box to your preferred height
- Wrap both straps around the pole (Image 19)



Image 19

STEP 3: SECURE THE VLP COMMS BOX

- Once the desired configuration of the VLP Comms box is achieved, tighten both straps to secure the VLP Comms Box (Image 20)



Metal Binding
(2 per Comms Box)

Image 20

STEP 4: POWERING THE VLP COMMS BOX

- Once the straps are fully secured, run power and camera cable connections into the box using conduit (Image 21)
- Use ½" liquid tight connectors and flex conduit for the incoming 120V AC power connection (Image 22)
- Use ¾" liquid tight connectors and flex conduit for the incoming Cat6 ReaperHD camera cables (Image 22)



120VAC Power
(Hot, Neutral, Ground) run through flex
conduit and tie into wire nuts

Image 21

Flex Conduit/Connectors
1/2" liquid tight for 120V AC
1/4" liquid tight for camera Cat6 data cables

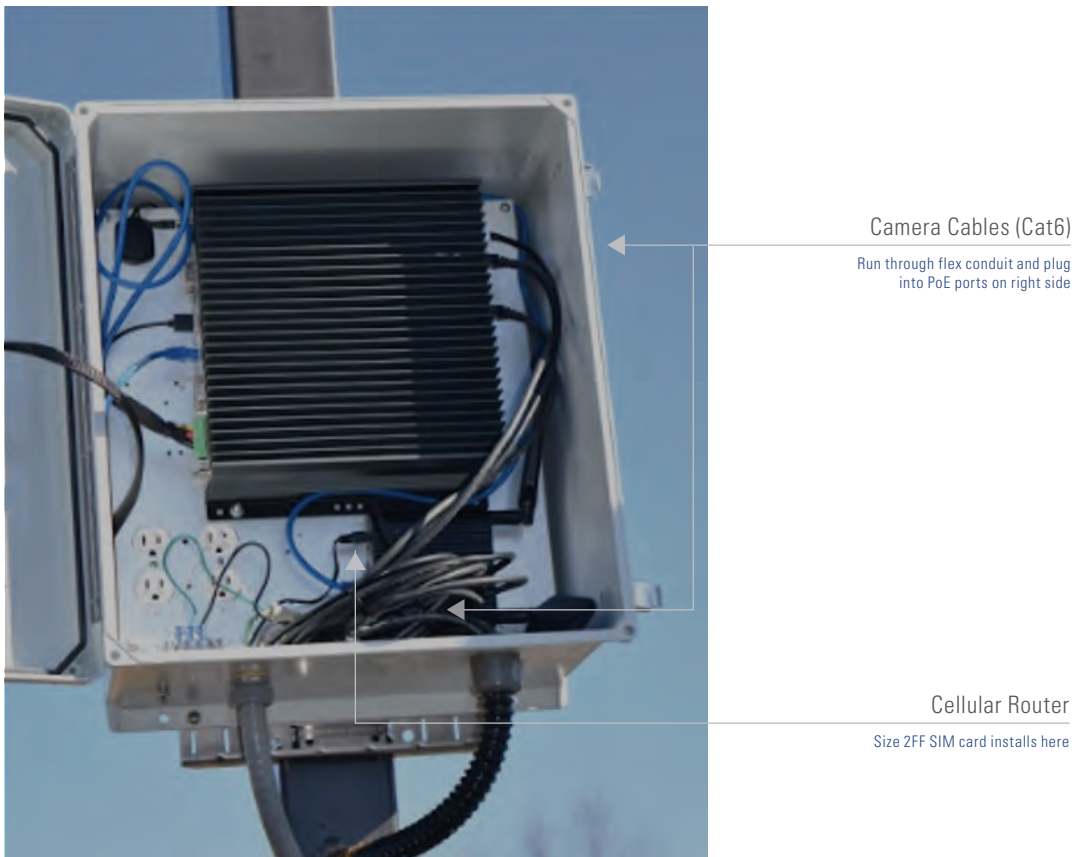


Image 22

STEP 5: REBOOT AND START UP THE VLP COMMS BOX

- After power has been connected to the box, the VLP will start up
- Once the VLP has fully booted, ReaperHD cameras will power up and start normal operation within 1-2 minutes
- Verify each camera is operating by connecting UbuntuHD Control tool to the VLP using a Windows PC (Image 23)
- Use UbuntuHD Control tool to configure the system for Vigilant LEARN (See section 5)



Image 23



5. CONFIGURING REAPERHD FOR VIGILANT LEARN –WINDOWS AND LINUX

STEP-BY-STEP GUIDE ON HOW TO CONNECT YOUR REAPERHD CAMERA TO VIGILANT LEARN

CONNECT YOUR REAPERHD CAMERA TO VIGILANT LEARN – WINDOWS AND LINUX

CHECK OPERATING SYSTEM

VERIFY THE OPERATING SYSTEM (OS) ON THE VLP – WINDOWS OR LINUX

- Check your purchase order documents. If “Fixed LPR” software is listed in the product description, the OS on the VLP is **Windows**.
- Connect a monitor and keyboard. Blue login screen will be **Windows**. Black command line, terminal screen is **Linux**.

CONNECT YOUR REAPERHD CAMERA TO VIGILANT LEARN – WINDOWS OS

WINDOWS OS OVERVIEW

Installed on the VLP is Vigilant CarDetector Fixed (“Vigilant CDF” or “Fixed LPR”), a client application with GUI that shows live video of connected cameras and lists accumulated plate detections with vehicle images. The Fixed LPR application on Windows allows Target Alert Service (TAS) to connect directly to the VLP inside the Comms Box for expedited alerting on plates of interest (‘hits’ or plates on a hot list). The GUI can be monitored using remote desktop or using a display monitor, however it will also run unattended depending on user preference. A connection file created then exported from Vigilant LEARN (cloud, backend server), will need to be saved to the Fixed LPR file directory (follow steps below).

CREATE A USER

- From Vigilant LEARN as an agency manager go to “User Management” (Image 24)



Image 24

- Select “Add New User” (or “Search/Modify Users” if one already exists) (Image 25)

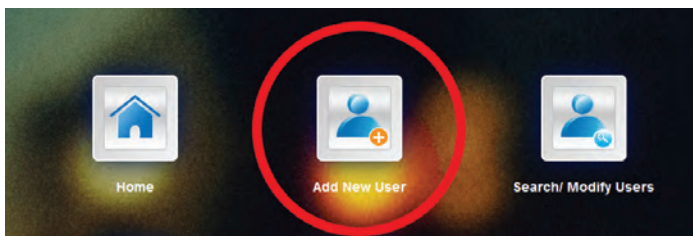


Image 25

- When creating a user, make sure “Vigilant CarDetector” is enabled with “Vigilant CarDetector Admin” selected in the dropdown. To use this account to check data it must have detection viewing enabled. Additionally, if the user is to generate alerts it must have alerting turned on. (Image 26)
- When you are finished hit “Create” (Image 26)
- This user is now the user you will use when logging into Vigilant CDF. If you have placed your connection file correctly you should see the user as available choice from the login dropdown when starting Vigilant CDF.

User Permissions

Plate Search | Face Search | Ballistic Search

PlateSearch Permission Group

CarDetector Admin
CarDetector Operator
Custom Profile
Default User
Detectives

LPR System Use

☒ CarDetector CarDetector Admin

Assign User Geo-Zone:

☐ Assign Zone Link Geo-Zone
Zone is NOT assigned

Console Access:

☒ Allow Alert Management
☒ Reporting (Output Reports)
☐ Record Preservation
☐ Limit Data View
 Limit Days:
 Limit Date:
☐ Limit Hot Plate uploads allotted
☐ Multi-Dispatch TAS Access

Icon Management Configure

Detections (LPR data scan access):

Available Data Sources

	User	Agency	Commercial	Shared
View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Edit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Allow all data access Permissions

View LPR data Shared by:
All Agencies

Modify
Remove

Hits (Hot List - Detection matches):

Available Data Sources

	User	Agency	Shared
View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Get Alerts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Allow all Hit Permissions

View Hits from Hot Lists Shared by:
All Agencies

Modify
Remove

Get Alerts from Hot Lists Shared by:
All Agencies

Modify
Remove

Alert Management: Configure

Hot List Management:

Available Hot List Sources

	User	Agency	Shared
View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upload	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

☒ Allow all Hot List Permissions

View Hot Lists Shared by:
All Agencies

Modify
Remove

Suppress Hits

	User	Agency
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Image 26

CREATE A FIXED SYSTEM / GENERATE A CONNECTION FILE FOR VIGILANT CDF

- The agency must exist in Vigilant LEARN
- You can create a new system under that agency as per the manager's login or an ADMIN level login. This guide will assume you are using a manager's login for the agency.
- Select "PlateSearch" from the Vigilant LEARN home screen (Image 27)



Image 27

- Then select "Agency Management" (Image 28)

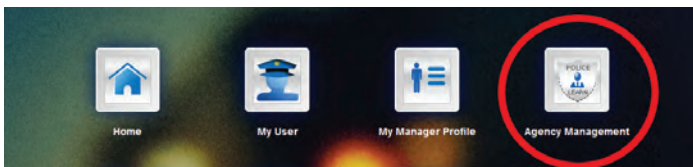


Image 28

- Select "Fixed Camera Systems" (Image 29)

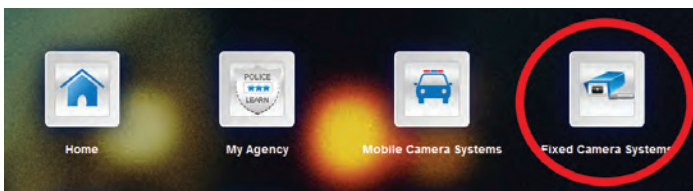


Image 29

- Select "New" to create a new system (Image 30)

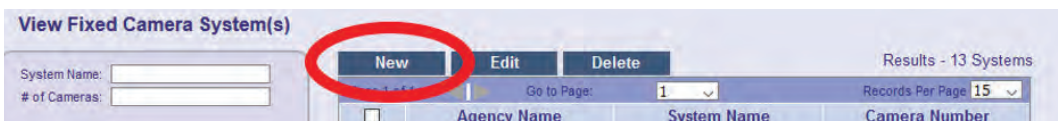


Image 30

- Name your camera site appropriately (Image 31)

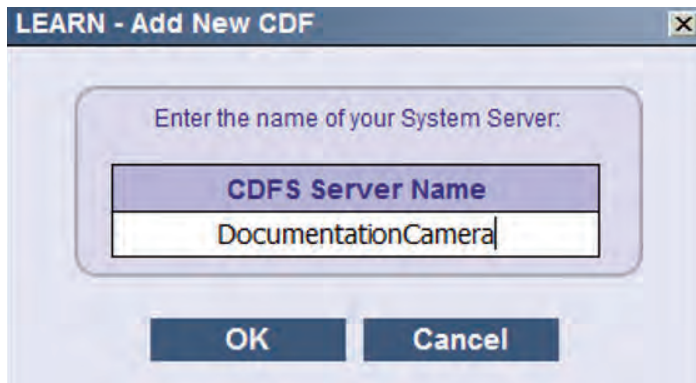


Image 31

- Set your OCR Region (Image 32)

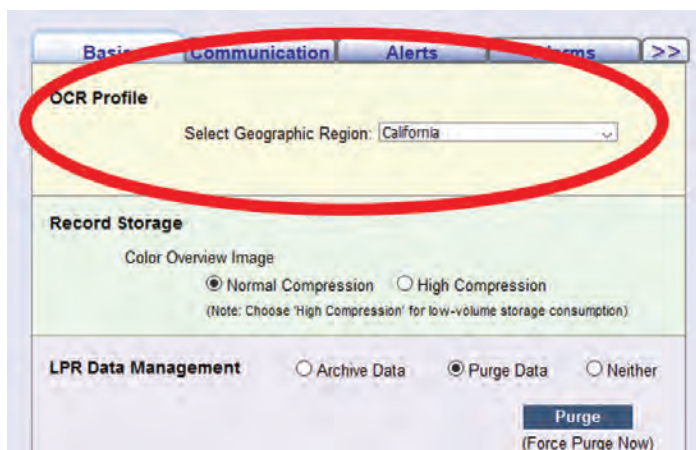


Image 32

- Click the “Admin Alarms” tab to make sure this is set up as the agency desires (Image 33)
- Click “Save” when finished

Administrative Alert Settings

☐ Enable Administrative Alerts
Email Address:

☐ System launch confirmation

☐ Successful system shut down

☐ When the camera is activated or deactivated

☐ Limit one system message 1 per Hour

☐ Camera Power/Connection loss after 30 minutes

☐ When a camera loses video after 1 minutes

☐ When a camera has not recorded a detection after 12 hours

☐ When a camera becomes out of calibration (Not aimed well)

☐ When a camera is not performing well (Too many 'Missed' plates)

☐ Limit health messages to 1 per Camera

Back Next Save Cancel

Image 33

- You will need to download your connection file by highlighting your system and clicking “Connection File” at the bottom (Image 34)
- Save the connection file, transfer it to the VLP inside the VLP Comms Box, then place it in the ROOT DIRECTORY of the Vigilant CarDetector Program: 'C:\Program Files (x86)\Vigilant Solutions\Fixed LPR'

Results - 13 Systems

Page 1 of 1 Go to Page: 1 Records Per Page: 15

<input type="checkbox"/>	Agency Name	System Name	Camera Number
<input type="checkbox"/>	Vigilant Solutions Sales	BlueFin	2
<input type="checkbox"/>	Vigilant Solutions Sales	CA-99 and CA-50	2
<input type="checkbox"/>	Vigilant Solutions Sales	CarDetector-01	0
<input type="checkbox"/>	Vigilant Solutions Sales	CDF_TAS_Hannah	0
<input type="checkbox"/>	Vigilant Solutions Sales	ChantellFixed	0
<input type="checkbox"/>	Vigilant Solutions Sales	ExampleCDF	1
<input type="checkbox"/>	Vigilant Solutions Sales	I-80 and 5	2
<input type="checkbox"/>	Vigilant Solutions Sales	Jacques-Fixed	0
<input type="checkbox"/>	Vigilant Solutions Sales	Jacques-Test	0
<input type="checkbox"/>	Vigilant Solutions Sales	OSI Texas Demo Fixed	4
<input type="checkbox"/>	Vigilant Solutions Sales	OSIDemoCDF	4
<input type="checkbox"/>	Vigilant Solutions Sales	Solar_SA_CBP_Demo	0
<input type="checkbox"/>	Vigilant Solutions Sales	WCAA	0

Connection File View Profiles Reset Hot List

Image 34

TEST SYSTEM – VERIFY CONNECTION TO VIGILANT LEARN

- Login to Vigilant LEARN using the user credentials you just created
- Select “PlateSearch”
- Select “License Plate Query” (Image 35)

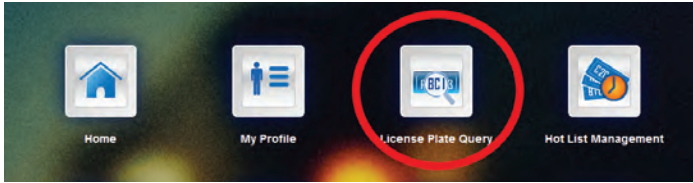


Image 35

- Select “More Options” to show the search filters (Image 36)

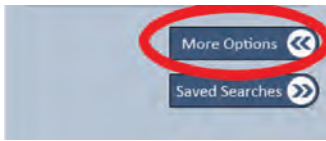


Image 36

- Filter by the system you just created. Returns generated will be plate detections from only this system.
(Image 37)

The screenshot shows a web interface for searching plate data. It is divided into two main sections: 'Search Plate' on the left and 'Data Source Filters' on the right.

Search Plate Section:

- Plate Number:** A text input field with a help icon.
- Date Range:** A checkbox labeled 'Date Range' with 'From' and 'To' date pickers.
- Location:**
 - State:** A dropdown menu with options AK, AL, AR, and AZ.
 - County:** A dropdown menu with the option 'All'.
 - Custom Map:** A dropdown menu with the option 'Not Used'.
 - Buttons:** 'Create Map' and 'View Map'.
- More Options:** A button with a double left arrow.
- Saved Searches:** A button with a double right arrow.
- Records To Show:** A checkbox and a dropdown menu set to '50 Records'.
- Buttons:** 'Search' and 'New Search'.

Data Source Filters Section:

- Make:** A text input field.
- Model:** A text input field.
- Year:** A text input field.
- Filters:**
 - ☐ Only view 'Detections' with GPS data
 - ☐ Show Daytime image in Nighttime image
 - Minimum Speed:** A text input field.
 - ☐ Hot List Hits
 - ☐ Whitelist Hits
 - ☐ Digital Chalking Hits
 - Agency Selection:**
 - ☐ All Agencies
 - ☐ Select Agencies
 - User Selection:**
 - ☐ All Users
 - ☐ Select Users
 - Hot List Sources:**
 - ☐ All Hot List Sources
 - ☐ Select Hot List Sources
 - Alert Types:**
 - ☐ All Alert Types
 - ☐ Select Alert Types
 - System Selection:**
 - ☐ All Systems
 - ☒ Select Systems
 - System List:** A list of systems with checkboxes: 'All Systems', 'Past Systems', 'Mobile Companion', 'Commercial System', '1', and 'Abox1'.
 - Server Selection:**
 - ☐ Local LEARN Server
 - ☒ Select LPR Server Links
 - Server List:** A list of server links with checkboxes: 'All LEARN Links', 'Local LEARN Server', and 'MVTRAC Commercial Data'.
 - Whitelist Sources:**
 - ☐ All Whitelist Sources
 - ☐ Select Whitelist Sources

Image 37

- You should then be able to view plate detections from the system you created. If so, then your Windows Fixed LPR system is connected and properly sending detections to the Vigilant LEARN cloud server. If not, you may need to wait a few minutes, research, and scan more plates for a larger data sample. Contact VigilantSupport@motorolasolutions.com for assistance.

CONNECT YOUR REAPERHD CAMERA TO VIGILANT LEARN – LINUX OS

LINUX OS OVERVIEW

The OCR application and Linux OS run on the VLP inside the VLP Comms Box. Cameras connect to the VLP as it operates headless with no monitoring required or GUI available. The VLP running Linux can be configured and diagnosed using an external windows PC with UbuntuHD Control tool (MiniCC) installed. MiniCC allows the user to enter Vigilant LEARN credentials, change network scheme (ips, subnet, gateway, dns), and view live video for aiming.

CREATE A FIXED SYSTEM

- The agency must exist in Vigilant LEARN
- You can create a new system under that agency as per the manager’s login or an ADMIN level login.
This guide will assume you are using a manager’s login for the agency.
- Select “PlateSearch” from the Vigilant LEARN home screen (Image 38)



Image 38

- Then select “Agency Management” (Image 39)

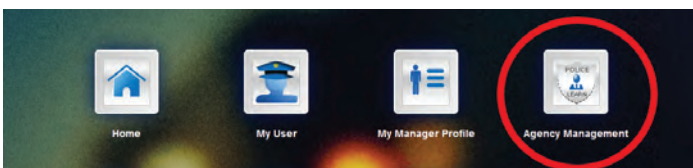


Image 39

- Select “Fixed Camera Systems” (Image 40)

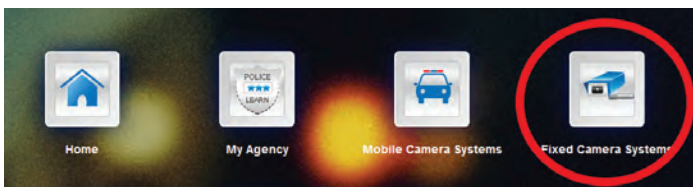


Image 40

- Select “New” to create a new system (Image 41)

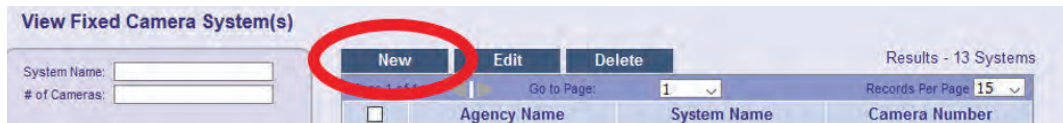


Image 41

- Name your camera site appropriately (Image 42)

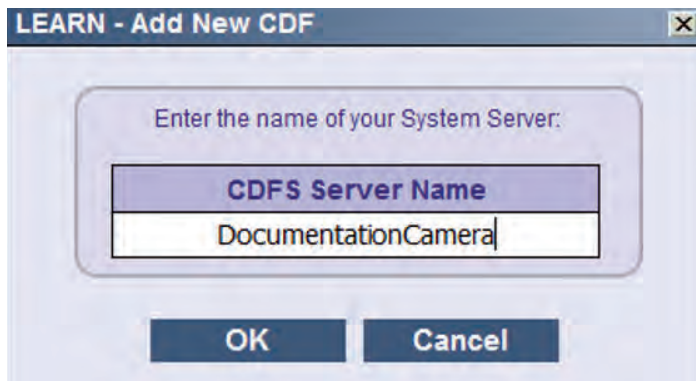


Image 42

- Set your OCR Region and click “Save” (Image 43)

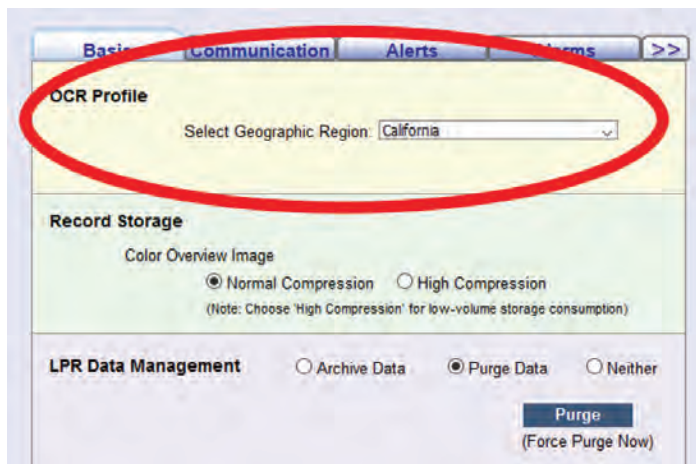
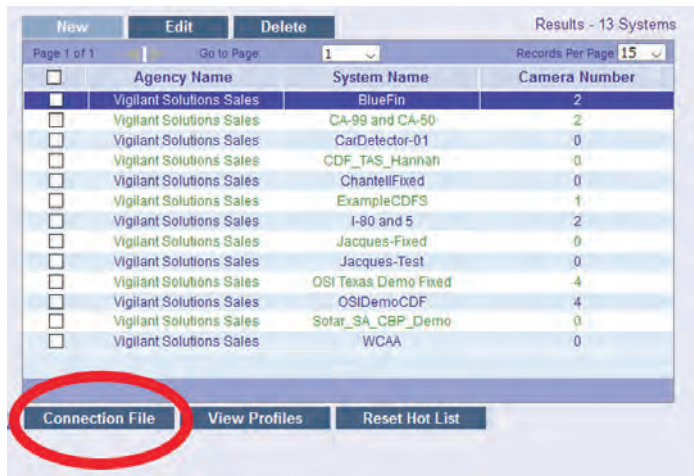


Image 43

- Document the name of the system you just created. For this example, it is “DocumentationCamera.” (Image 44)
- You will need to enter the system name into the VLP using UbuntuHD Control tool



Results - 13 Systems

Page 1 of 1 Go to Page: 1 Records Per Page: 15

<input type="checkbox"/>	Agency Name	System Name	Camera Number
<input type="checkbox"/>	Vigilant Solutions Sales	BlueFin	2
<input type="checkbox"/>	Vigilant Solutions Sales	CA-99 and CA-50	2
<input type="checkbox"/>	Vigilant Solutions Sales	CarDetector-01	0
<input type="checkbox"/>	Vigilant Solutions Sales	CDF_TAS_Hannah	0
<input type="checkbox"/>	Vigilant Solutions Sales	ChantellFixed	0
<input type="checkbox"/>	Vigilant Solutions Sales	ExampleCDFs	1
<input type="checkbox"/>	Vigilant Solutions Sales	I-90 and 5	2
<input type="checkbox"/>	Vigilant Solutions Sales	Jacques-Fixed	0
<input type="checkbox"/>	Vigilant Solutions Sales	Jacques-Test	0
<input type="checkbox"/>	Vigilant Solutions Sales	OSI Texas Demo Fixed	4
<input type="checkbox"/>	Vigilant Solutions Sales	OSIDemoCDF	4
<input type="checkbox"/>	Vigilant Solutions Sales	Solar_SA_CBP_Demo	0
<input type="checkbox"/>	Vigilant Solutions Sales	WCAA	0

Connection File View Profiles Reset Hot List

Image 44

CREATE A USER

- From Vigilant LEARN as an agency manager go to “User Management” (Image 45)



Image 45

- Select “Add New User” (or “Search/Modify Users” if one already exists) (Image 46)

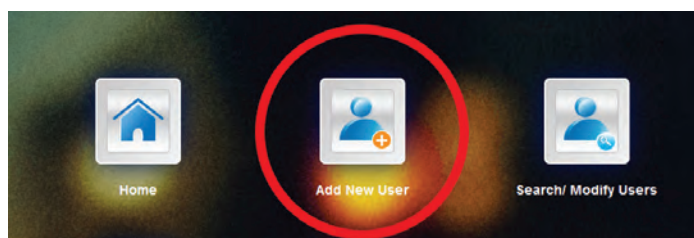


Image 46

- When creating a user, make sure to have “Vigilant CarDetector” enabled with “Vigilant CarDetector Admin” selected in the dropdown. To use this account to check data, it must have detection viewing enabled. Additionally, if the user is to generate alerts it must have alerting turned on. (Image 47)

User Permissions

PlateSearch | FaceSearch | BallisticSearch

PlateSearch Permission Group

CarDetector Admin
CarDetector Operator
Custom Profile
Default User
Detectives

LPR System Use

☒ CarDetector CarDetector Admin

Assign User Geo Zone:

☐ Assign Zone Zone is NOT assigned

Console Access:

☒ Allow Alert Management
☒ Reporting (Output Reports)
☐ Record Preservation
☐ Limit Data View
☐ Limit Days:
☐ Limit Date:
☐ Limit Hot Plate uploads allotted
☐ Multi-Dispatch TAS Access

Icon Management: [Configure](#)

Detections (LPR data scan access):

Available Data Sources

	User	Agency	Commercial	Shared
View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Edit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Allow all data access Permissions

View LPR data Shared by: All Agencies [Modify](#) [Remove](#)

Hits (Hot List - Detection matches):

Available Data Sources

	User	Agency	Shared
View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Get Alerts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Allow all H2 Permissions

View Hits from Hot Lists Shared by: All Agencies [Modify](#) [Remove](#)

Get Alerts from Hot Lists Shared by: All Agencies [Modify](#) [Remove](#)

Alert Management: [Configure](#)

Hot List Management:

Available Hot List Sources

	User	Agency	Shared
View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upload	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Edit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

☒ Allow all Hot List Permissions

View Hot Lists Shared by: All Agencies [Modify](#) [Remove](#)

Suppress Hits

User	Agency
<input type="checkbox"/>	<input type="checkbox"/>

Image 47

- Once complete, hit “Create”
- Document the name of the user you just created as you will need to enter it into the VLP using UbuntuHD Control later

CONFIGURE SYSTEM USING UBUNTUHD CONTROL (MINICC)

- Enter Vigilant LEARN Credentials – Click “LEARN” button (Image 48)

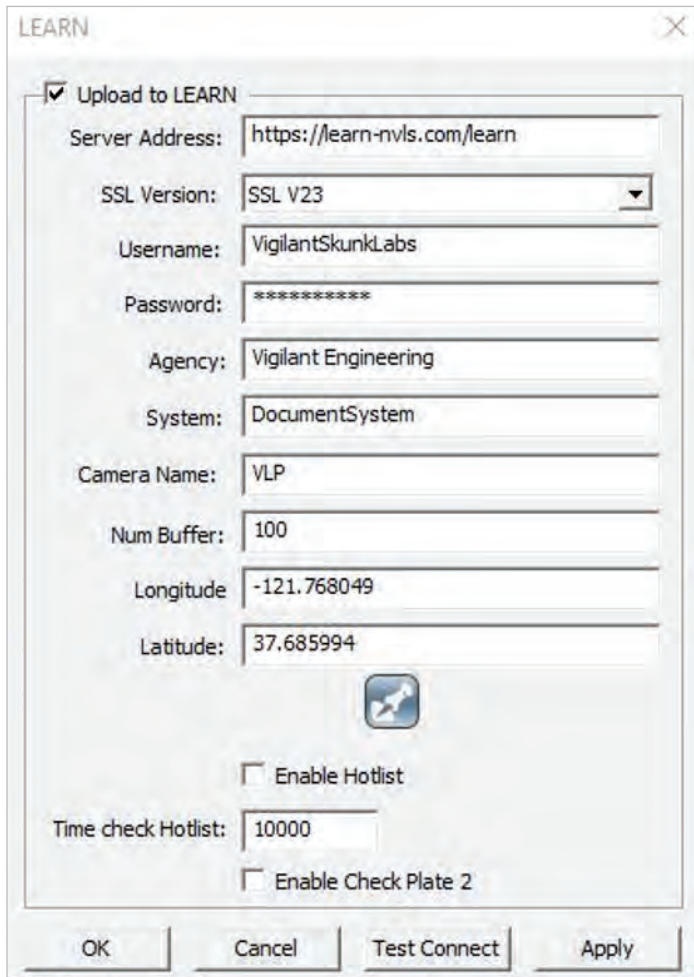
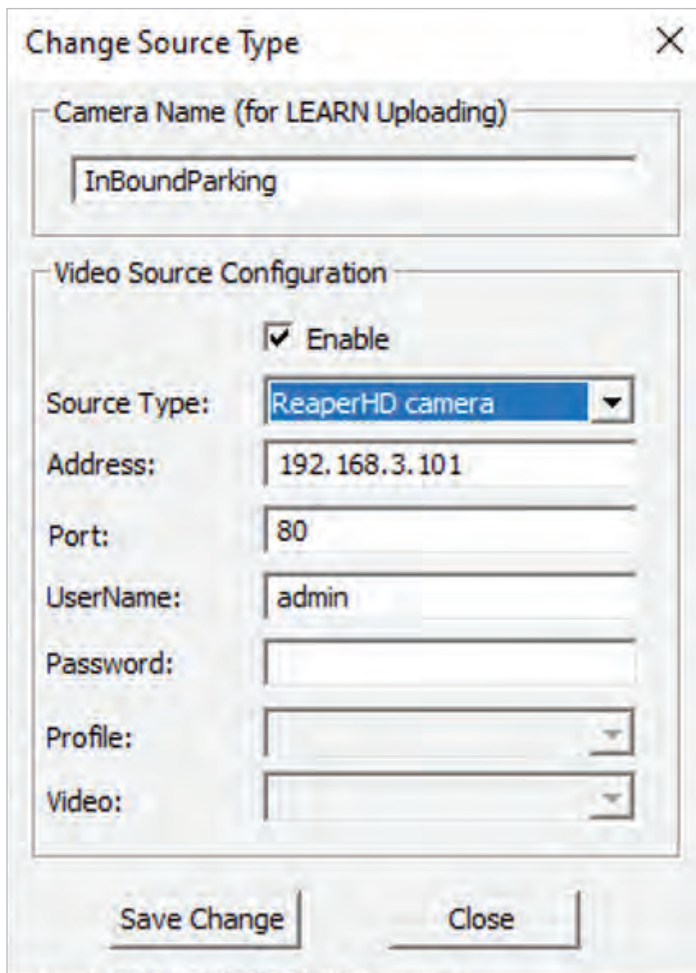


Image 48

- Enter the Username of the user you created in Vigilant LEARN
- Enter the Password for the user you created in Vigilant LEARN
- Enter your Agency name
- Enter the System name of the system you created in Vigilant LEARN
- Enter the Longitude and Latitude GPS coordinates by clicking the symbol
- Leave the other text boxes at the default values they have
- Click “Apply” then “Test Connect”
 - If you get a success message, move on
 - If you get “Operation failed: Invalid Username/Password” check the username and password
 - If you get “Operation failed: Unknown error” go back to “Change IP” button and check the network configuration for “enp3s0” (IP, Subnet, Gateway, and DNS)
- Close Vigilant LEARN window when complete

- Name each camera – Click “Change Source Type” (Image 49)
- Check the box next to “Enable”
- Enter the camera IP in the “Address” box (Note: By default cameras are 192.168.3.100-103)
- Enter a “Camera Name (for Vigilant LEARN Uploading)” that uniquely identifies this camera in the top textbox
- Use “Port” of 80
- Leave the “UserName” as “admin” and leave “Password” blank



Change Source Type [X]

Camera Name (for LEARN Uploading)

InBoundParking

Video Source Configuration

☒ Enable

Source Type: ReaperHD camera

Address: 192.168.3.101

Port: 80

UserName: admin

Password:

Profile:

Video:

Save Change Close

Image 49

- Set OCR Profile – Click “Set Profile” and select the correct state OCR profile (Image 50)

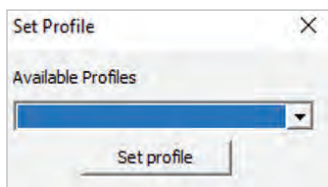


Image 50

- Set Time Zone – Click “Set the time zone” and select the correct GMT (Image 51)

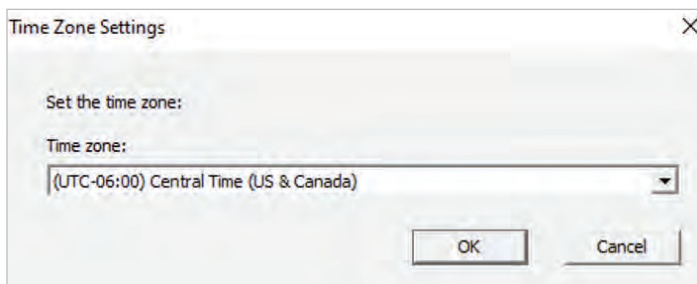


Image 51

- Set Network Configuration – Click “Change IP”
 - Select “enp3s0” and select “Static”
 - Change the IP, Subnet, Gateway, and DNS to work with your router and network settings
 - Check “DHC” then click “Write to Broad”
 - The system will save settings and do a soft reboot. Wait 60 seconds.
- Check your configuration settings – Click “Get Health Information”
 - Verify “IP Configuration” shows the correct settings for your router
 - Verify “Engine Profile” is the correct state profile you selected
 - Verify “Vigilant LEARN Account Information” shows the correct credentials
 - Verify “Current Time” is accurate
 - Verify “GPS Coordinates” is showing the correct values
 - Check “Scans Upload status,” “Total Scans Upload,” and “Total Plate in Vigilant LEARN queue” for the number of plates that you have scanned that should be sent to Vigilant LEARN

TEST SYSTEM – VERIFY CONNECTION TO VIGILANT LEARN

- Login to Vigilant LEARN using the credentials you just created
- Select “PlateSearch”
- Select “License Plate Query” (Image 52)

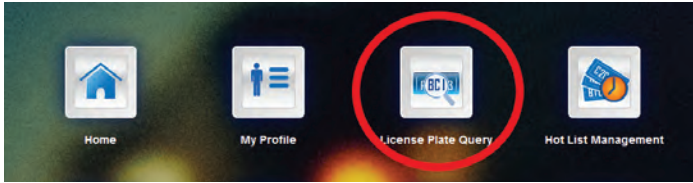


Image 52

- Select “More Options” to show the search filters (Image 53)

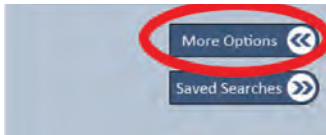


Image 53

- Filter by the system you just created. Returns generated will be reads from only this system. (Image 54)

Search Plate

Plate Number

☐ Date Range

From: To:

Location

☐ State: ☐ AK ☐ AL ☐ AR ☐ AZ

County: ☐ All

☒ Custom Map:

☒ Records To Show

Data Source Filters

Make:

Model:

Year:

☐ Only view 'Detections' with GPS data

☐ Show Daytime image in Nighttime image

Minimum Speed:

☐ Hot List Hits

☐ Whitelist Hits

☐ Digital Chalking Hits

☐ All Agencies

☐ Select Agencies

☐ All Users

☐ Select Users

☐ All Hot List Sources

☐ Select Hot List Sources

☐ All Alert Types

☐ Select Alert Types

☐ All Systems

☒ Select Systems

☒ All Systems

☒ Past Systems

☒ Mobile Companion

☒ Commercial System

☒ 1

☒ Abox1

☐ Local LEARN Server

☒ Select LPR Server Links

☒ All LEARN Links

☒ Local LEARN Server

☒ MVTRAC Commercial Data

☐ All Whitelist Sources

☐ Select Whitelist Sources

Image 54

6. REAPERHD CAPTURE DISTANCE

REAPERHD CAMERA SPECIFICATIONS

- At optimal focal length, all models have a horizontal field of view of up to 16 ft (4.9 m). The below distances may vary depending on plate mounting and horizontal/vertical angles > 00.

PART NUMBER	OPTIMAL FOCAL LENGTH	CAPTURE RANGE
VSR-42-925	75 ft / 22.9 m	55-80 ft / 16.8-24.4 m
VSR-42-916	34 ft / 10.4 m	20-55 ft / 6.1-16.8 m
VSR-42-912	24 ft / 7.3 m	13-48 ft / 4.0-14.6 m
VSR-42-908	16 ft / 4.9 m	8-36 ft / 2.4-11.0 m
VSR-42-906	12 ft / 3.7 m	6-24 ft / 1.8-7.3 m



Questions? Contact VigilantSupport@motorolasolutions.com
or call 925-398-2079.



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

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Next

Bid

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB # 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION A: COVER PAGE (P&C 600 FORM)

COUNTY OF SAN DIEGO
SECTION A-P&C 600 FORM
This is not an order

Issued: December 14, 2020

MAIL OR DELIVER TO:

COUNTY OF SAN DIEGO, RFB No. 10684
DEPARTMENT OF PURCHASING & CONTRACTING
5560 OVERLAND AVE., SUITE 270
SAN DIEGO, CA 92123

AWARD WILL BE MADE TO THE LOWEST RESPONSIVE,
RESPONSIBLE BIDDER BASED ON

- ☐ ALL OR NONE
☐ EACH LOT
☒ TOTAL PRICE
☐ OTHER (SEE PRICING SCHEDULE)

UNSPSC commodity code: 461716.0000

FOR INFORMATION, PLEASE CONTACT:

PUNNITA DINMUONG, ASSISTANT PROCUREMENT SPECIALIST
PUNNITA.DINMUONG@SDCOUNTY.CA.GOV

Bid OPENING DATE: DECEMBER 22, 2020

**BIDS MUST BE RECEIVED AT THE ABOVE ADDRESS
PRIOR TO 11:00 A.M. ON DATE OF BID OPENING.**

PLEASE STATE YOUR LOWEST PRICE
F.O.B. DESTINATION AND BRAND NAME
OR TRADE NAME IF APPLICABLE.

(Please use typewriter or black ink)

YOUR ENVELOPE MUST INCLUDE RFB No. 10684

DESCRIPTION

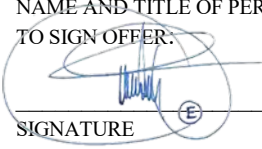
THE COUNTY OF SAN DIEGO (COUNTY), SHERIFF'S DEPARTMENT HAS A REQUIREMENT FOR LICENSE PLATE READERS IN ACCORDANCE WITH THE TERMS & CONDITIONS AND THE STATEMENT OF WORK REFLECTED HEREIN.

INITIAL TERM: DATE OF AWARD – JANUARY 31, 2022
1ST OPTION YEAR: FEBRUARY 1, 2022 – JANUARY 31 2023
2ND OPTION YEAR: FEBRUARY 1, 2023 – JANUARY 31, 2024

PRICING SUBMITTED IS TO REMAIN FIRM FIXED FOR THE TERM PERIOD IDENTIFIED ABOVE. ALL ITEMS WITHIN EACH TERM PERIOD MUST BE PRICED TO BE CONSIDERED RESPONSIVE. AWARD WILL BE MADE TO THE LOWEST RESPONSIVE, RESPONSIBLE OFFEROR BASED ON THE TOTAL PRICE. OFFEROR WHO SUBMITS THE LOW BID WILL BE DEEMED RESPONSIBLE BASED ON THE RESULTS OF THE PRE-AWARD SURVEY.

ARE YOU ABLE TO COMPLY WITH ALL ITEMS SPECIFIED WITHIN THE SCOPE OF WORK? YES__OR__NO

BIDDER ACKNOWLEDGES ADDENDUM NO. 1 [] 2 [] 3 [] 4 [] 5 []

SUBJECT TO ACCEPTANCE WITHIN 90 DAYS NAME AND ADDRESS OF BIDDER Neology Inc STREET, CITY, STATE, ZIP 13520 Evening Creek Dr N Suite 460, San Diego CA 92128 TELEPHONE: NUMBER (858) 391-0260 FAX TELEPHONE: (858) 391-0264 E-MAIL: sales@pipstechnology.com	PAYMENT TERMS NET 30 DAYS OR % DAY NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER: <div style="text-align: center;"> _____ SIGNATURE OFFEROR DATE</div> PRINTED NAME: Francisco Martinez de Velasco PRINTED TITLE: CEO
--	--

NOTIFICATION OF AWARD

ACCEPTANCE AS TO ITEM(S) NUMBERED:

(VC No.)

(THIS SECTION FOR COUNTY USE ONLY)

COUNTY OF SAN DIEGO

BY: _____ DATE: _____

JOHN M. PELLEGRINO, DIRECTOR

DEPT OF PURCHASING & CONTRACTING

TOTAL AMOUNT
P&C 600 Form

AWARD No.

NAME AND TITLE OF CONTRACTING OFFICER

County of San Diego
Department of Purchasing and Contracting
REPRESENTATIONS AND CERTIFICATIONS

The following representations and certifications are to be completed, signed and returned with the offer (the term "offer" includes a bid, proposal, quote, statement of qualifications, or any other submission to provide goods and/or services).

1. BUSINESS TYPE

☐ For-profit ☐ Non-profit ☐ Government

2. INTERLOCKING DIRECTORATE

In accordance with Board of Supervisors Policy A-79, if Offeror is a non-profit and will be subcontracting with a related for-profit entity where an interlocking directorate, management or ownership relationship exists, Offeror must list all such entity(ies) on an attached separate sheet, and authorization must be sought from Board of Supervisors. If Offeror is a non-profit and does not submit such a list, Offeror certifies it has not entered into a subcontract relationship with a related for-profit entity.

List Attached? Yes ☐

3. BUSINESS REPRESENTATION

Offeror represents as a part of this offer the following information regarding the ownership, operation, and control of its business:

3.1. Are you a local business with a physical address within the County of San Diego? ☐ Yes ☐ No

3.2. Are you certified by the State of California as a:

☐ Disabled Veteran Business Enterprise(DVBE)

Certification #: _____

☐ Small Business Enterprise (SBE)

Certification #: _____

3.3. Are you certified by the U.S. Dept Of Veterans' Affairs as:

☐ Veteran Owned Small Business (VOSB)

Certification # _____

☐ Service Disabled Veteran Owned Small Business (SDVOSB)

Certification # _____

3.4. Estimated percentage of work in this offer to be performed or fulfilled locally (within the geographic boundaries of the County of San Diego): _____%

4. DEBARMENT, SUSPENSION, AND RELATED MATTERS

4.1. Offeror certifies to the best of its knowledge that neither it nor any of its officers:

4.1.1. Are presently debarred, suspended, declared ineligible, or voluntarily excluded from covered transactions by any state, local, or federal department or agency.

4.1.2. Have within a three (3) year period preceding this agreement been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

4.2. Except as allowed for in Section 4.2.5, Offeror hereby certifies to the best of its knowledge that neither it nor any of its officers:

4.2.1 Are presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with the commission of any of the offenses enumerated in paragraph 4.1.2 of this certification;

4.2.2 Have within a three (3) year period preceding this agreement had one or more public transactions (federal, state or local) terminated for cause or default;

4.2.3 Are presently the target or subject of any investigation, accusation or charges by any federal, state or local agency or law enforcement, licensing, certification, ethics, or compliance body;

4.2.4 Are proposed for debarment by any state, local, or federal department or agency.

4.2.5 If Offeror is unable to certify Sections 4.2.1, 4.2.2, 4.2.3, or 4.2.4, it certifies that it has disclosed and attached to this Representations and Certifications the reason(s) it cannot do so. The disclosure must include the Section(s), specific relevant facts including dates, contracts, individuals involved, status of actions, and any other relevant information that prevent it from making the requested certification(s). The County reserves the right to disqualify an Offeror based upon information disclosed.

Disclosure Attached? Yes ☐

5. RELATED WORK

Offeror certifies to the best of its knowledge that, other than as disclosed in an attached separate sheet, it and its proposed subcontractors, agents, and consultants have not previously contracted with the County to perform work on or related to this project (e.g. preparing related studies or recommendations, components of the statement of work, or plans and specifications).

Disclosure Attached? Yes ☐

6. CURRENT COST OR PRICING

Offeror certifies to the best of its knowledge that cost and/or pricing data submitted with this offer, or specifically identified by reference if actual submission of the data is impracticable, are accurate, complete, and current as of the date signed below.

7. INDEPENDENT PRICING

Offeror certifies that in relation to this offer:

7.1. The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with other offerors, with any competitors, or with any County employee(s) or consultant(s) involved in this or related procurements;

7.2. Unless otherwise required by law, the prices that have been quoted in this offer have not been knowingly disclosed by the Offeror and will not knowingly be disclosed by the Offeror prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other Offeror or to any competitor or with any County employee(s) or consultant(s) involved in this or related procurements; and

7.3. No attempt has been made or will be made by the Offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.

8. ADDITIONAL DISCLOSURES

Offeror shall report in writing to the County Department of Purchasing and Contracting within five business days of discovering or having any reason to suspect any change in status as certified in the preceding paragraphs. Upon County's request, Offeror shall provide additional information supporting Offeror's Representations and Certifications. Offeror's obligations under this Section 8 shall continue until Offeror is no longer under consideration for award of a contract, or until termination or expiration of any resulting contract(s).

CERTIFICATION

The information furnished in Paragraphs 1 through 8 and in the accompanying offer is certified to be factual and correct as of the date submitted and this certification is made under penalty of perjury under the laws of the State of California.

Name: _____ Signature: _____

Title: _____ Date: _____

Company/Organization: Neology Inc.

SUBMIT THIS FORM AS DIRECTED IN THE REQUEST FOR SOLICITATION DOCUMENTS OR WITH THE OFFER

COUNTY OF SAN DIEGO
NONDISCLOSURE INDEMNIFICATION AGREEMENT

IF OFFEROR SUBMITS EXHIBIT CONFIDENTIAL/PROPRIETARY, THE FOLLOWING NONDISCLOSURE INDEMNIFICATION AGREEMENT MUST BE COMPLETED, SIGNED AND RETURNED WITH THE OFFER

This indemnification agreement ("Agreement") is made and entered into by and between the County of San Diego ("County") and Offeror Company/Organization Name: NEOLOGY INC
("Offeror") with reference to the following facts: _____

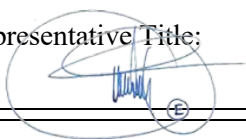
WHEREAS the County may receive a request for disclosure of Offeror's submission under the California Public Records Act, Government Code Section 6250, et seq.; and

WHEREAS, Offeror has included in its submission an exhibit entitled "*EXHIBIT – CONFIDENTIAL/PROPRIETARY*" containing records that Offeror has determined to constitute trade secrets or other proprietary information exempt from disclosure under the California Public Records Act; and

WHEREAS the County requires defense and indemnity from Offeror for the County's ongoing non-disclosure of Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*;

NOW, THEREFORE, for good and valuable consideration and the mutual promises contained herein, the parties agree to the following:

1. The above recitals are incorporated herein by this reference.
2. Except as otherwise provided herein, the County will not release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* based on Offeror's representation that the records contained therein are proprietary and exempt from disclosure under the California Public Records Act and/or are trade secrets as that term is defined in Government Code Section 6250, et seq. Notwithstanding the foregoing, however, the County may release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* in the event of any of the following:
 - a. Offeror fails to comply with the terms and conditions of this Agreement; or
 - b. Offeror provides the County with written notice that some or all of the records may be released; or
 - c. A court of competent jurisdiction orders the County to release the records and the County has exhausted or waived its appeal rights.
3. To the fullest extent allowed by law, the County shall not be liable for, and Offeror shall defend and indemnify County and its Board of Supervisors, officers, directors, employees and agents of County (collectively "County Parties"), against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees (whether incurred by County attorneys or attorneys employed by County) and court costs (hereinafter collectively referred to as "Claims"), related to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.
4. Offeror waives any and all claims in law or equity and hereby releases the County Parties from any and all claims, deductibles, self-insured retentions, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs, which arise out of or are in any way connected to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.

TO BE COMPLETED BY AN AUTHORIZED REPRESENTATIVE OF THE OFFEROR	
Offeror Company/Organization Name:	<u>NEOLOGY INC</u>
Authorized Representative Name:	<u>Francisco Martinez de Velasco</u>
Authorized Representative Title:	<u>CEO</u>
Signature: 	Date: <u>12/21/2020</u>

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

INITIAL TERM: Date of Award through January 31, 2022				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	MS481-3311-005 Mobile 4-CAM System - 810 - 2T, 2P - SX4E - VP - 5m	4	\$ 9,600.00	\$38,400.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	FC5812050002 P500 2K sensor 810nm 4G Modem	10	\$5,400.00	\$54,000.00
LPR Camera Mounting Brackets for Light Bar	75-0302-1777-4 - Whelen	4	\$ 800.00	\$ 3,200.00
LPR Mounting for Portable system	HW52X0020 - Accessories	10	\$200.00	\$ 2,000.00
LPR Processor (If needed, otherwise state N/A)	N/A	14	\$0.00	\$ 0.00
Modem	Modems included in Portable	14 (4)	\$150.00	\$600.00
LPR Software	SB140-0002-001 - BOSS4 On Prem	14 (1)	\$ 3,395.00	\$3,395.00
LPR Speed Trailer complete package. List all items included in price quoted:	75-0304-3100-3 Chassis, 2CAMsystem,mounts,,mode m	1	\$ 16,000.00	\$16,000.00
LPR Speed Trailer crating & shipping		1	\$ 0.00	\$0.00
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	75-0302-5308-4 System Commissioning	14	\$ 0.00	\$0.00
Installation	WF5011000100 - Installation	14	\$ 400.00	\$5,600.00
Covert Installation in vehicle	75-0302-3694-9 - Installation	1	\$ 1,200.00	\$ 1,200.00
Installation "Kit", Includes all hardware, wiring and software for "do it yourself" standard installations (on poles & trailers)	HW52X0011 - Accessories (Camera not included)	5	\$ 380.00	\$1,900.00
Training	75-0302-3697-2 -Training	8	\$ 0.00	\$ 0.00
Shipping Mobile LPR 1 camera system		4	\$ 95.00	\$ 380.00
Shipping Portable LPR 1 camera system		10	\$95.00	\$ 950.00
TOTAL				\$127,625.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

OPTION YEAR 1 – February 1, 2022 through January 31, 2023				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	MS481-3311-005 Mobile 4-CAM System - 810 - 2T, 2P - SX4E - VP - 5m	4	\$9,600.00	\$38,400.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle: camera with equivalent specifications will be accepted upon demonstration and verification	FC5812050002 P500 2K sensor 810nm 4G Modem	10	\$ 5,400.00	\$54,000.00
LPR Camera Mounting Brackets for Light Bar	75-0302-1777-4 - Whelen	4	\$800.00	\$ 3,200.00
LPR Mounting for Portable system	HW52X0020 - Accessories	10	\$200.00	\$2,000.00
LPR Processor	N/A	14	\$	\$
Modem	Modems included in Portables	14 (4)	\$ 150.00	\$ 600.00
LPR Software	SB140-0002-001 - BOSS4 On Prem	14 (1)	\$3,395.00	\$3,395.00
LPR Speed Trailer complete package. List all items included in price quoted:	75-0304-3100-3 Chassis, 2CAM system, mounts, modem .	1	\$16,000.00	\$16,000.00
LPR Speed Trailer crating & shipping		1	\$ 0.00	\$0.00
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	75-0302-5308-4 System Commissioning	14	\$360.00	\$5,040.00
Installation	WF5011000100 - Installation	14	\$400.00	\$ 5,600.00
Covert Installation	75-0302-3694-9 - Installation	1	\$ 1,200.00	\$ 1,200.00
Installation "Kit", Includes all hardware, wiring and software for do it yourself standard installations (on poles & trailers)	HW52X0011 - Accessories (Camera not included)	5	\$380.00	\$1,900.00
Training per hour	75-0302-3697-2 -Training	8	\$0.00	\$0.00
Shipping Mobile LPR 1 camera system		4	\$ 95.00	\$380.00
Shipping Portable LPR 1 camera system		10	\$95.00	\$950.00
TOTAL				\$127,625.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

OPTION YEAR 2 – February 1, 2023 through January 31, 2024				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	MS481-3311-005 Mobile 4-CAM System - 810 - 2T, 2P - SX4E - VP - 5m	4	\$9,600.00	\$ 38,400.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle: camera with equivalent specifications will be accepted upon demonstration and verification	FC5812050002 P500 2K sensor 810nm 4G Modem	10	\$ 5,400.00	\$ 54,000.00
LPR Camera Mounting Brackets for Light Bar	75-0302-1777-4 - Whelen	4	\$ 800.00	\$3,200.00
LPR Mounting for Portable system	HW52X0020 - Accessories	10	\$200.00	\$2,000.00
LPR Processor	N/A	14	\$ 0.00	\$0.00
Modem	Modem included in Portable	14 (4)	\$ 150.00	\$ 600.00
LPR Software	SB140-0002-001 - BOSS4 On Prem	14 (1)	\$3,395.00	\$3,395.00
LPR Speed Trailer complete package. List all items included in price quoted:	75-0304-3100-3 Chassis, 2CAM system, mounts, modem	1	\$ 16,000.00	\$ 16,000.00
LPR Speed Trailer crating & shipping		1	\$0.00	\$0.00
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	75-0302-5308-4 System Commissioning	14	\$ 0.00	\$ 0.00
Installation	WF5011000100 - Installation	14	\$400.00	\$5,600.00
Covert Installation	75-0302-3694-9 - Installation	1	\$1,200.00	\$1,200.00
Installation "Kit", Includes all hardware, wiring and software for do it yourself standard installations (on poles & trailers)	HW52X0011 - Accessories (Camera not included)	5	\$ 380.00	\$ 1,900.00
Training per hour		8	\$0.00	\$ 0.00
Shipping Mobile LPR 1 camera system		4	\$95.00	\$ 380.00
Shipping Portable LPR 1 camera system		10	\$ 95.00	\$ 950.00
TOTAL				\$ 127,625.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

1. PRICING

- 1.1. Enter unit prices and extended prices for each line item, Base Term Period, 1st Option Period, and 2nd Option Period page for each line item.
- 1.2. The aggregate total for each term period combined (Grand Total) will be used as the basis of award
- 1.3. The Pricing Schedule table should not be tampered with or altered in any way.
- 1.4. Bids must meet specifications provided.
- 1.5. ALL items MUST be priced to be considered responsive.**

2. GENERAL REQUIREMENTS

- 2.1 A specifications sheet with pictures and operations manual for the product shall be submitted with the bid.

COMPANY: Neology Inc

REPRESENTATIVE NAME: Louis Wershaw

REPRESENTATIVE EMAIL: lwershaw@neology.net

REPRESENTATIVE PHONE: 562-843-1066



Table of Contents

Cover Letter

Section 1: Cover Page (Form P&C 600)

Section 2: Proposed Products

Section 3: Pricing



Cover Letter

22, December 2020

Punnita Dinnuong
County of San Diego | San Diego Sheriff's Department
5560 Overland Avenue | Suite 270
San Diego | CA. 92123-1204

RFB #10493 – Request for Bids; Automated License Plate Readers

Dear Punnita Dinnuong,

ComSonics very much appreciates the opportunity to work with County of San Diego's Sheriff's Department to offer a solution for Automated License Plate Recognition (LPR), vehicles of interest detection and other related services to improve the overall efficiency for San Diego's Sheriff's Department. We are excited by the fact that the stated requirements are very well matched to ComSonics skills, deep pedigree in applying AI, Deep Machine Learning and other advanced techniques to optimize Automated License Plate Readers for smart States and Cities.

We are one of the oldest ESOP (100% employee-owned) companies in the US having converted in 1985 from a sole proprietorship. Our company today includes an Electronics Repair Division, Electronics manufacturing and Cable Harness Assembly Division, Broadband Test Products Division and Public Safety products and services, Division. Although various industries are served, the binding thread is electronics technology and a steadfast commitment to quality, service and adding value for our customers.

Since forming the Public Safety Division in 2012, ComSonics has pushed the limits of available technology to improve the efficiency and safety of transportation operations nationally. Our goal is to automate detection, recognition and alerting officers in a more reliable, effective and efficient manner than ever before.

The technologies that ComSonics provides to businesses as well as government authorities combine the sophisticated suite of products based on Genetec's platform with a professional and consultative approach to solving individual challenges within our partners and client organizations.

ComSonics is comprised of 300 employees, skilled as data technicians, software developers, database engineers and machine learning architects. Some are among the most experienced technologists in the field of artificial intelligence and deep learning as utilized by the Genetec LPR solution.



We have worked with organizations such as:

Port of Oakland, CA.	The Car Park McLaurin Parking Boise, ID
UNC-Chapel Hill University	Scheidt & Bachmann Midland TX Airport
City of Newark, DE	Duke University
Penn State University	United Parking Systems / South Florida
Borough of West Chester, PA	Massachusetts Institute of Technology (MIT)
City of Rehoboth Beach, DE	T2 Systems
University of Virginia	City of Richmond, VA

ComSonics' focus on the LPR, and to a broad extent our project management and implementation experience, has enabled us to develop one of the most experienced technical teams in the country. This opportunity has come at a very good time with regard to ComSonics' product lifecycle and technology enhancements.

ComSonics is proposing the following option including:

- The Tried and trusted Genetec AutoVu technology and Security Center which is already in use successfully in North America and around the world

As well as

- The latest ground-breaking technology that takes their leading deep learning-based LPR solution and condenses it into a unified platform making them cost-effective and highly scalable

This ComSonics response includes a very generous offer comprised of Genetec's most comprehensive mobile Automated License Plate Readers.

At ComSonics, we feel strongly that we are the best suited prospective partner for this project.

We very much look forward to the opportunity to work with the State of California to deploy the technology and showcase how this sophisticated technology will benefit both the State of California and end-users.

We believe that ComSonics' experience in the following areas is key to being selected:

- Providing and working with the robust and reliable mobile technology (Genetec AutoVu) around the world
- Solid and demonstrable track record in true deep machine learning and image processing Automated License Plate Reader and offering the highest capture rate in the industry
- Multiple successful deployments with Genetec across the country
- Proven history of ongoing R&D that translates to real-world value in this space



We believe that ComSonics' experience in the following areas is key to being selected:

- Providing and working with a robust and reliable mobile fixed technology (Genetec AutoVU)
- Solid and demonstrable track record in true deep machine learning, image processing Automated License Plate Reader and offering the highest capture rate in the industry
- Multiple successful deployments across the country
- Proven history of ongoing research and development that translates into real world value in this space

We trust that you find this targeted and highly efficient offer acceptable. The ComSonics team is making a very focused effort to continue our superior product and service offering to San Diego County Sheriff's Department, with offices across the country we have an office in Sacramento and Los Angeles to meet your immediate needs. Our services are provided nation wide and on-site by our fleet of mobile laboratories. We are equipped with the tools and technology to provide the best service in the industry from installation through routine maintenance. There are currently three mobile labs covering the United States providing service to our customers when needed. One of the labs is assigned to the western part of the United States. As one of only six Genetec Premier Partners, we receive superior training, support and updates from the manufacturer regularly to deliver service to the end user.

We are responsive and customer focused, always with the customers interests first.

Should you have any questions, please do you not hesitate to call.

Best Regards,

A handwritten signature in blue ink, appearing to read "Charles Gutierrez", written over the printed name.

Charles Gutierrez
Public Safety Manager

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB # 10684)

**SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION A: COVER PAGE (P&C 600 FORM)**

COUNTY OF SAN DIEGO
SECTION A-P&C 600 FORM
This is not an order

Issued: December 14, 2020

MAIL OR DELIVER TO:

COUNTY OF SAN DIEGO, RFB No. 10684
DEPARTMENT OF PURCHASING & CONTRACTING
5560 OVERLAND AVE., SUITE 270
SAN DIEGO, CA 92123

AWARD WILL BE MADE TO THE LOWEST RESPONSIVE,
RESPONSIBLE BIDDER BASED ON

- [] ALL OR NONE
[] EACH LOT
[X] TOTAL PRICE
[] OTHER (SEE PRICING SCHEDULE)

UNSPSC commodity code: 461716.0000

FOR INFORMATION, PLEASE CONTACT:

PUNNITA DINMUONG, ASSISTANT PROCUREMENT SPECIALIST
PUNNITA.DINMUONG@SDCOUNTY.CA.GOV

BID OPENING DATE: DECEMBER 22, 2020
BIDS MUST BE RECEIVED AT THE ABOVE ADDRESS
PRIOR TO 11:00 A.M. ON DATE OF BID OPENING.

PLEASE STATE YOUR LOWEST PRICE
F.O.B. DESTINATION AND BRAND NAME
OR TRADE NAME IF APPLICABLE.
(Please use typewriter or black ink)
YOUR ENVELOPE MUST INCLUDE RFB No. 10684

DESCRIPTION

THE COUNTY OF SAN DIEGO (COUNTY), SHERIFF'S DEPARTMENT HAS A REQUIREMENT FOR LICENSE PLATE READERS IN ACCORDANCE WITH THE TERMS & CONDITIONS AND THE STATEMENT OF WORK REFLECTED HEREIN.

INITIAL TERM: DATE OF AWARD – JANUARY 31, 2022
1ST OPTION YEAR: FEBRUARY 1, 2022 – JANUARY 31 2023
2ND OPTION YEAR: FEBRUARY 1, 2023 – JANUARY 31, 2024

PRICING SUBMITTED IS TO REMAIN FIRM FIXED FOR THE TERM PERIOD IDENTIFIED ABOVE. ALL ITEMS WITHIN EACH TERM PERIOD MUST BE PRICED TO BE CONSIDERED RESPONSIVE. AWARD WILL BE MADE TO THE LOWEST RESPONSIVE, RESPONSIBLE OFFEROR BASED ON THE TOTAL PRICE. OFFEROR WHO SUBMITS THE LOW BID WILL BE DEEMED RESPONSIBLE BASED ON THE RESULTS OF THE PRE-AWARD SURVEY.

ARE YOU ABLE TO COMPLY WITH ALL ITEMS SPECIFIED WITHIN THE SCOPE OF WORK? YES OR NO

BIDDER ACKNOWLEDGES ADDENDUM NO. 1 [] 2 [] 3 [] 4 [] 5 []

SUBJECT TO ACCEPTANCE WITHIN 90 DAYS

NAME AND ADDRESS OF BIDDER
ComSonics, Inc.
Sacramento, CA. 95827

TELEPHONE: NUMBER (213) 999-9798
FAX TELEPHONE: ()

E-MAIL: cgutierrez@comsonics.com

PAYMENT TERMS NET 30 DAYS OR % DAY

NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER

SIGNATURE

OFFEROR DATE

PRINTED NAME: Charles Gutierrez

PRINTED TITLE: Public Safety Manager

NOTIFICATION OF AWARD

ACCEPTANCE AS TO ITEM(S) NUMBERED:

(VC No.)

(THIS SECTION FOR COUNTY USE ONLY)

COUNTY OF SAN DIEGO

BY: _____ DATE: _____

JOHN M. PELLEGRINO, DIRECTOR
DEPT OF PURCHASING & CONTRACTING

TOTAL AMOUNT
P&C 600 Form

AWARD NO.

NAME AND TITLE OF CONTRACTING OFFICER

County of San Diego
Department of Purchasing and Contracting
REPRESENTATIONS AND CERTIFICATIONS

The following representations and certifications are to be completed, signed and returned with the offer (the term "offer" includes a bid, proposal, quote, statement of qualifications, or any other submission to provide goods and/or services).

1. BUSINESS TYPE

☒ For-profit ☐ Non-profit ☐ Government

2. INTERLOCKING DIRECTORATE

In accordance with Board of Supervisors Policy A-79, if Offeror is a non-profit and will be subcontracting with a related for-profit entity where an interlocking directorate, management or ownership relationship exists, Offeror must list all such entity(ies) on an attached separate sheet, and authorization must be sought from Board of Supervisors. If Offeror is a non-profit and does not submit such a list, Offeror certifies it has not entered into a subcontract relationship with a related for-profit entity.

List Attached? Yes ☐

3. BUSINESS REPRESENTATION

Offeror represents as a part of this offer the following information regarding the ownership, operation, and control of its business:

3.1. Are you a local business with a physical address within the County of San Diego? ☐ Yes ☒ No

3.2. Are you certified by the State of California as a:
☐ Disabled Veteran Business Enterprise(DVBE)

Certification #: _____

☐ Small Business Enterprise (SBE)

Certification #: _____

3.3. Are you certified by the U.S. Dept Of Veterans' Affairs as:

☐ Veteran Owned Small Business (VOSB)

Certification #: _____

☐ Service Disabled Veteran Owned Small Business (SDVOSB)

Certification #: _____

3.4. Estimated percentage of work in this offer to be performed or fulfilled locally (within the geographic boundaries of the County of San Diego): 75 %

4. DEBARMENT, SUSPENSION, AND RELATED MATTERS

4.1. Offeror certifies to the best of its knowledge that neither it nor any of its officers:

4.1.1. Are presently debarred, suspended, declared ineligible, or voluntarily excluded from covered transactions by any state, local, or federal department or agency.

4.1.2. Have within a three (3) year period preceding this agreement been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

4.2. Except as allowed for in Section 4.2.5, Offeror hereby certifies to the best of its knowledge that neither it nor any of its officers:

4.2.1. Are presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with the commission of any of the offenses enumerated in paragraph 4.1.2 of this certification;

4.2.2. Have within a three (3) year period preceding this agreement had one or more public transactions (federal, state or local) terminated for cause or default;

4.2.3. Are presently the target or subject of any investigation, accusation or charges by any federal, state or local agency or law enforcement, licensing, certification, ethics, or compliance body;

4.2.4. Are proposed for debarment by any state, local, or federal department or agency.

4.2.5. If Offeror is unable to certify Sections 4.2.1, 4.2.2, 4.2.3, or 4.2.4, it certifies that it has disclosed and attached to this Representations and Certifications the reason(s) it cannot do so. The disclosure must include the Section(s), specific relevant facts including dates, contracts, individuals involved, status of actions, and any other relevant information that prevent it from making the requested certification(s). The County reserves the right to disqualify an Offeror based upon information disclosed.

Disclosure Attached? Yes ☐

5. RELATED WORK

Offeror certifies to the best of its knowledge that, other than as disclosed in an attached separate sheet, it and its proposed subcontractors, agents, and consultants have not previously contracted with the County to perform work on or related to this project (e.g. preparing related studies or recommendations, components of the statement of work, or plans and specifications).

Disclosure Attached? Yes ☐

6. CURRENT COST OR PRICING

Offeror certifies to the best of its knowledge that cost and/or pricing data submitted with this offer, or specifically identified by reference if actual submission of the data is impracticable, are accurate, complete, and current as of the date signed below.

7. INDEPENDENT PRICING

Offeror certifies that in relation to this offer:

7.1. The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with other offerors, with any competitors, or with any County employee(s) or consultant(s) involved in this or related procurements;

7.2. Unless otherwise required by law, the prices that have been quoted in this offer have not been knowingly disclosed by the Offeror and will not knowingly be disclosed by the Offeror prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other Offeror or to any competitor or with any County employee(s) or consultant(s) involved in this or related procurements; and

7.3. No attempt has been made or will be made by the Offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.

8. ADDITIONAL DISCLOSURES

Offeror shall report in writing to the County Department of Purchasing and Contracting within five business days of discovering or having any reason to suspect any change in status as certified in the preceding paragraphs. Upon County's request, Offeror shall provide additional information supporting Offeror's Representations and Certifications. Offeror's obligations under this Section 8 shall continue until Offeror is no longer under consideration for award of a contract, or until termination or expiration of any resulting contract(s).

CERTIFICATION

The information furnished in Paragraphs 1 through 8 and in the accompanying offer is certified to be factual and correct as of the date submitted and this certification is made under penalty of perjury under the laws of the State of California.

Name: Charles Gutierrez

Signature: _____

Title: Public Safety Manager

Date: 12/22/20

Company/Organization: ComSonics, Inc.

SUBMIT THIS FORM AS DIRECTED IN THE REQUEST FOR SOLICITATION DOCUMENTS OR WITH THE OFFER

COUNTY OF SAN DIEGO
NONDISCLOSURE INDEMNIFICATION AGREEMENT

IF OFFEROR SUBMITS EXHIBIT CONFIDENTIAL/PROPRIETARY, THE FOLLOWING NONDISCLOSURE INDEMNIFICATION AGREEMENT MUST BE COMPLETED, SIGNED AND RETURNED WITH THE OFFER

This indemnification agreement ("Agreement") is made and entered into by and between the County of San Diego ("County") and Offeror Company/Organization Name: ComSoincs, Inc.

("Offeror") with reference to the following facts: Appendix-Gentec

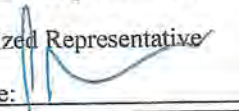
WHEREAS the County may receive a request for disclosure of Offeror's submission under the California Public Records Act, Government Code Section 6250, et seq.; and

WHEREAS, Offeror has included in its submission an exhibit entitled "*EXHIBIT - CONFIDENTIAL/PROPRIETARY*" containing records that Offeror has determined to constitute trade secrets or other proprietary information exempt from disclosure under the California Public Records Act; and

WHEREAS the County requires defense and indemnity from Offeror for the County's ongoing non-disclosure of Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*;

NOW, THEREFORE, for good and valuable consideration and the mutual promises contained herein, the parties agree to the following:

1. The above recitals are incorporated herein by this reference.
2. Except as otherwise provided herein, the County will not release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* based on Offeror's representation that the records contained therein are proprietary and exempt from disclosure under the California Public Records Act and/or are trade secrets as that term is defined in Government Code Section 6250, et seq. Notwithstanding the foregoing, however, the County may release Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY* in the event of any of the following:
 - a. Offeror fails to comply with the terms and conditions of this Agreement; or
 - b. Offeror provides the County with written notice that some or all of the records may be released; or
 - c. A court of competent jurisdiction orders the County to release the records and the County has exhausted or waived its appeal rights.
3. To the fullest extent allowed by law, the County shall not be liable for, and Offeror shall defend and indemnify County and its Board of Supervisors, officers, directors, employees and agents of County (collectively "County Parties"), against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees (whether incurred by County attorneys or attorneys employed by County) and court costs (hereinafter collectively referred to as "Claims"), related to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.
4. Offeror waives any and all claims in law or equity and hereby releases the County Parties from any and all claims, deductibles, self-insured retentions, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs, which arise out of or are in any way connected to Offeror's *EXHIBIT-CONFIDENTIAL/PROPRIETARY*.

TO BE COMPLETED BY AN AUTHORIZED REPRESENTATIVE OF THE OFFEROR	
Offeror Company/Organization	COMSOINCS, INC.
Name: Authorized Representative	CHARLES GUTIERREZ
Name: Authorized Representative	
Title: Signature: 	Date: 12/22/20

SECTION 1.1: Strategic Vision of San Diego Sheriff's Department

ComSonics has reviewed your RFB request and believe we have the solution that meets and exceeds the County's requirements while having the flexibility to grow with changing needs.

Our flexible offering allows you to share automatic license plate recognition (ALPR) data with other agencies in your region. This allows you to expand the scope of investigations and extend your view to include the reach of participating organizations.

Below is our proposed solution for the County of San Diego Sheriff's Department

SECTION 2: Proposed Products

Technical Requirements

Core Items: Overview of the LPR system & Functionality

ComSonics will work with Genetec to provide a comprehensive Automated License Plate Reader solution that meets and exceeds the County's expectations.

The AutoVu SharpZ3 LAW system is the latest IP-based license plate recognition (LPR) camera by Genetec. It allows law enforcement agencies to quickly identify vehicles of interest with the highest degree of accuracy available. Advanced license plate recognition technology has been touted as a true force multiplier, and for good reasons. Whether an agency is on the lookout for wanted felons, uninsured or prohibited drivers, or any vehicles of interest, the AutoVu SharpZ3 LAW can scan thousands of vehicles per shift, and alert officers when a suspect's vehicle is within the vicinity.

Discreet Form Factor – The AutoVu SharpZ3 LAW is the smallest high-resolution LPR camera on the market with integrated illumination. The AutoVu SharpX's robust IP67 aluminium body stands at 1.65 inches (42 mm) tall, limiting light bar occlusion and making it less obvious to vandals. Its clever design also offers universal mounting for the grill, light bar, trailer, pole, trunk or just about anywhere.

Unsurpassed Reading Accuracy – The AutoVu SharpZ3 LAW uses a progressive scan sensor with 1024 × 946 (XGA) resolution to capture the plate images for analysis. This sensor provides two to three times higher image resolution than most solutions found on the market today, ensuring better readability in bad weather, with dirty or obstructed plates, with difficult angles and across three lanes.

Superior Night and Day Performance – The AutoVu SharpZ3 LAW is designed with a state-of-the-art colour context camera to provide the best images in a variety of environmental conditions. From morning to late

ALPR Data Sharing for Law Enforcement

Overview

Criminals aren't contained by city or county limits. After a crime is committed, criminals move away from that area to escape the heat. What impact does that have on you? Law enforcement agencies need to think beyond their jurisdictions and collaborate better to face that reality.

Did you know that you can share automatic license plate recognition (ALPR) data with other agencies in your region? This allows you to expand the scope of investigations and extend your view to include the reach of all participating organizations. Sharing data lets you speed up investigations, cut through those boundaries to track wanted vehicles wherever they go, and ultimately close cases faster.

Frequently Asked Questions

Q Does Genetec offer an ALPR solution for law enforcement agencies?

A Yes, Genetec offers a variety of solutions to help empower law enforcement officers. Our goal is to help communities work with law enforcement agencies to improve public safety. Our offering includes mobile ALPR systems installed on patrol vehicles, mobile trailers and fixed or stationary ALPR units to augment citywide surveillance.

[Learn more about how ALPR helps law enforcement agencies](#)

Q Does Genetec allow agencies to share data between AutoVu users?

A Yes, using the Genetec Federation™-as-a-Service feature, you are able to search reads and/or hits from any participating neighboring government agency. There's no need to install new software or deploy more hardware. All you need to do is request to opt-in to the data sharing program and new credentials will be issued to your agency. You maintain ownership over your data and are able to opt-in or opt-out at any time, taking your data with you.

[Learn more about Federation™](#)

Q Who will my ALPR data be shared with?

A Once you request to opt-in to the data sharing program, you will be asked to sign a Memorandum of Understanding outlining the terms of service of the program and listing any agencies that are also in the program and with whom you will be sharing your data. You maintain ownership over your data and are able to opt-in or opt-out at any time, taking your data with you.

[Learn more about managing access to ALPR data and lists](#)

Q Can Genetec export data to third-party application?

A Yes, Genetec is able to export Security Center AutoVu™ ALPR data to third-party systems and apps as long as you and the third-party manufacturer agree to accept the data. We have already helped a number of our customers share data with third-party systems such as IBM, Vigilant Solutions, Conduent (formerly Xerox) and Inrix. We will work with your agency and your manufacturer to get your data into other systems so you have access to your evidence however you choose. This type of integration allows you to send Genetec ALPR data to other back-office platforms, ticketing software, computer-aided dispatch (CAD) systems, etc.

Q Can Genetec import third-party data into the Genetec platform?

A Yes, the Genetec platform is able to accept data streams from a third-party, including third-party ALPR systems. In this manner, you are able to import data from existing systems into the Genetec platform while expanding your system with Genetec ALPR.

Q How do I go about importing third-party data or exporting Genetec data to third-party systems?

A Please contact AutoVu Inside Sales by phone at +1 (514)-227-5928 or email autovuinsidesales@genetec.com if you are interested in exporting data with Genetec systems. An Inside Sales representative will then set up a conversation with your local systems integrator and Genetec Regional Sales Manager.

Q Does Genetec offer secure hosting of ALPR data in the cloud?

A Yes, your data is hosted on the Microsoft Azure Government Cloud which offers a number of key security enhancements. Microsoft Azure Government data-centers reside in the continental United States, are specially constructed with 24x7 monitoring, provide geo-redundancy and are reserved for government data. The Azure Government Cloud is compliant with the Criminal Justice Information Services (CJIS) security policy, making it an optimal choice for law enforcement agencies at the federal, state, and municipal level.

[Learn more the Microsoft Azure Government Cloud](#)

night, officers can expect quality images to help identify the make, model, and even the colour of a suspect vehicle.

Unified within the Security Center – The AutoVu system and SharpZ3 LAW camera are integral parts of the Security Center, Genetec’s Unified Security Platform. This means an officer can easily incorporate the SharpX into a city-wide surveillance system or merge a stand-alone LPR system into the unified platform later on as needs arise.

Hardware Components

Automated License Plate Reader Camera and processor:



The Genetec AutoVu LPR solution being provided for the mobile application meets and, in some areas, exceeds the scope requested by the County of San Diego Sheriff’s Department. Genetec’s AutoVu Mobile Automated License Plate Reader complies with requirement demands within the IFB. The performance of traditional ALPR technology is difficult to improve on. That’s why a new approach is needed. AutoVu MLC leverages decades of ALPR images and a proprietary neural network to achieve new levels of plate-read performance. It has been optimized to run on current ALPR hardware already used by customers in the field; eliminating the need for the costly hardware often required by machine learning technology. AutoVu MLC reduces the number of misreads and false positives and increases the accuracy of advanced vehicle analytics, such as license plate origin detection. This increases automation efficiency, reduces the frequency of operator interventions, and helps officers act with confidence knowing that their data is accurate.

How AutoVu MLC compares to traditional engines

	Rule-based engine	AutoVu MLC	Daily impact
Capture rate	95.4%	99.6%	+166 license plates captured
Exact read rate	97.6%	99.8%	+266 license plates perfectly read
Copy Matchable Rate	97.5%	99.7%	+244 matchable license plates
False positives	16%	0.1%	50 fewer false alerts

* Sample size: 1,500 license plates of various countries, including United States, Canada, Western Europe, etc. The Daily Impact column assumes an average of 3,500 reads per day.

AutoVu SharpZ3

Mobile Automatic License Plate Recognition System

High performance and edge-based mobile ALPR

The AutoVu™ SharpZ3 is a mobile automatic license plate recognition (ALPR) system that goes beyond traditional plate identification. It brings new levels of insight in vehicle analytics, situational awareness, and accuracy.

That's because the SharpZ3 is powered by the latest edge-based processing technology. Designed to combine high-performance and low power consumption, it lets you take full advantage of machine learning capabilities directly at the edge. And with its third optical sensor, the SharpZ3 can precisely position objects and vehicles to understand what's around the license plate, placing reads into context.

Expand your vision with the AutoVu SharpZ3.

Features

Powered by AutoVu MLC machine learning based engine

Built-in vehicle classification, plate origin and make and color recognition analytics

Ultra-low reading latency

3 optical sensors

Modular architecture designed to evolve seamlessly

Optional advanced GPS positioning with dead reckoning

Up to 4 high-definition ALPR cameras on the same base unit

Unified with Genetec Security Center



Get more from your mobile ALPR system

Go beyond conventional mobile ALPR

With the latest neural networking technology built in, the SharpZ3 redefines what mobile ALPR can do. Not only does it deliver higher accuracy and reduce misreads, the SharpZ3 unlocks new insights through its expanded suite of vehicle analytics.

Capture the full picture

With its third optical sensor, the SharpZ3 effortlessly navigates complex urban environments. From flat and non-reflective plates to embossed designs and digital plates, the SharpZ3 can detect more plate designs than traditional units.

Evolve your system with ease

The SharpZ3 is designed with growth in mind. The modular chassis of the SharpZ3 will protect your investment and let you tap into new modules and capabilities over time. This reduces the complication and cost of hardware replacement.

AutoVu SharpZ3 Camera Specifications**ALPR camera sensors**

1456(H) x 1088(V) progressive scan @30fps, monochrome, global shutter

ALPR capture range

Up to 63-foot (19-meter) range with retro-reflective license plates

ALPR camera lens options

8mm, 12mm, 16mm, 25mm

Context camera sensor

1456(H) x 1088(V) progressive scan @30fps, color, B&W night mode with 940nm illuminator, global shutter. JPEG still images and MJPEG video streaming

Context camera lens

Based on ALPR lens configuration: (4mm, 6mm, 8mm, 12mm)

Illuminators

Pulsed LED illuminator (740nm, 850nm, 940nm, 590nm)

Water-resistance | sealing

IEC 60529 IPx6, IPx7 | IEC 60529 IP6x

Dimensions

1.65 (h) x 5.12 (w) x 3.56 (d) inches (4.2 x 13 x 9 cm) | Excludes cabling and mounting bracket

Weight

1.2 lbs (0.54kg)

Color

Available in black/white

AutoVu SharpZ3 Base Unit Specifications**I/O**

Base unit:

2x 10/100/1000 Base-T Ethernet ports (RJ45)

4x digital inputs (triggers), 0-32Vdc, opto-coupled

4x dry-contact outputs (relays): 2x 0.25A solid state relays, 2x 8A electromechanical relays

1x regulated 12V AUX output power, 200ma

Mounting options

Horizontal and vertical

Dimensions

3.6 (h) x 8.6 (w) x 9.3 (d) inches (9.1 x 21.8 x 23.6 cm).

Excludes cabling, cable racks and mounting brackets

Weight

Base unit: 4.4 lbs (2.0 kg)

ALPR module: 2-ports: 4.1 lbs (1.9 kg)

ALPR module: 4-ports: 4.4 lbs (2.0 kg)

Processors

Intel Atom Processor E3950

Additional dedicated machine-learning co-processor

Power

12/24Vdc nominal (9 to 32 Vdc)

Optional modules:

2x ALPR unit base module

Typical Power consumption: 50W

4x ALPR unit base module

Typical Power consumption: 98W

AutoVu SharpZ3 System Certification (Camera + Base unit)**Vibration**

IEC 60068-2-64

Shock resistance

IEC 60068-2-27

Electromagnetic immunity & emissions

FCC part 15 Sub-part B | ICES-003 Issue 4 | CISPR32 / EN55032 | CISPR24 / EN55024 | CISPR25 / EN55025 | EN 50498

CE marking

EMC Directive 2014/30/EU; Automotive EMC Directive 2004/104/EC; RoHS Directive 2011/65/EU

Temperature

-40°F to 122°F (-40°C to 50°C) operating; -40°F to 185°F (-40°C to 85°C) storage

-40°F to 149°F (-40°C to 65°C) base unit operating, w/optional cooling pack

Certifications: IEC 60068-2-1 Category Ad and Ae | IEC 60068-2-2 Category Be | IEC 60068-2-14 Category Na

Includes hi-temp auto-shutoff protection

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AutoVu™ SharpV

Automatic License Plate Recognition System

Dedicated, high performance, and edge based Fixed ALPR

The Genetec AutoVu™ SharpV is a specialized, all-in-one automatic license plate recognition (ALPR) camera designed to simplify deployments from specification through installation. Versatile and accurate, the SharpV is suited for fixed ALPR installations, such as monitoring entries and exits or capturing license plates at high-speeds on city-streets and highways.

The SharpV is ideally suited for a range of applications, from managing off-street parking lots and facilities to covering major city access points for wanted vehicles. The SharpV is also capable of simultaneously streaming ALPR and video data to Security Center, the Genetec security platform, where it can be unified with plate reads from mobile ALPR vehicles, surveillance camera streams, and access control events in a single system.



Features

On-board ALPR processing ensures high-performance, scalability, and ultra low reading latency

Varifocal lenses ease specification and design

Power over Ethernet Plus (PoE+) enabled to simplify deployment

IP67-rated enclosure allows for operation in extreme weather conditions and harsh environments

Built-in illumination for around-the-clock operation

Simultaneously read license plates and stream high-resolution contextual color video

On-board I/Os for integration to induction loops or gates

Dual lane feature available for America, Europe, ANZ, other regions*

Benefits

Intelligence at the Edge – With processing on-board, the SharpV brings ALPR intelligence to the edge of your system with ultra low reading latency. Since only plate read data needs to be transferred over the network, this means decreased data load on the network and server as all the image processing and analysis is done in the unit. The cameras are not dependent on the server, hence providing uninterrupted coverage even when connectivity goes down.

Unify on a Single Platform – The SharpV can be enrolled within Security Center as a surveillance camera for streaming and recording video. On-board I/Os can be used to trigger reads based on sensors to increase capture rates or open gates based on credentials associated to the plates.

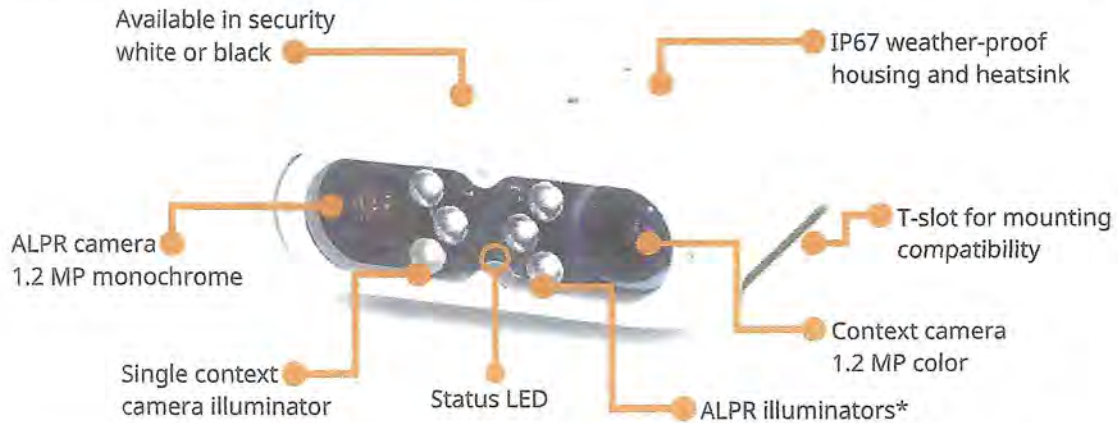
Simplify Specification and Installation – The SharpV is built to facilitate deployment. As a varifocal PoE+ device, the reading distance, magnification and cabling are easily adjustable on site, reducing system design and specification effort. Meanwhile, the modern HTML5 web portal simplifies configurations and maintenance.

See more – Equipped with high-resolution ALPR and context cameras as well as on-board illumination, the SharpV covers a wide field-of-view and provides high-quality images and video, day or night.

* To verify Dual-lane feature availability in your region, contact your Genetec representative.

About the AutoVu™ SharpV

The AutoVu™ SharpV is an all-in-one specialized automatic license plate recognition (ALPR) device which combines two high-definition cameras with onboard processing and illumination in a ruggedized, environmentally sealed unit.



* Depending on the camera options, the five ALPR illuminators might emit light that is visible in dark conditions. The single context camera illuminator does not emit visible light.

Specifications

ALPR camera sensor

1280 × 960 @ 30 fps; monochrome; global shutter

Capture range

Standard Range: 9–60 ft (3–18.25 m)

Long Range: 60–115 ft (18–35 m)

Dimensions

2.5 in × 7.6 in × 8.5 in (2.7 high with sunshield for black version)
(63 mm × 192 mm × 214 mm)

Weight

5.04 lb (2.29 kg)

Illuminator

Pulsed LED illuminator for effective use in
0 lux (total darkness) environments

940nm, 850nm, 740nm and 590nm illumination wavelengths
available

Context camera sensor (not in ITS model)

1280 × 960 @ 30 fps; color; global shutter

Available color(s)

Security White / Black

Operating Temperature

-40°F to 140°F (-40°C to 65°C) ambient

On-board Analytics

Single-camera speed estimation, direction of travel and
virtual loop

Power supply

PoE+ (Power-over-Ethernet) - 802.3at Type 2 (25.5 W)

Cabling

Cat5e cable (special connector provided for IP67 rating)

Sealing (Water/Dust Protection)

IEC 60529: IP66/IP67

Still image compression

JPEG compression for ALPR and Context still images

External interface

1 × 10/100/1000 Base-T Ethernet port

Video streaming

H.264 @ up to 30 fps; MJPEG @ up to 15 fps

Vibration & Shock

IEC 60068-2-64: 5~100Hz | 0.5 g rms

IEC 60068-2-27: 10g | 16ms half-sine

NEMA TS-2: 5~30 Hz | 0.5 g double-amplitude

Electromagnetic immunity & emissions

FCC part 15 Subpart B | ICES-003 Issue 4 | CISPR32 / EN55032 |

CISPR 24 / EN 55024

EMC Directive (CE marking)

2014/30/EU

External I/Os

2 inputs / 2 outputs (opto-isolated)

Mounting

Pole and Wall Mount included



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Operations and Security

AutoVu MLC

The new standard for accuracy in automatic license plate recognition

Security Center AutoVu™ MLC (Machine Learning Core) is the automatic license plate recognition (ALPR) engine embedded in the ALPR devices. It replaces the traditional rule-based engine used in ALPR solutions with a machine-based algorithm. This increases accuracy, capture rate, while reducing common misreads and false-positives.

Challenge

Fixed and mobile ALPR systems read thousands of license plates every day. This amplifies the impact of misreads and false positives, with every instance requiring human intervention. The popularity of ALPR in performance-sensitive applications, such as parking enforcement and automatic vehicle access control, means that every gap in performance leads to lost productivity and unnecessary alarms. These service interruptions not only cause customer dissatisfaction but also cost operators time and money.

Pushing past the performance plateau

The performance of traditional ALPR technology is difficult to improve on. That's why a new approach is needed. AutoVu MLC leverages decades of ALPR images and a proprietary neural network to achieve new levels of plate-read performance. It has been optimized to run on current ALPR hardware already used by customers in the field; eliminating the need for the costly hardware often required by machine learning technology. AutoVu MLC reduces the number of misreads and false positives and increases the accuracy of advanced vehicle analytics, such as license plate origin detection. This increases automation efficiency, reduces the frequency of operator interventions, and helps officers act with confidence knowing that their data is accurate.

Industry:

Parking Enforcement, Transportation,
Law Enforcement, B&I

Applications:

LPR

Key benefits

Cover more ground per shift by
reducing interruptions caused by
misreads and false positives

Ensure the smooth flow of vehicles at
gated entrances

Apprehend more offenders or vehicles
of interest with improved accuracy
and capture rate

Get new insights on where visitors
come from with high accuracy license
plate origin detection

Compatible with existing SharpX,
SharpV, and Sharp 3 ALPR units

Applications

**Law enforcement**

AutoVu MLC boosts the performance of advanced vehicle analytics, such as the state of origin of a license plate. Police officers can act with increased confidence, by having more reliable information and more accurate reads right at their fingertips

**Parking enforcement**

False positives can drain parking management of resources as they are forced to validate and correct misreads. AutoVu MLC dramatically reduces the number of interruptions parking officers face so they can focus on improving efficiency and catching violators.

**Vehicle access control**

Accuracy is crucial when businesses trust you on the front line of their operations. Whether to identify scofflaws, black listed plates, your own staff, or even suppliers AutoVu MLC can be trusted to automate vehicle access control on your premises while limiting false positives.

**Marketing & business intelligence**

Offer a seamless experience to loyalty program and VIP members. AutoVu MLC can identify regular patrons more accurately, helping you get a better sense of your customers. Reduced false positives also save your team time by avoiding the hassle of unnecessary alerts to focus on your customers.

About Security Center AutoVu™

The AutoVu™ automatic license plate recognition (ALPR) system automates license plate reading and identification, making it easier for law enforcement and for municipal and commercial organizations to locate vehicles of interest and enforce parking restrictions. Designed for both fixed and mobile installations, the AutoVu™ system is ideal for a variety of applications and entities, including law enforcement, municipal, and commercial organizations.

Depending on the Sharp hardware you install, you can use AutoVu™ in a fixed configuration such as on a pole in a parking lot, or in a mobile configuration such as on a patrol vehicle.

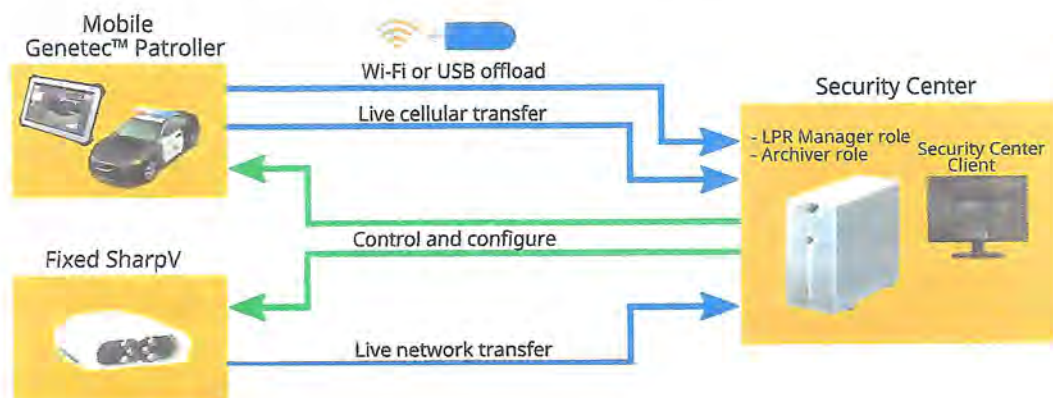
You can use AutoVu™ for the following:

- Scofflaw and wanted vehicle identification
- City-wide surveillance
- Parking enforcement
- Parking permit control
- Vehicle inventory
- Security
- Access control

AutoVu™ system architecture

AutoVu™ Sharp cameras capture license plate images, and send the data to Genetec Patroller™ or Security Center to verify against lists of vehicles of interest (hotlists) and vehicles with permits (permit lists).

The following diagram shows how a typical AutoVu™ system works:



Example

Watch this video to learn more. Click the **Captions** icon (CC) to turn on video captions in one of the available languages.





The core line items as defined as high-use core ALPR equipment based on historical purchase data, along with the services and support to meet and exceed the County of San Diego Sheriff's Department requirements. The Core Items will be available for purchase at a fixed contract price. The Core Items will include; 3-camera Automated License Plate Reader system, Replacement Equipment for the ALPR system, Cables, Operator and Technician Training and Annual End User Access.

AutoVu SharpV Camera kit is a specialized, all-in-one automatic license plate reader (ALPR) camera designed to simplify deployments from specification through installation.

The SharpV is ideally suited for a range of applications, from managing off-street parking lots and facilities to covering major city access points for wanted vehicles. The SharpV is also capable of simultaneously streaming ALPR and video data to Security Center, the Genetec security platform, where it can be unified with plate reads from mobile ALOR vehicles, surveillance camera streams and access control events in a single system

ComSonic's Gentec Certified technician will conduct training and support on-site for initial install and available via telephone and email.

ComSonics operates nominally a business hours Help-desk support function for our clients. This can be extended under service maintenance contracts to include out of hours support if desired. To maintain high quality/timely maintenance and emergency services, the following support will be provided by ComSonics during the and outside of the client's normal work hours.

- Dedicated Account Manager from ComSonics will be the primary interface for the customer for any support and queries
- Online support through secure SSH / TeamViewer remote support at all times for faster issue resolution
- Support via email
- Continuous Assistance – For issue identification, root cause analysis, complete diagnostics and reports, quick failure resolution. ComSonics shall provide a receipt for each service request within 2 hours. For this contract, we will engage our local support through our US-based and ComSonics' engineer where initial response and remote support is required.

Coverage parameters specific to the project are as follow;

- Genetec telephone support: 9:00 am to 5 pm local time Monday – Friday
- Calls received out of office hours will be forwarded to a mobile phone and best efforts will be made to answer / action the call; however, there will be a backup answer phone service.
- Online Service Desk support: Monitored 9:00 am to 5:00 pm Monday – Friday
- Online Service requests received outside of office hours will be collected, however, no action can be guaranteed until the next working day.

Each service request shall be classified into High, Medium or Low category. The response time for each category shall be;

- High - Within 24 hours (during business hours)
- Medium - Within 48 hours
- Low – Within 3-5 working days



Remote assistance will be provided in-line with the above timescales dependent on the priority of the support request.

Where service levels are deemed unsatisfactory, escalations can be directed to Charles Gutierrez (Public Safety Manager) who will act as the escalation officer for this project.

SECTION 3: Pricing

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

INITIAL TERM: Date of Award through January 31, 2022				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	AU-Z3-B-08F08F-850 including warranty. 5 years available.	4	\$ 8,405.00	\$ 33,620.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	AU-K-V-Generio-LC including warranty. 5 years available.	10	\$ 3,315.00	\$ 33,150.00
LPR Camera Mounting Brackets for Light Bar	AU-H-Z3-B-LTBARMNT-DBL	4	\$ 120.00	\$ 480.00
LPR Mounting for Portable system		10	\$	\$
LPR Processor (If needed, otherwise state N/A)	AU-K-P4Z3-BASE	14	\$ 1,395.00	\$ 19,530.00
Modem	CradlePoint	14	\$1,850.00	\$25,900.00
LPR Software	Genetec Advantage & Support	14	\$ 145.00	\$ 2,030.00
LPR Speed Trailer complete package. List all items included in price quoted:	Includes 1 portable camera, software, training & shipping on County provided trailer.	1	\$ 4,461.00	\$ 4,461.00
LPR Speed Trailer crating & shipping		1	\$	\$
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Includes mobile & fixed LPR installations. Solar fixed LPR can be provided upon request	14	\$ 345.00	\$ 4,830.00
Installation	Mobile & fixed installation. Does not include trailer	14	\$ 925.00	\$ 12,950.00
Covert Installation in vehicle	Installation	1	\$ 1,750.00	\$ 1,750.00
Installation "Kit", Includes all hardware, wiring and software for "do it yourself" standard installations (on poles & trailers)	Includes hardware, software and associated parts	5	\$ 6,953.83	\$ 34,769.15
Training		8	\$ 3965.00	\$ 3965.00
Shipping Mobile LPR 1 camera system		4	\$ 62.50	\$ 250.00
Shipping Portable LPR 1 camera system		10	\$ 25.00	\$ 250.00
			TOTAL	\$ 177,935.15

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

OPTION YEAR 1 – February 1, 2022 through January 31, 2023				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification		4	\$	\$
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification		10	\$	\$
LPR Camera Mounting Brackets for Light Bar		4	\$	\$
LPR Mounting for Portable system		10	\$	\$
LPR Processor		14	\$	\$
Modem		14	\$	\$
LPR Software	Genetec Advantage & support	14	\$ 140.00	\$ 1,960.00
LPR Speed Trailer complete package. List all items included in price quoted:		1	\$	\$
LPR Speed Trailer crating & shipping		1	\$	\$
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Preventative including travel	14	\$ 285.36	\$ 3,995.00
Installation		14	\$	\$
Covert Installation		1	\$	\$
Installation "Kit", Includes all hardware, wiring and software for do it yourself standard installations (on poles & trailers)		5	\$	\$
Training per hour	optional	8	\$ 120.00	\$ 960.00
Shipping Mobile LPR 1 camera system		4	\$	\$
Shipping Portable LPR 1 camera system		10	\$	\$
Option Year 1 Subtotal			TOTAL	\$ 6915.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

OPTION YEAR 2 – February 1, 2023 through January 31, 2024				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification		4	\$	\$
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification		10	\$	\$
LPR Camera Mounting Brackets for Light Bar		4	\$	\$
LPR Mounting for Portable system		10	\$	\$
LPR Processor		14	\$	\$
Modem		14	\$	\$
LPR Software	Genetec Advantage & Support	14	\$ 140.00	\$ 1,960.00
LPR Speed Trailer complete package. List all items included in price quoted:		1	\$	\$
LPR Speed Trailer crating & shipping		1	\$	\$
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	Preventative Maintenance including travel	14	\$ 285.36	\$ 3,995.00
Installation		14	\$	\$
Covert Installation		1	\$	\$
Installation "Kit", Includes all hardware, wiring and software for do it yourself standard installations (on poles & trailers)		5	\$	\$
Training per hour	optional	8	\$ 120.00	\$ 960.00
Shipping Mobile LPR 1 camera system		4	\$	\$
Shipping Portable LPR 1 camera system		10	\$	\$
Option year 2 subtotal			TOTAL	\$ 6,915.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

1. PRICING

- 1.1. Enter unit prices and extended prices for each line item, Base Term Period, 1st Option Period, and 2nd Option Period page for each line item.
- 1.2. The aggregate total for each term period combined (Grand Total) will be used as the basis of award
- 1.3. The Pricing Schedule table should not be tampered with or altered in any way.
- 1.4. Bids must meet specifications provided.
- 1.5. ALL items MUST be priced to be considered responsive.

2. GENERAL REQUIREMENTS

- 2.1 A specifications sheet with pictures and operations manual for the product shall be submitted with the bid.

COMPANY: ComSonics, Inc.

REPRESENTATIVE NAME: Charles Gutierrez

REPRESENTATIVE EMAIL: cgutierrez@comsonics.com

REPRESENTATIVE PHONE: 213-999-9798

Next

Bid



REQUEST FOR BIDS

RFB No. 10684

Sheriff's Department License Plate Readers (Reissued)

ORIGINAL SUBMITTAL

One (1) Electronic Copy Original submitted via email to:

cosd_procurement@sdcounty.ca.gov

in conformance with temporary COVID-19 Instructions per Addendum #1

Closing Date and Time:
December 28, 2020 at 11:00 A.M. PT

County of San Diego
Department of Purchasing and Contracting
5560 Overland Avenue, Suite 270
San Diego, CA 92123-1204

ATTN: Punnita Dinmuong, Assistant Procurement Specialist

Punnita.dinmuong@sdcounty.ca.gov

(858) 505-6367

Presented by
Utility Associates, Inc.



County of San Diego, California

Request for Bids (RFB Reissued) # 10684 for Sheriff's Department License Plate Readers

Submittal: One (1) Electronic Copy Original submitted via email to cosd_procurement@sdcounty.ca.gov
Per Temporary COVID-19 Instructions issued in Addendum #1

Table of Contents

Before Required Documents: Cover Letter

Required Submittal Documents

- P&C 600 Form - Cover Page
 - Representations and Certifications Page
 - Section C; Exhibit C Pricing Schedule
 - Non-Disclosure Indemnification Form - *Not Included, Not Applicable*
 - W-9 Form for Utility Associates, Inc.
-

TECHNICAL SUPPLEMENT - for Discretionary Review

Section 1: Company Qualifications and Experience

- Company Profile and Experience
- *Flyer – Utility Named Innovation Challenge Award Winner by AWS (2016-2019)*
- Project Team for San Diego County Sheriff's Department

Section 2: Approach to Technology

- Summary of the Technical Approach Narrative of the RocketIoT™ ALPR Solution
- Table of Responses to Specifications Section C: Exhibit A Statement of Work
- *Flyer - Five ALPR 'Must Haves'*
- Product Data Sheet for the RocketIoT™ ALPR Solution
- AVaiLWeb™ Digital Evidence Management Platform, and SMART REDACTION™
- *Flyer – Features of RocketIoT ALPR Paired with the RocketIoT™ In-Car Camera*
- Product Data Sheet for the RocketIoT™ In-Car Camera System



Section 3: Appendix - Procurement Information

- Installation Operations Manual for RocketIoT-XLE ALPR
- Summary: Warranties, Terms & Conditions, Software as a Service (SaaS) Agreement
- Summary Sheet: Data Security Documentation
- Summary Sheet: Utility CJIS Compliance, and CJIS Compliance in the Cloud



Punnita Dinmuong, Assistant Procurement Specialist
County of San Diego
Department of Purchasing and Contracting
5560 Overland Avenue, Suite 270
San Diego, CA 92123-1204
punnita.dinmuong@sdcounty.ca.gov
(858) 505-6367

December 27, 2020

Subject: Request for Bids (RFB #10684, Reissued) for Sheriff's Department License Plate Readers

On behalf of Utility Associates, Inc., thank you for the opportunity to present our RocketIoT Advanced LPR license plate reader camera system technology to the County of San Diego and the San Diego County Sheriff's Department. Our Bid submittal meets and exceeds the County's requirements and specifications, includes all equipment, including the speed trailer, and everything needed to transmit LPR data.

Utility's RocketIoT ALPR™ technology is a partnership with Sony Corporation, and is installed in fixed stationary applications and in-vehicle applications for customers across the US. Utility is an Amazon Web Services (AWS) City on a Cloud Innovation Challenge award winner (2016-2019). RocketIoT ALPR™ is the most advanced license plate reader solution in the industry.

Utility's technology model is not reliant upon the Vigilant Learn cloud platform, and instead drives LPR using Artificial Intelligence (AI) at-the-edge, and real-time connectivity to Hot Lists from State, local and Federal data sources. The RocketIoT ALPR™ features highly sophisticated optical technology and machine learning algorithms to improve accuracy and efficiency.

The RocketIoT ALPR™ provides unique benefits to the San Diego County Sheriff's Department:

- **Intelligent.** Unlike traditional LPR systems, Utility's RocketIoT ALPR™ is powered by artificial intelligence (AI) and a new ability to read license plates at high speeds and through windshields - all while comparing data at-the-edge. In both fixed stationary and in-vehicle applications, Smart ALPR runs passively the background throughout an officer's patrol shift allowing **unknown threats to become known in real-time.**
- **Force Multiplier.** ALPR provides greater efficiency for the patrol officer which translates to increased productivity for your agency. ALPR allows officers to focus on their job functions while patrolling as it leverages AI and the total system to maximize the officer's effectiveness, safety and situational awareness.

Because the technology does not depend upon legacy proprietary platforms, it is designed to be cost-effective, allowing Departments to extend LPR to more fixed stationary applications, and to more vehicles, for greater coverage and officer safety in performance of their duties. Beyond its cost-effective aspects, RocketIoT ALPR™ technology model is designed to focus advanced AI capabilities to promote officer safety and real-time connectivity in these ways:

- **Connected.** RocketIoT ALPR™ and AVaiLWeb™ provide officers with **total system connectivity** directly to the AWS GovCloud for real-time access to Federal, State and local databases for purposes of automatically searching for hotlisted vehicles.

- **Alerts.** Policing our communities today has become more increasingly dangerous for our officers on patrol and as a result, increased officer safety measures are paramount. **ALPR Alerts** are automated and connected to the Department by Utility's AVaiLWeb™ ecosystem. Dispatch, supervisors and nearby officers can receive real-time alerts when a patrol officer receives an ALPR Alert of a hotlisted vehicle.
- **Automatic Updates.** As a smart device, Utility's RocketIoT ALPR™ has policy-based Smart Recording for automated and independent operation, asynchronous, over-the-air (OTA) updates occur in the background, without effort by the Department, all the while updating the same device.
- **Pathway to Future Integrations.** Utility's RocketIoT ALPR™ is capable of integrating with RMS and CAD , where it can create an Action Zone for High Priority Calls, and can make them visible on the AVaiLWeb™ video management system live map. The RocketIoT ALPR™ can ingest other digital data, and is compatible and interoperable with the entire ecosystem of Utility's automatic, policy based mobile video recording systems, including our RocketIoT™ in-vehicle DVR/router (a FirstNet Certified device) and our interview room camera system. This enables officers to focus on policing instead of video equipment.

Utility's RocketIoT ALPR™ with AVaiLWeb™ is provided as a System as a Service (SaaS) subscription. The solution does not require user licenses, and an active SaaS subscription allows access by authorized personnel of the San Diego County Sheriff's Department, including prosecutors, and automatically supports unlimited concurrent logins.

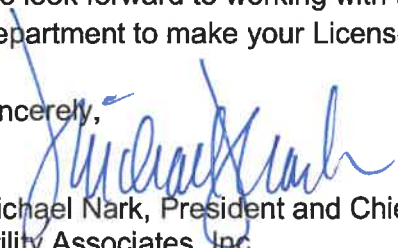
The RocketIoT ALPR™ is CJIS-compliant, Made in the USA, and includes 24/7/365 support from Utility's headquarters in Decatur, Georgia in Metropolitan Atlanta, and the Sony Corporation in Southern California.



Taken together, Utility's mobile license plate reader, digital evidence management, and video capture solutions are the most advanced technology for law enforcement today. Utility's RocketIoT ALPR™ allows today's efficiency-focused law enforcement leaders to use this new technology to leverage their budgeted resources to increase safety and LPR coverage.

We look forward to working with the County of San Diego, and the San Diego County Sheriff's Department to make your License Plate Readers project a resounding success!

Sincerely,


Michael Nark, President and Chief Executive Officer,
Utility Associates, Inc.

mnark@utility.com

404-816-0300 office, or 800-597-4707 toll free

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB # 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION A: COVER PAGE (P&C 600 FORM)

COUNTY OF SAN DIEGO
SECTION A-P&C 600 FORM
This is not an order

Issued: December 14, 2020

MAIL OR DELIVER TO:

COUNTY OF SAN DIEGO, RFB No. 10684
DEPARTMENT OF PURCHASING & CONTRACTING
5560 OVERLAND AVE., SUITE 270
SAN DIEGO, CA 92123

AWARD WILL BE MADE TO THE LOWEST RESPONSIVE,
RESPONSIBLE BIDDER BASED ON

- ☐ ALL OR NONE
☐ EACH LOT
☒ TOTAL PRICE
☐ OTHER (SEE PRICING SCHEDULE)

UNSPSC commodity code: 461716.0000

FOR INFORMATION, PLEASE CONTACT:

PUNNITA DINMUONG, ASSISTANT PROCUREMENT SPECIALIST
PUNNITA.DINMUONG@SDCOUNTY.CA.GOV

BID OPENING DATE: DECEMBER 22, 2020
BIDS MUST BE RECEIVED AT THE ABOVE ADDRESS
PRIOR TO 11:00 A.M. ON DATE OF BID OPENING.

PLEASE STATE YOUR LOWEST PRICE
F.O.B. DESTINATION AND BRAND NAME
OR TRADE NAME IF APPLICABLE.
(Please use typewriter or black ink)
YOUR ENVELOPE MUST INCLUDE RFB No. 10684

DESCRIPTION

THE COUNTY OF SAN DIEGO (COUNTY), SHERIFF'S DEPARTMENT HAS A REQUIREMENT FOR LICENSE PLATE READERS IN ACCORDANCE WITH THE TERMS & CONDITIONS AND THE STATEMENT OF WORK REFLECTED HEREIN.

INITIAL TERM: DATE OF AWARD – JANUARY 31, 2022
1ST OPTION YEAR: FEBRUARY 1, 2022 – JANUARY 31 2023
2ND OPTION YEAR: FEBRUARY 1, 2023 – JANUARY 31, 2024

PRICING SUBMITTED IS TO REMAIN FIRM FIXED FOR THE TERM PERIOD IDENTIFIED ABOVE. ALL ITEMS WITHIN EACH TERM PERIOD MUST BE PRICED TO BE CONSIDERED RESPONSIVE. AWARD WILL BE MADE TO THE LOWEST RESPONSIVE, RESPONSIBLE OFFEROR BASED ON THE TOTAL PRICE. OFFEROR WHO SUBMITS THE LOW BID WILL BE DEEMED RESPONSIBLE BASED ON THE RESULTS OF THE PRE-AWARD SURVEY.

ARE YOU ABLE TO COMPLY WITH ALL ITEMS SPECIFIED WITHIN THE SCOPE OF WORK? YES ☒ OR ☐ NO

BIDDER ACKNOWLEDGES ADDENDUM NO. 1 ☒ 2 ☒ 3 ☒ 4 ☐ 5 ☐

SUBJECT TO ACCEPTANCE WITHIN 90 DAYS

NAME AND ADDRESS OF BIDDER

Utility Associates, Inc.
STREET, CITY, STATE, ZIP
250 E. Ponce de Leon Avenue, Suite 700,
Decatur, GA 30030
TELEPHONE: NUMBER (800) 597-4707 Toll Free, 404-816-0300
FAX TELEPHONE: (877) 449-5088 Toll Free

E-MAIL: mmark@utility.com or proposals@utility.com

PAYMENT TERMS NET 30 DAYS OR % DAY

NAME AND TITLE OF PERSON AUTHORIZED

TO SIGN OFFER:

 12/29/2020
SIGNATURE OFFEROR DATE

PRINTED NAME: Michael Nark

PRINTED TITLE: President and CEO

NOTIFICATION OF AWARD

ACCEPTANCE AS TO ITEM(S) NUMBERED:

(VC No.)

(THIS SECTION FOR COUNTY USE ONLY)

COUNTY OF SAN DIEGO

BY: _____ DATE: _____

JOHN M. PELLEGRINO, DIRECTOR

DEPT OF PURCHASING & CONTRACTING

TOTAL AMOUNT
P&C 600 Form

AWARD No.

NAME AND TITLE OF CONTRACTING OFFICER

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB # 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION A: COVER PAGE (P&C 600 FORM)

COUNTY OF SAN DIEGO
SECTION A-P&C 600 FORM
This is not an order

Issued: December 14, 2020

MAIL OR DELIVER TO:

COUNTY OF SAN DIEGO, RFB No. 10684
DEPARTMENT OF PURCHASING & CONTRACTING
5560 OVERLAND AVE., SUITE 270
SAN DIEGO, CA 92123

AWARD WILL BE MADE TO THE LOWEST RESPONSIVE,
RESPONSIBLE BIDDER BASED ON

- [] ALL OR NONE
[] EACH LOT
[X] TOTAL PRICE
[] OTHER (SEE PRICING SCHEDULE)

UNSPSC commodity code: 461716.0000

FOR INFORMATION, PLEASE CONTACT:

PUNNITA DINMUONG, ASSISTANT PROCUREMENT SPECIALIST
PUNNITA.DINMUONG@SDCOUNTY.CA.GOV

BID OPENING DATE: DECEMBER 22, 2020
BIDS MUST BE RECEIVED AT THE ABOVE ADDRESS
PRIOR TO 11:00 A.M. ON DATE OF BID OPENING.

PLEASE STATE YOUR LOWEST PRICE
F.O.B. DESTINATION AND BRAND NAME
OR TRADE NAME IF APPLICABLE.
(Please use typewriter or black ink)
YOUR ENVELOPE MUST INCLUDE RFB No. 10684

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ARE YOU ABLE TO COMPLY WITH ALL ITEMS SPECIFIED WITHIN THE SCOPE OF WORK? YES ☒ OR ☐ NO

BIDDER ACKNOWLEDGES ADDENDUM NO. 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐

SUBJECT TO ACCEPTANCE WITHIN 90 DAYS

NAME AND ADDRESS OF BIDDER

Utility Associates, Inc.

STREET, CITY, STATE, ZIP

250 E. Ponce de Leon Avenue, Suite 700,
Decatur, GA 30030

TELEPHONE: NUMBER (800) 597-4707 Toll Free, 404-816-0300

FAX TELEPHONE: (877)449-5088 Toll Free

E-MAIL: mnark@utility.com or proposals@utility.com

PAYMENT TERMS NET 30 DAYS OR % DAY

NAME AND TITLE OF PERSON AUTHORIZED

TO SIGN OFFER:

 12/27/2020

SIGNATURE

OFFEROR DATE

PRINTED NAME: Michael Nark

PRINTED TITLE: President and CEO

NOTIFICATION OF AWARD

ACCEPTANCE AS TO ITEM(S) NUMBERED:

(VC No.)

(THIS SECTION FOR COUNTY USE ONLY)

COUNTY OF SAN DIEGO

BY: _____ DATE: _____

JOHN M. PELLEGRINO, DIRECTOR

DEPT OF PURCHASING & CONTRACTING

TOTAL AMOUNT
P&C 600 Form

AWARD No.

NAME AND TITLE OF CONTRACTING OFFICER

County of San Diego
Department of Purchasing and Contracting
REPRESENTATIONS AND CERTIFICATIONS

The following representations and certifications are to be completed, signed and returned with the offer (the term "offer" includes a bid, proposal, quote, statement of qualifications, or any other submission to provide goods and/or services).

1. BUSINESS TYPE

☒ For-profit ☐ Non-profit ☐ Government

2. INTERLOCKING DIRECTORATE

In accordance with Board of Supervisors Policy A-79, if Offeror is a non-profit and will be subcontracting with a related for-profit entity where an interlocking directorate, management or ownership relationship exists, Offeror must list all such entity(ies) on an attached separate sheet, and authorization must be sought from Board of Supervisors. If Offeror is a non-profit and does not submit such a list, Offeror certifies it has not entered into a subcontract relationship with a related for-profit entity.

List Attached? Yes ☐

3. BUSINESS REPRESENTATION

Offeror represents as a part of this offer the following information regarding the ownership, operation, and control of its business:

3.1. Are you a local business with a physical address within the County of San Diego? ☐ Yes ☐ No

3.2. Are you certified by the State of California as a:

☐ Disabled Veteran Business Enterprise(DVBE)

Certification #:

☐ Small Business Enterprise (SBE)

Certification #:

3.3. Are you certified by the U.S. Dept Of Veterans' Affairs as:

☐ Veteran Owned Small Business (VOSB)

Certification #

☐ Service Disabled Veteran Owned Small Business (SDVOSB)

Certification #

3.4. Estimated percentage of work in this offer to be performed or fulfilled locally (within the geographic boundaries of the County of San Diego): _____ %

4. DEBARMENT, SUSPENSION, AND RELATED MATTERS

4.1. Offeror certifies to the best of its knowledge that neither it nor any of its officers:

4.1.1. Are presently debarred, suspended, declared ineligible, or voluntarily excluded from covered transactions by any state, local, or federal department or agency.

4.1.2. Have within a three (3) year period preceding this agreement been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

4.2. Except as allowed for in Section 4.2.5, Offeror hereby certifies to the best of its knowledge that neither it nor any of its officers:

4.2.1 Are presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with the commission of any of the offenses enumerated in paragraph 4.1.2 of this certification;

4.2.2 Have within a three (3) year period preceding this agreement had one or more public transactions (federal, state or local) terminated for cause or default;

4.2.3 Are presently the target or subject of any investigation, accusation or charges by any federal, state or local agency or law enforcement, licensing, certification, ethics, or compliance body;

4.2.4 Are proposed for debarment by any state, local, or federal department or agency.

4.2.5 If Offeror is unable to certify Sections 4.2.1, 4.2.2, 4.2.3, or 4.2.4, it certifies that it has disclosed and attached to this Representations and Certifications the reason(s) it cannot do so. The disclosure must include the Section(s), specific relevant facts including dates, contracts, individuals involved, status of actions, and any other relevant information that prevent it from making the requested certification(s). The County reserves the right to disqualify an Offeror based upon information disclosed.

Disclosure Attached? Yes ☐

5. RELATED WORK

Offeror certifies to the best of its knowledge that, other than as disclosed in an attached separate sheet, it and its proposed subcontractors, agents, and consultants have not previously contracted with the County to perform work on or related to this project (e.g. preparing related studies or recommendations, components of the statement of work, or plans and specifications).

Disclosure Attached? Yes ☐

6. CURRENT COST OR PRICING

Offeror certifies to the best of its knowledge that cost and/or pricing data submitted with this offer, or specifically identified by reference if actual submission of the data is impracticable, are accurate, complete, and current as of the date signed below.

7. INDEPENDENT PRICING

Offeror certifies that in relation to this offer:

7.1. The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with other offerors, with any competitors, or with any County employee(s) or consultant(s) involved in this or related procurements;

7.2. Unless otherwise required by law, the prices that have been quoted in this offer have not been knowingly disclosed by the Offeror and will not knowingly be disclosed by the Offeror prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other Offeror or to any competitor or with any County employee(s) or consultant(s) involved in this or related procurements; and

7.3. No attempt has been made or will be made by the Offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.

8. ADDITIONAL DISCLOSURES

Offeror shall report in writing to the County Department of Purchasing and Contracting within five business days of discovering or having any reason to suspect any change in status as certified in the preceding paragraphs. Upon County's request, Offeror shall provide additional information supporting Offeror's Representations and Certifications. Offeror's obligations under this Section 8 shall continue until Offeror is no longer under consideration for award of a contract, or until termination or expiration of any resulting contract(s).

CERTIFICATION

The information furnished in Paragraphs 1 through 8 and in the accompanying offer is certified to be factual and correct as of the date submitted and this certification is made under penalty of perjury under the laws of the State of California.

Name: Michael Nark

Signature: 

Title: President and CEO

Date: 12/27/2020

Company/Organization: UTILITY ASSOCIATES, INC.

SUBMIT THIS FORM AS DIRECTED IN THE REQUEST FOR SOLICITATION DOCUMENTS OR WITH THE OFFER

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

INITIAL TERM: Date of Award through January 31, 2022				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	ALPR-H-4001-Mobile (4 Camera System)	4	\$ 8,000.00	\$ 32,000.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	ALPR-H-4001-Port	10	\$ 6,500.00	\$ 65,000.00
LPR Camera Mounting Brackets for Light Bar	Included in ALPR-H-4001-Mobile	4	\$ 0.00	\$ 0.00
LPR Mounting for Portable system	Included in ALPR-H-4001-Port	10	\$ 0.00	\$ 0.00
LPR Processor (If needed, otherwise state N/A)	Included in ALPR	14	\$ 0.00	\$ 0.00
Modem	Included in ALPR	14	0.00	0.00
LPR Software	ALPR-S-4001	14	\$ 2,500.00	\$ 35,000.00
LPR Speed Trailer complete package. List all items included in price quoted:	ALPR-H-4001-Traill	1	\$ 15,000.00	\$ 15,000.00
LPR Speed Trailer crating & shipping	Included in ALPR-H-4001-Traill	1	\$ 0.00	\$ 0.00
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel	ALPR-H-4001-SVCS Included in ALPR	14	\$ 0.00	\$ 0.00
Installation	ALPR-H-4001-INSTALL	14	\$ 2,250.00	\$ 31,500.00
Covert Installation in vehicle	ALPR-H-4001-COVERT	1	\$ 600.00	\$ 600.00
Installation "Kit", Includes all hardware, wiring and software for "do it yourself" standard installations (on poles & trailers)	ALPR-H-4001-KIT	5	\$ 2,500.00	\$ 12,500.00
Training	Included in ALPR	8	\$ 0.00	\$ 0.00
Shipping Mobile LPR 1 camera system	Included in ALPR	4	\$ 0.00	\$ 0.00
Shipping Portable LPR 1 camera system	Included in ALPR	10	\$ 0.00	\$ 0.00
TOTAL				\$ 191,000.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

OPTION YEAR 1 – February 1, 2022 through January 31, 2023				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	ALPR-H-4001-Mobile (4 Camera System) WARRANTY	4	\$ 400.00	\$ 1,600.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	ALPR-H-4001-Port WARRANTY	10	\$ 325.00	\$ 3,250.00
LPR Camera Mounting Brackets for Light Bar		4	\$	\$
LPR Mounting for Portable system		10	\$	\$
LPR Processor		14	\$	\$
Modem		14	\$	\$
LPR Software	ALPR-S-4001	14	\$ 2,500.00	\$ 35,000.00
LPR Speed Trailer complete package. List all items included in price quoted:	ALPR-H-4001-Trail WARRANTY	1	\$ 650.00	\$ 650.00
LPR Speed Trailer crating & shipping		1	\$	\$
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel		14	\$	\$
Installation		14	\$	\$
Covert Installation		1	\$	\$
Installation "Kit", Includes all hardware, wiring and software for do it yourself standard installations (on poles & trailers)		5	\$	\$
Training per hour	TRAIN	8	\$ 80.00	\$ 640.00
Shipping Mobile LPR 1 camera system		4	\$	\$
Shipping Portable LPR 1 camera system		10	\$	\$
TOTAL				\$ 41,140.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

OPTION YEAR 2 – February 1, 2023 through January 31, 2024				
DESCRIPTION	MFG & MODEL QUOTED	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
Mobile LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle; camera with equivalent specifications will be accepted upon demonstration and verification	ALPR-H-4001-Mobile (4 Camera System) WARRANTY	4	\$ 400.00	\$ 1,600.00
Portable LPR 1 camera system, dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle: camera with equivalent specifications will be accepted upon demonstration and verification	ALPR-H-4001-Port WARRANTY	10	\$ 325.00	\$ 3,250.00
LPR Camera Mounting Brackets for Light Bar		4	\$	\$
LPR Mounting for Portable system		10	\$	\$
LPR Processor		14	\$	\$
Modem		14	\$	\$
LPR Software	ALPR-S-4001	14	\$ 2,500.00	\$ 35,000.00
LPR Speed Trailer complete package. List all items included in price quoted:	ALPR-H-4001-Trail WARRANTY	1	\$ 650.00	\$ 650.00
LPR Speed Trailer crating & shipping		1	\$	\$
Start-up, configuration and commissioning of LPR Systems at Sheriff's facility to include all expenses such as travel		14	\$	\$
Installation		14	\$	\$
Covert Installation		1	\$	\$
Installation "Kit", Includes all hardware, wiring and software for do it yourself standard installations (on poles & trailers)		5	\$	\$
Training per hour	TRAIN	8	\$ 80.00	\$ 640.00
Shipping Mobile LPR 1 camera system		4	\$	\$
Shipping Portable LPR 1 camera system		10	\$	\$
TOTAL				\$ 41,140.00

Quantities are estimates only and not guaranteed

COUNTY OF SAN DIEGO - REQUEST FOR BIDS (RFB# 10684)
SHERIFF'S DEPARTMENT
LICENSE PLATE READERS
SECTION C: EXHIBIT C PRICING SCHEDULE

1. PRICING

- 1.1. Enter unit prices and extended prices for each line item, Base Term Period, 1st Option Period, and 2nd Option Period page for each line item.
- 1.2. The aggregate total for each term period combined (Grand Total) will be used as the basis of award
- 1.3. The Pricing Schedule table should not be tampered with or altered in any way.
- 1.4. Bids must meet specifications provided.
- 1.5. ALL items MUST be priced to be considered responsive.**

2. GENERAL REQUIREMENTS

- 2.1 A specifications sheet with pictures and operations manual for the product shall be submitted with the bid.

COMPANY:	Utility Associates, Inc.
REPRESENTATIVE NAME:	Michael Nark, President & CEO
REPRESENTATIVE EMAIL:	mnark@utility.com or proposals@utility.com
REPRESENTATIVE PHONE:	800-597-4707 Toll Free or 404-816-0300

Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the
requester. Do not
send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Utility Associates, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC

☒ C Corporation

☐ S Corporation

☐ Partnership

☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
250 E. Ponce de Leon Avenue, Suite 700

6 City, state, and ZIP code
Decatur, Georgia 30030

7 List account number(s) here (optional)

8 Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			-			-				
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or

Employer identification number

5	8	-	2	5	7	4	3	1	8
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Part II Certification

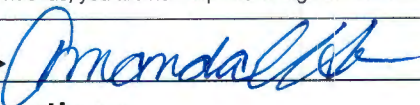
Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign
Here

Signature of
U.S. person ►



Date ► 12/6/19

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
 - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
 - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
 - Form 1099-S (proceeds from real estate transactions)
 - Form 1099-K (merchant card and third party network transactions)
 - Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.



REQUEST FOR BIDS

RFB No. 10684

Sheriff's Department License Plate Readers (Reissued)

ORIGINAL SUBMITTAL

One (1) Electronic Copy Original submitted via email to:

cosd_procurement@sdcounty.ca.gov

in conformance with temporary COVID-19 Instructions per Addendum #1

Closing Date and Time:
December 28, 2020 at 11:00 A.M. PT

County of San Diego
Department of Purchasing and Contracting
5560 Overland Avenue, Suite 270
San Diego, CA 92123-1204

ATTN: Punnita Dinmuong, Assistant Procurement Specialist

Punnita.dinmuong@sdcounty.ca.gov

(858) 505-6367

Presented by
Utility Associates, Inc.



County of San Diego, California

Request for Bids (RFB Reissued) # 10684 for Sheriff's Department License Plate Readers

Submittal: One (1) Electronic Copy Original submitted via email to cosd_procurement@sdcounty.ca.gov
Per Temporary COVID-19 Instructions issued in Addendum #1

Table of Contents

Before Required Documents: Cover Letter

Required Submittal Documents

- P&C 600 Form - Cover Page
 - Representations and Certifications Page
 - Section C; Exhibit C Pricing Schedule
 - Non-Disclosure Indemnification Form - *Not Included, Not Applicable*
 - W-9 Form for Utility Associates, Inc.
-

TECHNICAL SUPPLEMENT - for Discretionary Review

Section 1: Company Qualifications and Experience

- Company Profile and Experience
- *Flyer – Utility Named Innovation Challenge Award Winner by AWS (2016-2019)*
- Project Team for San Diego County Sheriff's Department

Section 2: Approach to Technology

- Summary of the Technical Approach Narrative of the RocketIoT™ ALPR Solution
- Table of Responses to Specifications Section C: Exhibit A Statement of Work
- *Flyer - Five ALPR 'Must Haves'*
- Product Data Sheet for the RocketIoT™ ALPR Solution
- AVaiLWeb™ Digital Evidence Management Platform, and SMART REDACTION™
- *Flyer – Features of RocketIoT ALPR Paired with the RocketIoT™ In-Car Camera*
- Product Data Sheet for the RocketIoT™ In-Car Camera System



Section 3: Appendix - Procurement Information

- Installation Operations Manual for RocketIoT-XLE ALPR
- Summary: Warranties, Terms & Conditions, Software as a Service (SaaS) Agreement
- Summary Sheet: Data Security Documentation
- Summary Sheet: Utility CJIS Compliance, and CJIS Compliance in the Cloud

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the
requester. Do not
send to the IRS.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. Utility Associates, Inc.	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input checked="" type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner. <input type="checkbox"/> Other (see instructions) ► _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ (Applies to accounts maintained outside the U.S.)
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Social security number									
			-			-			
or									
Employer identification number									
5	8	-	2	5	7	4	3	1	8

Part II Certification

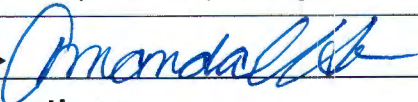
Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
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Sign
Here

Signature of
U.S. person ►



Date ► 12/6/19

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 - Form 1099-K (merchant card and third party network transactions)
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 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

Company Qualifications and Experience

Utility Associates, Inc. is a vertically integrated US manufacturer and supplier of software solutions, digital in-vehicle cameras, advanced license plate readers, mobile routers, mobile digital multi-media evidence management systems, body worn cameras, and situational awareness software solutions for the law enforcement community, transportation agencies, and utilities. With over 50,000 devices deployed, Utility has worked with many progressive first responders, transit agencies and utilities to incorporate industry best practices to help solve critical legal evidence capture and field situational awareness management challenges. We support a base of over 200+ client agencies spanning small 5-unit installations to multi-precinct fleets with hundreds of vehicles and hundreds of officers.

Company Location and Contact Information:

Utility is a Delaware Corporation incorporated in 2001 with Headquarters in Decatur, Georgia, in Metropolitan Atlanta.

Utility Associates, Inc. Global Headquarters:

250 East Ponce De Leon Avenue, Suite 700

Decatur, Georgia 30030

404-816-0300 general office 404-795-0525 fax

www.utility.com www.bodyworn.com



Primary Representatives:

Contract Approval: Michael Nark, President and CEO, mnark@utility.com 404-816-0300

Business Manager: Clay Campbell, Retired Sworn Officer, Business Manager

ccampbell@utility.com, 832-953-9849

Support Manager: Dahlia Blake, Customer Support Specialist dblake@utility.com

Repair and Maintenance: Samson Aberra, Support Manager saberra@utility.com

Utility hardware and software is designed, developed, manufactured, packaged, and shipped at our state-of the-art Headquarters location in Decatur, Georgia, within Metropolitan Atlanta. Utility has more than 80 employees, based in the US in all time zones dedicated to our evidence capture and digital evidence management solutions.

Company Qualifications and Experience

Utility's digital recording software is the proven result of 10+ years of development and deployment in thousands of patrol car video recording systems around the US.

Utility solutions are US FBI CJIS compliant, and Utility maintains state-of-the-art security.

Utility owns key US Patents for video recording systems, including:

- 6,831,556 – Composite Mobile Digital Information System
- 7,768,548 – Mobile Digital Video Recording System
- 8,781,475 – System for Switching between Cellular Networks
- 9,246,898 – Method for Securely Distributing Legal Evidence
- 9,282,495 – Method and Device for Switching between Cellular Networks

Many vendors outsource engineering, software development and support, and/or manufacturing offshore. By contrast, Utility's control of the design, development, manufacturing and customer support experience through our in-house team of professionals allows us to provide a secure, reliable solution, and eliminate an 8,000 miles supply chain, while rapidly innovating and responding to our customer's needs.

Utility solutions are Country of Origin USA, manufactured in the USA.

- Utility is committed to supporting the USA through the Buy American Act and the American Recovery Reinvestment Act, to which all Utility solutions are Compliant.



Amazon Web Services (AWS) City on a Cloud Innovation Challenge Winner

2016, 2017, 2018, 2019



Utility, Inc. has been recognized the past four years by Amazon as a winner of the Amazon Web Services (AWS) City on a Cloud Innovation Challenge for its innovative use of Amazon cloud storage.

Recently in 2019, Utility won the Powered by AWS Award. In a case of a school shooting, police and school administrators need to know immediately when a gunshot happens, where the gun was fired, and what type of gun was fired. Active Shooter Response Technology (ASRT) provides real-time alerts of the location of gunshots to central dispatch, nearby police and resource officers, and school administrators. ASRT ultrasound analysis distinguishes gunshot ultrasounds from other loud noises. Because ultrasounds do not penetrate hard surfaces, the specific gunshot location can be known and reported immediately. The AWS Cloud and ASRT ultrasound waveform artificial intelligence (AI) processing can further identify gunshot signature metadata such as gun type (shotgun, rifle, pistol) and caliber. Police and school administrators can immediately respond. Just as importantly, having ASRT may deter a shooter from assaulting a school.

In 2018, Utility was awarded the Partners in Innovation Award for its cutting-edge police technology. Utility's BodyWorn and In-Car Video systems integrate audio, video, and tactile A.I. to automate video recording policy rules. Gunshot audio recognition automatically triggers recording and smart saves pre-event audio and video whenever a gunshot happens close to an officer. Smart Holsters automatically start recording when a weapon has been pulled. In-Car Video AI automatically captures license plate numbers to support immediate analysis.

Utility's partner agency, Lawrence Police Department (IN) was awarded the Best Practices Award in 2017. Aiming to improve public safety, reduce crime, and build public trust between police and the citizens they serve,

the Lawrence Police Department partnered with BodyWorn by Utility to provide Body Worn Camera technology. The project used AWS for big data storage and analytics. Video and audio recording collected by police officers is instantly, effortlessly uploaded in a safe, encrypted storage environment.

In the previous year, 2016, Utility was presented the Partners in Innovation Award for its BodyWorn camera and AVailWeb evidence management Solutions.

Robert McKeeman, Vice President of Utility said, "Being named as a winner by Amazon Web Services for our innovative solutions to solve a government challenge solidifies our work to meet our mission to make police officers' jobs safer, while protecting Privacy for Police Officers and Citizens, and enabling Police Accountability and Transparency. Through our partnership with Amazon Web Services, we provide our customers with a very reliable and cost effective video management and redaction solution."



Utility's customers can choose to access to Amazon AWS-based e-discovery, e-citation, secure image management, mobile forensics, crime forecasting, major risk event management, public records management, backup, archival and disaster recovery tools on the Amazon AWS Cloud.

Project Team for San Diego County Sheriff’s Department

Project Customer Success Team

A successful and seamless implementation is vital for Utility to build lasting customer partnerships. The San Diego County Sheriff’s Department relationship will be managed by the **Customer Success Team**, and led by Utility’s Clay Campbell (retired officer, Harris County TX Sheriff’s Office), who will guide the focus of other key personnel to ensure that your needs will be our team’s top priority. Clay Campbell will have direct contact and interaction on this project to ensure the system is meeting expectations.



Customer Operations and Project Management Teams

System implementation will be led by **Customer Operations**, by the **Project Management Team**, and **Implementation Team**, which will be solely dedicated, from start to finish, to the success of the deployment of the mobile video system for the San Diego County Sheriff’s Department. We propose Claude Poux as our designated **Project Manager** for this project. A resume for Claude Poux is provided below. Claude Poux has more than eight years of experience in project and program management, analysis and information security. He will be responsible for adhering to scheduling deadlines and overall management of the project, with experience on recent projects similar to this project. His background demonstrates his ability to keenly manage and solve applied technology problems.

Claude R. Poux

| Duluth, Georgia 30096

T: 770.895.8161 E: cpoux325@gmail.com



Professional Profile

Highly knowledgeable and dedicated project management professional with extensive experience in a variety of project focused activities and coordination in both corporate and business administration. Eager to apply creativity and client relational skills and improve organization effectiveness with a vision that promotes success.

Skills

- Project Planning & Management
- Tradeshow Marketing & Sales
- Drafting & Analyzing Reports
- Training Material Composition
- Metrics Execution
- Compliance Analysis
- Material Take off estimator
- Small Business Operations

Technical Proficiencies

Software Programs:

- MS Office Suite: Word, Excel, PowerPoint, Outlook, Access, Publisher, FrontPage
- Internet Explorer, Mozilla Firefox, Apple Safari, Google Chrome
- Provide Information Platform, Oracle 11i & R12, Infolase, Salesforce, and SAGE

Experience

Body Worn by Utility (Elite Technical) | Decatur, GA Project Manager

09/2019 – Present

Manage and coordinate all stakeholders and parts required to successfully complete full-scale deployments for Law Enforcement agencies.

Develop and manage project plans, schedules and resources using an agile or adaptive approach to ensure optimal quality.

Initiate and lead conference, video calls and meetings for Sales handoffs, kick off calls, and closeouts meetings with stakeholders.

Oversee project procurement management while tracking and managing incoming documents from vendors, purchasing, logistics and engineers providing field service.

Manage project knowledge and communication for all team members and stakeholders

Develop, maintain and enforce scope of work to ensure project follows agreed upon guidelines and action items to ensure that milestones, timelines and schedule compliance are met.

Caterpillar Switchgear (Rose International, Inc.) | Alpharetta, GA Project Manager

09/2018 – Present

Ammacore | Roswell, GA Project Manager

09/2017 – 05/2018

Nichiha USA | Johns Creek, GA Project Coordinator

03/2016 – 07/2017

Coca-Cola/Randstad | Alpharetta, GA Project Install Coordinator (Contract)

08/2014 – 02/2016

Education

University of Florida, College of Journalism & Communications
Bachelor of Science in Public Relations

Utility's **Senior Field Engineer** Ricky Vaugh will lead the **Implementation Team**, which is responsible for the initial configuration and project setup. The team leader is a Certified Dell Systems Expert, a Certified Microsoft Expert (Network Administrator, Windows XP, Server, Messaging) with more than 25 years of experience. This team will initially work with both your sworn and technology staff to ensure proper configuration and then will direct the training sessions with officers and support staff.

Training for this project will be led by Michael Freeman. Michael has a mastery of formal classroom instructor training, with relevant experience with the software and hardware. He possesses a thorough knowledge of the equipment and the AVaiLWeb™ digital evidence management system. He has mastery of the subject material, training process, system documentation tools, and training aids. Michael is highly competent, and able to work independently of outside support to accomplish the San Diego County Sheriff's Department goals and objectives.

The **Customer Success Team**, **Customer Operations Team**, and **Implementation Team**, will work with appointed staff from the Sheriff's Department in an integrated, streamlined process for a seamless and efficient delivery of services.

The RocketIoT™ ALPR implementations are all-inclusive. They include technical support and assistance devices, networking equipment, video uploading, charging, connectivity, system software and upgrades, and data and video retrieval software and procedures.

The technical system functionality is fully managed by our software engineers to ensure that it will always be up to date for all of our customers on our Cloud-based platform. All system upgrades are all done over-the-air (OTA), without requiring officer effort.



Technical Approach of Utility's RocketIoT ALPR™, and AVaiLWeb™ Digital Evidence Management System (DEMS)

The Ultimate Ecosystem

Mission Critical Mobile Intelligence.

**Protect What's Important:
Accurate Detection, Connectivity and Officer Safety**



Capture high-quality license plate images with our AI on-the-edge ALPR system. Upload ALPR recordings instantly to the cloud via LTE cellular



Utility's Virtual Command Center – a comprehensive user-friendly online platform allows the user to store, manage and retrieve digital data at the click of a button.



Download CCIC/NCIC data directly (by Department's credential) to the RocketIoT ALPR™ 'box', without human review. Data is only used to look up license plates that are read 'on the street'.



All ALPR data collected 'on the street' by Utility is encrypted and securely stored in the cloud.

Share captured data within Utility's Virtual Command Center using our state-of-the-art digital evidence management system.



The RocketIoT ALPR™ License Plate Reader Camera System (RocketIoT ALPR™) is an all-inclusive, turnkey, cloud-based solution. The RocketIoT ALPR™ and AVaiLWeb™ DEMS are provided as a System as a Service (SaaS) subscription. The SaaS subscription provides complete end-to-end security from the time data is captured and recorded until it is purged at the end of the retention classification. Utility provides unlimited storage at no additional cost to the Department.



Utility's technology model is not reliant upon the Vigilant Learn cloud platform, and instead drives LPR using Artificial Intelligence (AI) at-the-edge, and real-time connectivity to Hot Lists from State, local and Federal data sources. The RocketIoT ALPR™ features highly sophisticated optical technology and machine learning algorithms to improve accuracy and efficiency.

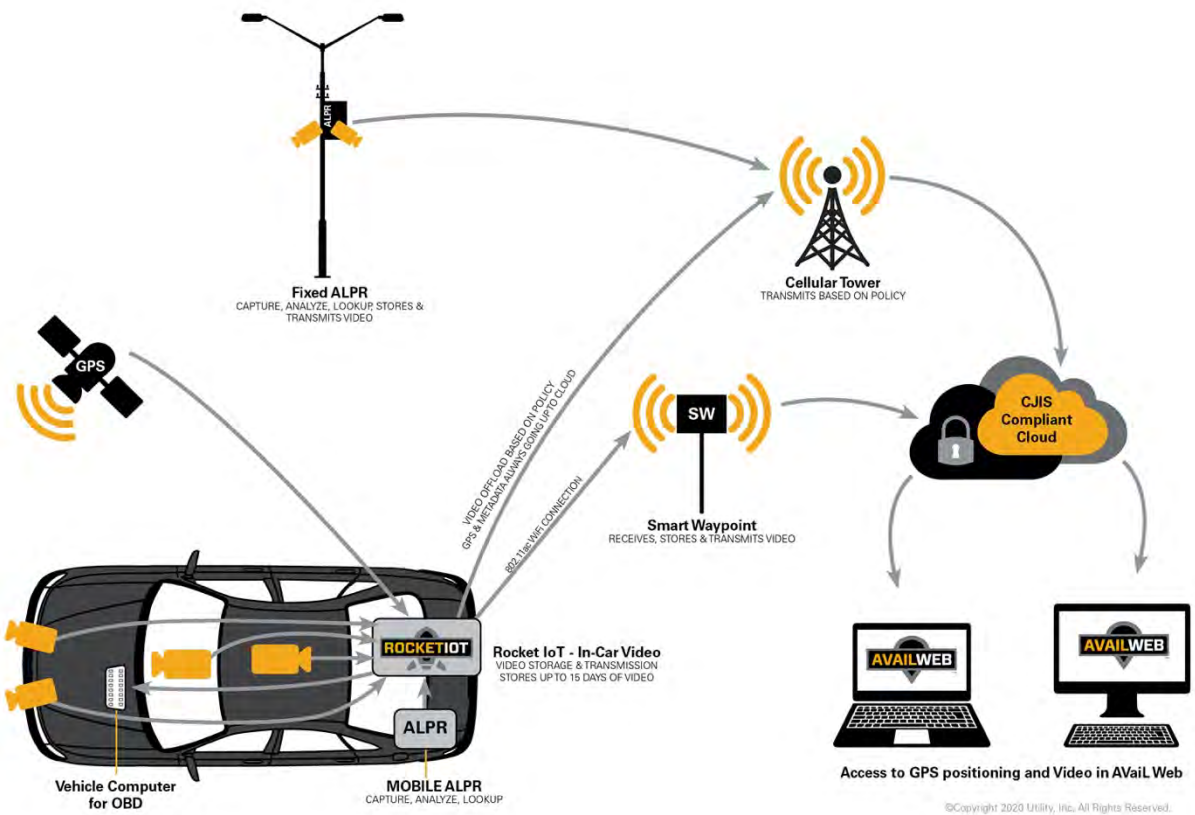
Utility's RocketIoT ALPR™ allows today's efficiency-focused law enforcement leaders to use AI enhanced technology to accurately capture and manage digital data. This provides officers a Smart ALPR tool to help protect their community and themselves from mobile threats.

This combination of features and capabilities is unmatched by any other solution, and is designed to serve as a Force Multiplier, promote a Connected department, and offer a Pathway to Future Integrations, such as CAD, RMS, and mobile video camera systems.

Utility's ALPR™ technology is a partnership with Sony Corporation, and is installed in fixed stationary applications and in-vehicle applications for customers across the US.



This narrative describes a system overview of technical features, capabilities, and design considerations that are included in the RocketIoT ALPR™ Ecosystem, beginning with a description of RocketIoT ALPR™, and AVailWeb™.



(The Exhibit above also details the optional integration of Utility's FirstNet Certified RocketIoT™ in-car DVR/Router, part of the RocketIoT ALPR™ technology Ecosystem).

Utility is a video communications industry-leader. As such, we provide the following link to video presentation of the RocketIoT ALPR™ system:

<http://bodyworn-4053552.hs-sites.com/en/knowledge/smart-alpr>



The RocketIoT ALPR™ is a smart license plate reader device that utilizes real-time 4G-LTE cellular communications provided by its own LTE connection. The device has capability for a variety of sensors and configurable operating software for autonomous processing. This combination of software and communications driven technology provides Smart ALPR recording control, automatic safety reporting (such as “ALERT” bulletins), and when used in combination with the RocketIoT™ in-car DVR/Router can enable geofence zone awareness.



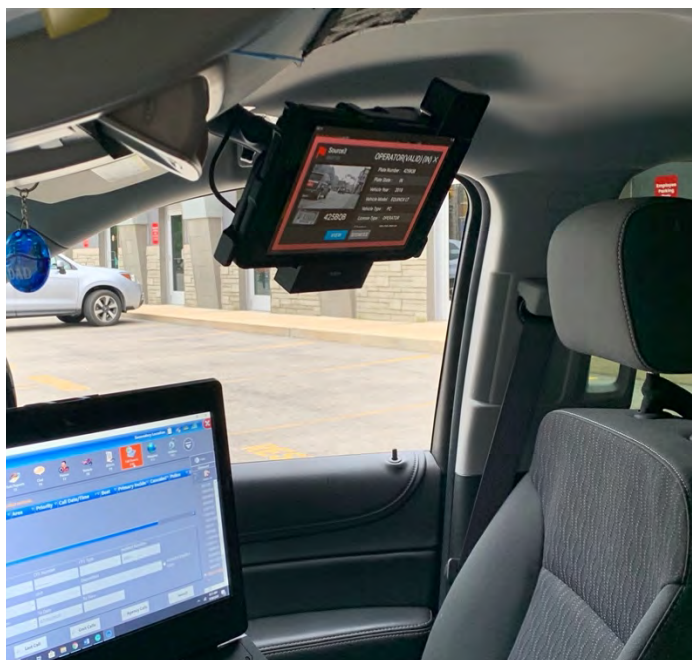
RocketIoT ALPR™ also offers the ability to receive messages and take actions based upon configuration rules processed by software that can be updated at any time.

RocketIoT ALPR™ Camera Mounting Options

Utility’s ALPR™ technology is installed in in-vehicle applications and fixed stationary applications for customers across the US, with in-vehicle mobile, as well as stationary fixed-mount options.



View of Typical Mobile Vehicle Mounting Option



View of Typical Mobile In-Vehicle AVaiLWeb™ Access



The RocketIoT ALPR™ operates with shore power (120V). Utility's future technology roadmap for the device includes solar power capability.

View of Typical Stationary Fixed- Mounting Option



RocketIoT ALPR™ data is managed by Utility's AVaiLWeb™ platform. AVaiLWeb™ pulls



together all devices and data in the system - ALPR license plate data, meta data (and any Rocketlot in-vehicle DVR video, audio and metadata, if available) — into one platform keeping the process streamlined. All captured images and metadata can be viewed instantly

and managed within the platform. The system allows for additional features, such as Live Video streaming for more urgent situational awareness incidents. Additionally, device data is tied together in the system to provide a clearer picture, with timeline and tags of everything that took place. All of these connected data sources (and Utility's ALPR and video camera devices) can be remotely configured through AVaiLWeb™, by sending over-the-air updates.

Accessing Data Bases

RocketIoT ALPR™ data managed by Utility's AVaiLWeb™ provides access to:

NCIC

- Criminal Data
- Wanted Felons
- Stolen vehicles

State

- Expired Plates
- Vehicle Holds
- Suspended Driver Files
- Habitual Traffic Violators

Local

- Be on the Lookout (BOLOs)
- Crime Information Bulletin (BIC)



RocketIoT ALPR™ is a Smarter System

Typical LPR systems use video streams to **capture** pictures, **analyze** the picture to find license plates, then do a **lookup** to find a match within the database, and then it is **displayed** to an officer, either at computer viewing device at a remote location, or in the officer's car.

RocketIoT ALPR™ provides a better way to integrate the system for a real-time approach to ALPR. Utility's development process with Sony had the objective to not only capture and analyze the data at-the-edge, but then share that data with the cloud so that decisions could be made to disseminate that information to officers and other staff within the agency (or outside the agency) who need it as quickly as possible.

Like typical LPR systems, the RocketIoT ALPR™ system captures using camera feeds. RocketIoT ALPR™ uses picture analysis, but uses *artificial intelligence for the analysis* part. The agency using RocketIoT ALPR™ benefits from the advantage of ability of the ALPR BOX to process dozens of pictures per second. It can analyze a substantial amount of data while the vehicle is moving at high speeds or stationary, and even at night.

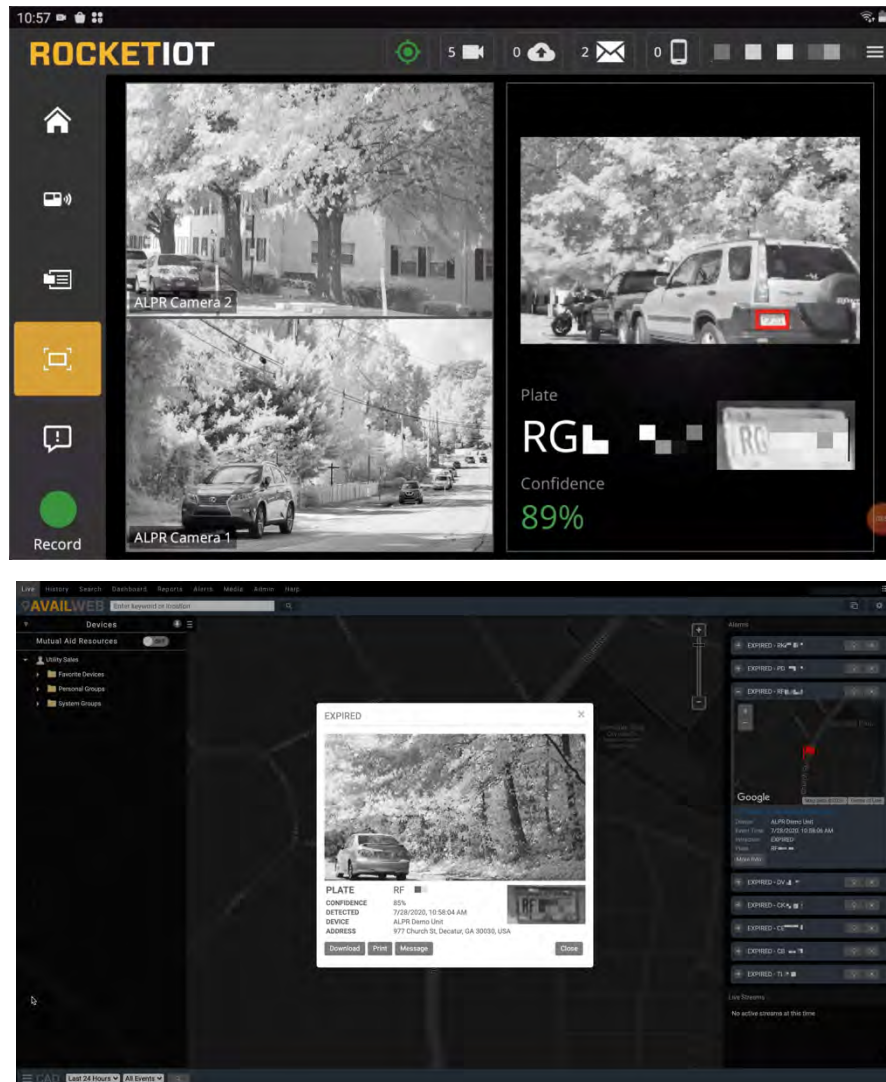
Like typical LPR systems, the RocketIoT ALPR™ lookup is similar. RocketIoT ALPR™ allows lookups from state and NCIC Federal databases. RocketIoT ALPR™ has an additional level of lookup by allowing BOLOs to be sent directly from AVaiLWeb™ into an agency-specific lookup database, immediately.

For Example, if there is a need for an Amber Alert, and you have the vehicle plate information, you can create a BOLO within AVaiLWeb™ and send it out to be accessed within AVaiLWeb™ from within all vehicles, either from a MDC or Utility's in-car mounted ALPR system. This integration enables every patrol vehicle to be on the lookout for that vehicle tag.



Plate Detection of Hits

The AVailWeb™ platform view below shows actual images from two 'live' views of RocketIoT ALPR™ cameras. Both mobile and stationary mounted cameras can be easily adjusted. Whether the camera is stationary mounted, or a mobile in-car camera out on patrol, the data is constantly being collected and entering the system. Captured data paired to NCIC data, and state and local databases that are downloaded directly to the RocketIoT ALPR™ box on a daily basis.



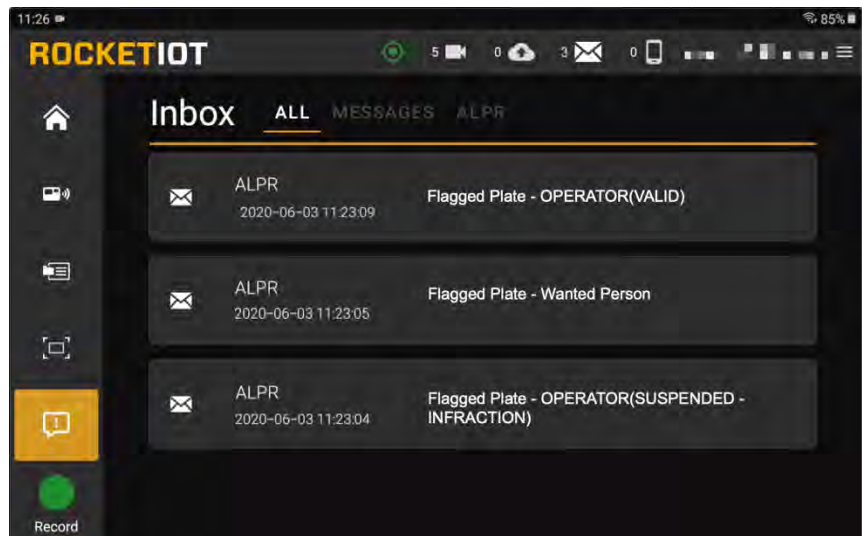
(The plate in the image is redacted since this plate was a real hit).

The RocketIoT ALPR™ box goes through and compares data, so when a hit is obtained, the system shows it. As user can see when it captures a plate. It will capture an image, and highlight the plate with a red box. Below that is the plate number and how confident it is that it is the correct plate. A hit rated 80% or above is very accurate.



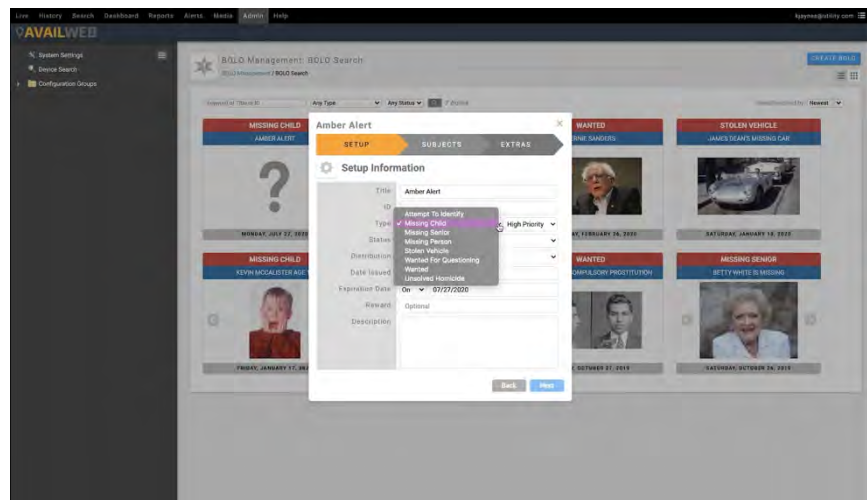
Rapid Processing and Analysis

The RocketIoT ALPR™ analyzes and processes rapidly. The AVaiLWeb™ platform view above shows the system finding 3 matches within a matter of seconds. In this instance, the RocketIoT ALPR™ even caught an NCIC plate. In this list view, you can see that these three hits were processed and recognized with 5 seconds. From the list view above, it can be seen that the hits were happening within 5 seconds.



Alerts

Using AVaiLWeb™, the system can inject BOLOs. For any BOLOs or local watch sheets that involve a vehicle plate, the system can automatically ingest that information and push it out to the officers using AVaiLWeb™ immediately. For officers accessing AVaiLWeb™ in the field, this can provide more 'eyes on the street' looking for that vehicle.





Database and Optional Software

Departments will need access to a current desktop Web Browser and Broadband internet connectivity to use the AVaiLWeb™ digital evidence management service. There is no additional or optional Software or Hardware needed to use the AvaiLWeb™ service.

Pathway to Future Integrations for Better Connectivity

The RocketIoT ALPR™ allows a pathway for full integration and connectivity, depending upon the optional devices and other optional agency integrations that are desired. Ultimately, the RocketIoT ALPR™ has the ability to define policies that would allow agencies to integrate and associate the license plate number and the vehicle picture data with the capture of video evidence in addition to getting.

Other optional integrations can enable more connectivity. For example, when a plate is detected in the system, then actionable decisions can be made. Instead of just displaying it to the officer in the vehicle, the system can push that data up to the cloud. Then, from the cloud, the data would be pulled into AVaiLWeb™ where it would be displayed on the Dispatcher's screen in real-time, with Utility's devices supporting CAD integration.

Taking it one step further, the Department can send the plate alert data to an officer in proximity of where the vehicle was spotted, allowing the agency to have quicker reaction time to critical information, with Utility's camera devices supporting live video and data communications. In this instance, an officer on patrol in a 'district' could have near real-time integration with plate images being captured live by stationary-mount ALPR within the same geographic vicinity, which can enable immediate follow up and more timely pursuit of violations and perceived threats.

The vision of a fully integrated system for law enforcement offers the promise to provide more information for better law enforcement investigation, improved officer safety, and safer communities.

**County of San Diego, California****RESPONSE TO SPECIFICATIONS by UTILITY ASSOCIATES, INC.****Re-Issued Request for Bids (RFB # 10684) for Sheriff's Department License Plate Readers****Section C: Exhibit A Statement of Work**

Item	Question	Vendor Response
3.1 SECURITY		
3.1.1	Must be compliant with California Senate Bill 34 (SB34).	<p>Meets Requirement.</p> <p>Utility has reviewed and understands this requirement and will comply.</p> <p>Provisions of SB34 require an ALPR operator to maintain a specified record of access and require that ALPR information only be used for authorized purposes. Utility's RocketIoT ALPR™ with AVaiLWeb™ digital evidence management system provides a robust audit log of all data and recordings that details access, viewing or playback, edits, deletions, commenting, shares, downloads, transfers, etc. These logs take the form of a detailed Chain of Custody that is an audit trail, which every incident/recording has. AVaiLWeb™'s Chain of Custody report shows information about an incident/recording such as who or what activated the recording, who or what deactivated the recording, any classifications or notes that are added or modified for the recording, any retention action that is taken, any exports to an external source, and any other action that is taken on an incident. Each interaction in this report includes a date/time stamp, the user's username, and IP Address. AVaiLWeb™ includes a User Access Custody report which shows all actions taken by a user for a given time frame, such as videos viewed, shared, or exported.</p> <p>These reports are printable and exportable into PDF format.</p> <p>To clarify, Utility does not collect or review any personal information.</p>



3.1.2	Single Sign-On (SSO) implementation options	See responses below:
3.1.2.1	Security Assertion Markup Language (SAML) 2.0 compliance	<p>Meets Requirement.</p> <p>Utility's RocketIoT ALPR™ with the AVaiLWeb™ digital evidence management system supports Single Sign On (SSO), based on SAML 2.0.</p>
3.1.2.2	Other SSO methods, such as Active Directory and Office 365.	<p>Meets Requirement.</p> <p>Utility's RocketIoT ALPR™ License Plate Reader Camera System with the AVaiLWeb™ digital evidence management system supports Single Sign On (SSO), working with your existing Active Directory Federation Services (AD FS) system. When you activate SSO for your users, they don't need to remember another password. They will be authenticated by your Windows Active Directory system. AD FS will forward the authenticated user's information to AVaiLWeb™, and the user will be logged in to AVaiLWeb™ just as if they had supplied the correct username and password.</p>
3.1.3	User and Entity Based Behavioral Analytics (UEBA)	<p>Meets Requirement.</p> <p>Both Utility and our data partner Amazon Web Services maintain robust Standards and Compliance Services, and each performs these activities, including to identify risks, threats and vulnerabilities, as well as the integrity of the data itself.</p> <p>In order to ensure 24/7/365 uptime, Utility employs real-time activity simulation that reproduces and verifies that the system is performing from end-to-end. This simulation allows Utility to uniquely identify performance issues before a client notices or reports them to Utility.</p> <p>AWS maintains security on the underlying virtual infrastructure. AWS Security performs regular vulnerability scans on the infrastructure, web application, and databases in the AWS environment using a variety of tools.</p> <p>Utility's Technology Development Roadmap includes User and Entity Based Behavioral Analytics (UEBA).</p>



3.1.4	Distributed Denial of Service (DDoS) protection	Meets Requirement. Both Utility and our data partner Amazon Web Services have built-in protections against DDoS.
32.1.5	Data sanitization and anti-malware prevention. Minimizing attack vectors throughout the LPR solution using a multi-layered approach	Meets Requirements. See responses below:
3.1.5.1	Anti-malware scanning and threat prevention with up to date signatures	Not Applicable. The RocketIoT ALPR™ with AVaiLWeb™ solution is provided as a System as a Service (SaaS) subscription, and is accessed a computer desktop or in the field, via the internet, using a common web browser. There is no requirement to install software on County computers, and as such the County will not be subject to this threat.
3.1.5.2	Alerts and notifications	Not Applicable. See response above.
3.1.5.3	Input sanitization: All data coming into the system from users or application programming interfaces (API's)	Meets Requirement. Utility sanitizes all user input and API input.
3.1.5.4	White list of file types for attaching/uploading for all purposes	Meets Requirement. The RocketIoT ALPR™ with AVaiLWeb™ supports a client configurable white list of file types for uploading files to cases. This is the only feature in the system where uploading files is applicable.
3.1.5.5	File Contents Disarm and Reconstruction (CDR)	Meets Requirement. AVaiLWeb™ has this capability built-in as part of input sanitization.
3.1.6	Disaster Recovery	Meets Requirement. See responses below: Utility's RocketIoT ALPR™ and AVaiLWeb™ is an all-inclusive solution, provided as a 'System as a Service' (SaaS) subscription, which is hosted in



		<p>AWS GovCloud, and all evidence is stored redundantly and within AWS geographically separated CJIS-compliant cloud environments. This methodology provides 99.999999999% resiliency for your data.</p> <p>Utility Associates, Inc. is an approved elite Launch Partner in the AWS Public Safety & Disaster Response Competency program. See details about the program at AWS' upcoming conference event Re:Invent 2020, and at this link: https://aws.amazon.com/stateandlocal/justice-and-public-safety/partner-solutions/?partner-solutions-cards.sort-by=item.additionalFields.partnerNameLower&partner-solutions-cards.sort-order=asc</p>
3.1.6.1	Data protection, backup, and recovery strategy	<p>The RocketIoT ALPR™ with the AVaiLWeb™ digital evidence management system is hosted in the CJIS-compliant AWS GovCloud.</p> <p>The hosted solution resiliency programs identify, respond to, and recover from a major incident, with contingency management, business continuity, and disaster recovery plans. It identifies critical system components required to maintain the availability of the system, recovers services in the event of an outage from physically separate locations, maintains authoritative backups, employs continuous infrastructure capacity planning, and monitors to ensure successful replication.</p> <p>Further information on disaster recovery can be found at: http://bit.ly/2NA4rRV.</p>
3.1.6.2	Disaster recovery liability in case of catastrophic event	<p>Meets Requirements. See the responses in 2.1.6, and 2.1.6.1 above.</p> <p>Both Utility and our data partner Amazon Web Services maintain robust disaster recovery in case of catastrophic event, which is ongoing, continuous and geographically distributed. As such there, our disaster recovery liability is minimized effectively to zero.</p>



3.1.7	California Consumer Privacy Act (CCPA) compliance	<p>Meets Requirement.</p> <p>Utility has reviewed and understands this requirement and will comply.</p> <p>To clarify, Utility does not collect or review any personal information.</p>
3.1.8	Vendor shall provide a secure, database encrypted and web-based system that provides real-time access to uploaded data	<p>Meets Requirement.</p> <p>The RocketIoT ALPR™ with AVaiLWeb™ is hosted in AWS GovCloud. All evidence is encrypted at rest and in transmission using AES 256-bit encryption.</p> <p>AVaiLWeb™ is a robust evidence management system. Users interact with on a computer desktop or in the field, for real time access to uploaded data, via the internet, using a common web browser.</p>
3.1.9	Vendor shall allow authorized users access to LPR data in a number of LPR-specific dashboards	<p>Meets Requirement.</p> <p>The RocketIoT™ ALPR dashboard is accessed in AVaiLWeb™ on a computer desktop or in the field, via the internet, using a common web browser. AVaiLWeb™ provides authorized users access to LPR data in a number of LPR-specific dashboards.</p>
3.1.10	Dashboard will show LPR vehicle scans in an easy to read graphical format	<p>Meets Requirement.</p> <p>AVaiLWeb™ is a robust evidence management system, and the AVaiLWeb™ dashboard is accessed on a computer desktop or in the field, via the internet, using a common web browser. AVaiLWeb features an intuitive, easy to use graphical user interface, and has the capability to integrate with GPS, CAD and RMS.</p>
3.1.11	LPR dashboard will show vehicle location, images captured and provide the ability to search using the license plate	<p>Meets Requirement.</p> <p>The AVaiLWeb™ RocketIoT ALPR™ dashboard will show vehicle location, images captured and provide the ability to search using the license plate.</p>



3.1.12	Vendor shall provide an option to purge data at specified intervals or dates	<p>Meets Requirement.</p> <p>Retention within AVaiLWeb™ takes place automatically based on custom retention periods by classification type to be defined by the Department. There is also a retention period for unclassified incidents. These retention periods can easily be configured, or modified, to maintain consistency with Department-defined policy.</p>
3.1.12.1	Provide notification of purge date.	<p>Meets Requirement.</p> <p>AVaiLWeb™ provides a purge notification report that is easy to access.</p>
3.1.12.2	Provide confirmation and notification that specified data was purged.	<p>Meets Requirement.</p> <p>AVaiLWeb™ authorized users can easily access records to confirm whether they are active or already purged.</p>
3.1.13	Data uploaded will only be shared at the discretion of an administrator designated by the San Diego County Sheriff's Department	<p>Meets Requirement.</p> <p>Exports and redactions are owned by, and accessible to, the AVaiLWeb™ user who is working with that specific export or redaction job. Other users will have access to that export or redaction job only if the owner shares it with them.</p> <p>Authorized AVaiLWeb™ users can share cases. The AVaiLWeb™ platform has the ability to create case files to maintain all relevant information for a specific case in one file. File data can be sourced from LPR (both Portable fixed stationary, and Mobile vehicle mount cameras), in-vehicle cameras, body cameras, surveillance video and other sources.</p> <p>When sharing is initiated, the recipient receives an email that includes the case title. The use can also include a free form 'reason' message for the sharing action. When the recipient accesses the shared case within AVaiLWeb™, they have access to all of the case meta data including: case title, notes, case creation date, included media, etc.</p>

**3.2. LPR CAMERAS**

3.2.1	Vendor shall have LPR systems capable of being installed on a fixed object (i.e. light pole), marked patrol vehicles, covert vehicles and speed trailers.	<p>Meets Requirement.</p> <p>RocketIoT ALPR™ can be used for Portable fixed object stationary mounted applications, and can be easily relocated and re-mounted.</p> <p>RocketIoT ALPR™ is also deployable as a Mobile mounted application for marked patrol vehicles, covert vehicles, and speed trailers, etc. The in-vehicle installation comprises ALPR, DVR video camera and a high-speed router in a single device, which connects to the agency network. This eliminates the need for separate devices and reduces the cost and space needed in the squad vehicle.</p>
3.2.2	Marked patrol vehicle camera mounting brackets must be compatible with Whelen, Code3, TOMAR, Federal Signal, Arjent S2 light bars	<p>Meets Requirement.</p> <p>RocketIoT ALPR™ mounts (external to the vehicle) with a universal bracket, compatible with standard industry equipment.</p>
3.2.3	Cameras shall be self-illuminating Infrared (IR) for effective license plate image capture in a variety of weather and lighting conditions	<p>Meets Requirement.</p> <p>RocketIoT ALPR™ has the capability for automatic and manual day and night modes. RocketIoT ALPR™ has the capability for color, with an infrared range of 40M (131 ft.).</p>
3.2.3.1.	Non-IR cameras will be accepted upon demonstration and verification of its equivalency	Utility has read and understands this requirement and will comply.
3.2.4	LPR cameras shall be water-resistance with few moving parts that can be damaged	<p>Meets Requirement.</p> <p>RocketIoT ALPR™ is a solid state, cast aluminum device that has few moving parts that can be damaged. RocketIoT ALPR™ is rated IP67 weatherproof, rated MIL-810 for vibration, rated for a temperature range of -30 degrees Celsius to 50 degrees Celsius, and rated IK10 for vandal proof housing.</p>



3.2.5	LPR cameras shall have the ability to automatically capture all variations of California license plates, to include California dealer issued plates (paper plates)	Meets Requirement. The RocketIoT ALPR™ ability to capture California dealer issued plates (paper plates) requires custom configuration.
3.2.6	Cameras shall have a dual lens configuration in a single camera housing, featuring both an IR lens for license plate capture and a color overview image of the vehicle for verification purposes	Meets Requirement. The RocketIoT ALPR™ has the ability to run in color continuously, delivering superior performance.
3.2.7	Cameras shall be sealed to NEMA 6 (IP67) standards	Meets Requirement. RocketIoT ALPR™ cameras are rated IP67 weatherproof, rated MIL-810G for vibration, shock temperature (range of -30 degrees Celsius to 50 degrees Celsius), and rated IK10 for vandal proof housing.
3.2.8	Dual lens camera shall be capable of capturing up to 60 frames per second	Meets Requirement. RocketIoT ALPR™ captures images at an adjustable rate of 30 fps or 60 fps.
3.2.9	Cameras shall have the ability to adjust shutter, brightness, and gain settings to ensure a high-quality image regardless of weather or lighting conditions	RocketIoT ALPR™ has the capability for automatic and manual day and night modes.
3.2.10	The cameras shall be able to have a fixed focal point or target distance from the camera to the vehicle's license plate from 9 ½ feet to 30 feet	Meets Requirement. RocketIoT ALPR™ has a capture range that meets and exceeds the 9 ½ feet to 30 feet requirement.
3.2.11	The camera shall be capable of various configurations to capture plates in any of the following modes depending on the configuration:	Meets Requirements. See responses below:
3.2.11.1	An adjacent lane on either side of the vehicle while driving through traffic and/or parking lots	Meets Requirement. The RocketIoT ALPR™ has single or multiple camera image capture



		capability, and includes the ability to capture plates in adjacent lane on either side of the vehicle while driving through traffic and/or parking lots.
3.2.11.2	Traffic in an adjacent lane while parked on the side of the shoulder of a roadway	<p>Meets Requirement.</p> <p>The RocketIoT ALPR™ has single or multiple camera image capture capability, and includes the ability to capture plates in traffic in an adjacent lane while parked on the side of the shoulder of a roadway.</p>
3.2.11.3	Parked vehicles in parking lots	<p>Meets Requirement.</p> <p>The RocketIoT ALPR™ has single or multiple camera image capture capability, and includes the ability to capture plates from parked vehicles in parking lots.</p>
3.2.12.	Each camera shall have the ability to read more than one lane	Meets Requirement.
3.3. LPR PROCESSOR		
3.3.1	Processor shall have a "self-trigger" mode to detect the presence of correctly mounted vehicle license plates in the camera's field of view for image capture from the camera	<p>Meets Requirement.</p> <p>The RocketIoT ALPR™ is in a self-trigger mode upon activation.</p>
3.3.2	Processor's installed in vehicles shall be equipped with an intelligent Power Supply Unit (PSU) that provides for a safe start and shut-down each time the vehicle's ignition is turned on and turned off	<p>Meets Requirement.</p> <p>The RocketIoT ALPR™ device monitors ignition and will intelligently turn on and turn off in a safe manner with a configurable shut down timer.</p>
3.3.3	Processor controls the power supplied to the cameras and provides video connection points for simplified system wiring	<p>Meets Requirement.</p> <p>Power and control to the cameras is provided by the RocketIoT ALPR™ system, using PoE.</p>



3.3.4	Processor shall have at least four (4) LPR camera connections and multiple USB ports	Meets Requirement. RocketIoT ALPR™ has the ability to connect up to four cameras, as well as a USB port that is capable of generating a hub for multiple USB ports.
3.3.5	Vehicle mounted processors shall meet the environmental conditions associated with being mounted in a trunk	Meets Requirement. RocketIoT ALPR™ vehicle mount is rated IP67 weatherproof, rated MIL-810G for vibration, rated for a temperature range of -20 degrees Celsius to 70 degrees Celsius.
3.4 LPR SOFTWARE		
3.4.1	Application software shall be capable of running on a Windows based mobile computer	Meets Requirement. AVaiLWeb™ and RocketWeb™ are browser-based applications which supports the RocketIoT ALPR™. They can be accessed on a computer desktop, or on a tablet or MDC in the field, using a common web browser. It runs on standard web browsers, including Chrome, Internet Explorer, Edge, and Firefox. It is capable of running on a Windows based mobile computer. There is no requirement for installation of the application software on County computers.
3.4.2	There shall be no Java programming or Java derivatives	Meets Requirement. RocketIoT ALPR™ is accessed using a standard web browser. There is no requirement for installation of the application software on County computers.
3.4.3	LPR system shall have real time alerting and the ability to program custom hotlist	Meets Requirement. RocketIoT ALPR™ has real time alerting, and the ability to program custom hotlist.



3.4.4	There shall be a secure login and password function on the LPR software; The user's access shall be controlled by an administrator designated by the San Diego County Sheriff's Department	<p>Meets Requirement.</p> <p>The RocketIoT ALPR™ License Plate Reader Camera System operates with AVaiLWeb™, Utility's centralized web based digital evidence management system.</p> <p>AVaiLWeb™ provides a simple way to manage individual user profiles and security settings by providing administrators a way to define security roles with a unique set of permissions. Since each user has a security role tied to them, you always have a quick way to manage what a user has access to.</p> <p>The various permissions assigned to roles define exactly what users are allowed to do and not allowed to do within the system. Permissions include field video review, managing video markers and notes, who can review whose and which videos (by classification or sealed status), export and redaction, user permission and group management, etc.</p>
3.4.4.1	API capable of integrating user defined active directory	<p>Meets Requirement.</p> <p>RocketIoT ALPR™ with the AVaiLWeb™ supports Single Sign On (SSO), working with your existing Active Directory Federation Services system.</p>
3.4.5	The software shall provide live, simultaneous display of all the following data:	Meets Requirements. See responses below:
3.4.5.1	The license plate image	<p>Meets Requirement.</p> <p>For each capture within the RocketIoT ALPR™ system, a snapshot of the tag is presented to the officer/operator.</p>
3.4.5.2	The license plate interpretation or system read	<p>Meets Requirement.</p> <p>For each capture within the RocketIoT ALPR™ system, the officer/operator is presented with the system read of the tag.</p>



3.4.5.3	A corresponding color overview of the vehicle displaying the captured IR license plate	Meets Requirement. The RocketIoT ALPR™ has the ability to run in color continuously, and when it is in color mode, it will present the corresponding color overview of the vehicle displaying the captured IR license plate, as well as the captured license plate.
3.4.5.4	The date and time stamp	Meets Requirement.
3.4.5.5	Identification of the camera capturing the image	Meets Requirement.
3.4.6	Software shall capture GPS coordinates for every recorded license reads	Meets Requirement.
3.4.7	Software shall have the ability to GPS stamp all the reads	Meets Requirement.
3.4.8	Software will give a unique audible and visible alert when a wanted license plate is discovered	Meets Requirement. The RocketIoT ALPR™ will present to the officer both audible alert, as well as a 'red flashing area' around the tag.
3.4.9	The Alert Screen remains displayed until acknowledged by the user, and, while displayed, the system continues to process license plate data in the background	Meets Requirement.
4.0 LPD SPEED TRAILER – Complete Package		
4.1.	Solar LPR Trailer with Speed Sign	Meets Requirement. Utility will provide solar LPR Trailer with Speed Sign
4.2.	Solar LPR Trailer shall be able to operate at least three (3) days	Meets Requirement.



4.3.	Speed signs will be radar equipped	Meets Requirement.
4.4.	Trailer chassis	Meets Requirement. Utility will provide trailer chassis.
4.5.	GPS antenna and minimum of 3 Generation (G)/4G or Long-Term Evolution (LTE) multiband antenna	Meets Requirement.
4.6.	Two (2) ALPR cameras IR (or its equivalent and color	Meets Requirement.
4.7.	Extended battery	Meets Requirement.
4.8.	Everything needed to transit LPR data, such as data processor, modem, computer, power inverter	Meets Requirement. Utility has read and understands this requirement and will comply.
5.0 DEMONSTRATION OR SAMPLE		
5.1	County reserves the right to request an on-site demonstration of the LPR camera system being bid or a sample be sent to determine if it meets the requirements stated. All specifications listed in the General Requirements shall be confirmed. All travel, demonstration supplies and/or shipping expenses shall be at the vendor's expense.	Utility would be honored to provide the County an on-site demonstration of the unique features and capabilities of the RocketIoT ALPR™ License Plate Reader Camera System, operated with AVaiLWeb™.
6.0 INSTALLATION		
6.1	Vendor shall provide the option to purchase systems as a "kit" that includes all hardware, wiring and software for standard installations	Utility's RocketIoT ALPR™ License Plate Reader Camera System and AVaiLWeb™ is an all-inclusive solution, provided as a 'System as a Service' (SaaS), and includes all equipment, installation, services, training, customer support, Smart Redaction, and unlimited Cloud storage. The RocketIoT ALPR™ 'kit' is all-inclusive, and the County will be provided



		<p>with training and installation.</p> <p>The technical system functionality is fully managed by our software engineers to ensure that it will always be up to date for all of our customers on our Cloud-based platform. All system upgrades are all done over-the-air (OTA), without requiring ALPR operator/officer effort.</p>
6.2	Vendor shall provide installation and warranty repair options on vehicles within San Diego County.	<p>Utility's APR is provided as a Service as a System (SaaS) subscription. Utility warranties are in full effect for the term during a current paid annual SaaS subscription. Hardware failure outside of malicious intent is fully covered free of charge by Utility.</p> <p>Utility will provide product installation, and Utility can certify local installers to the Product.</p> <p>Utility provides 24/7/365 technical support. All users have access to the help desk service phone number for technical support during or after normal business hours. Should there be an outage notification, users will receive a call back within one hour.</p> <p>Should the County need to return hardware, authorized stakeholders will need to email Utility's support team with all relevant information on the device, including the serial number and the reason for the return. Once the necessary information is received, our team will send a shipping label for the County to complete the return.</p> <p>Replacement equipment is cross-shipped the day after Utility is notified about an issue.</p> <p>Please refer to the Appendix for a summary and links to Utility's warranty, terms and conditions, and System as a Service (SaaS) agreement</p>
6.3	Vendor shall provide a technician or representative to visit customer site for system start-up, configuration and commissioning of LPR system	<p>Utility's ALPR implementations are all-inclusive. They include training, technical support and assistance, devices, networking equipment, video uploading, charging, connectivity, system software and upgrades, and video retrieval software and procedures.</p>



7.0 CUSTOMER SUPPORT

7.1

The vendor shall provide technical advice and sales support within 72 business hours.

Meets Requirement.

Utility provides 24/7/365 technical support. Our technical support associates are located at our home office in Decatur, Georgia, in Metropolitan Atlanta. Utility has employees in all time zones. All users have access to the help desk service phone number for technical support during or after normal business hours. Should there be an outage notification, users will receive a call back within one hour.

Utility has a tiered response to support that will escalate the level of support depending on the situation. Tier 1 would be onsite support by County staff after they have been trained by Utility, which will alleviate most day-to-day issues that may arise. Problems beyond Tier 1 scope will be escalated to Tier 2 and from there to Tier 3, which is onsite technical support from a Utility field engineer.

Item Priority	Fatal	Severe	Medium	Minor
1	1 Hour	1 Hour	2 Hours	3 Hours
2	2 Hours	2 Hours	4 Hours	6 Hours
3	4 Hours	4 Hours	8 Hours	16 Hours

Please refer to the **Appendix** for a detailed copy of Utility's Customer Service Agreement (SLA).

**8.0 TRAINING**

8.1	The County reserves the right to request up to eight (8) hours of training at a San Diego County Sheriff's Department facility within 30 days of delivery at no additional charge.	Utility's RocketIoT ALPR™ implementations are all-inclusive. They include training, technical support and assistance. Training is on-site, in-person, and online and interactive.
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9.0 DELIVERY REQUIREMENTS

9.1	Delivery address: San Diego County Sheriff's Department Attn: Ivy Scites - Grants Unit 9621 Ridgehaven Court San Diego, CA 92123	Utility will comply with the County's delivery requirements.
-----	--	--

10.0 INVOICE

	<p>Only new products shall be accepted. An LPR system that has been used in any way, refurbished, reconditioned, or gray market is unacceptable and will be rejected and returned.</p> <p>The County shall be given credit for damaged and returned items within five (5) business days.</p> <p>There shall be no restocking fees or other charges for returns of damaged or incorrect items.</p> <p>Deviations to the terms, conditions and/or specifications shall be conspicuously noted in writing by the respondent.</p>	Utility will comply with the County's delivery requirements.
--	---	--



by



4 **AUTOMATED LICENSE PLATE RECOGNITION** MUST HAVES

RocketIoT ALPR is fundamentally better.

No other LPR solution has these 4 Must Have capabilities. Your Officers and Citizens deserve the best.

1

CONNECTIVITY

With Smart ALPR on patrol, your officers have total system connectivity directly to the AWS GovCloud for real-time access to Federal, State and local databases for purposes of automatically searching for hotlisted vehicles.

2

REAL-TIME ALERTS

Central Dispatch can start live video streaming from any in-car camera system. Video is automatically uploaded as it is recorded to secure CJIS compliant storage. Video can be available immediately.

3

INTELLIGENCE BUILT IN

Unlike traditional LPR systems, ALPR is powered by artificial intelligence (AI) which provides a new ability to read license plates at high speeds and through windshields all while comparing data on the edge. ALPR runs passively the background throughout an officer's patrol shift allowing unknown threats to become known in real-time. (Built in collaboration with SONY.)

4

FORCE MULTIPLIER

ALPR provides greater efficiency for the patrol officer which translates to increased productivity for your agency. ALPR allows officers to focus on their job functions while patrolling as it leverages AI and the total system to maximize the officer's effectiveness. The ALPR total system gives an agency the ability to do more with less makes which makes it cost-effective for today's efficiency-focused law enforcement leaders.

bodyworn.com



Automated License Plate Recognition

Product Features & Specifications



Made in the USA

ALPR BOX

Dimensions: 172mm(l) x 122mm(w) x 38mm(h)

Material: Cast Aluminum

Power: Dual (DC: 9 to 24Vdc or PoE 802.3at compliant)

Processor:

- CPU: Dual Core nVidia Denver 2 64-bit & Quad Core ARM Cortex-A57
- GPU: 256 Core nVidia Pascal

Memory: 16GB

Connectors: color coded, water tight, locking

- RED: Power
- BLUE: 10/100 Ethernet (802.3 PoE)
- BLACK: USB 2.0 (optional) | 5V /1.5A output

Environmental:

- Operational Temp Range: -20 to 70 deg C
- Storage Temp Range: -40 to 85 deg C
- IP-67: (submerge 1M for 30min w/ no water ingress)

Certifications:

- FCC
- MIL-810G: Shock, Vibration and Temperature

FEATURES:

- ⦿ **Extension of the RocketIoT System:** Utilizes the Connectivity and Video Functionality
- ⦿ **Real-Time Connectivity to Hot Lists:** Federal, State and Local Data Sources
- ⦿ **Ability to Inject Local Data** in Real-time
- ⦿ **Agency Force Multiplier:** Passively and Continuously Collects Data Throughout an Entire Shift
- ⦿ **Uses Artificial Intelligence** to Analyze Data at Fast Speeds
- ⦿ **Real-Time Configurable Alerts:** Transmit to BodyWorn Device, In-Car Video Display, Command & Dispatch, Other Officers in the Area
- ⦿ **Plate Lookup:** Provides Historical Plate Data with Location and Time
- ⦿ **Enhances Officer Safety:** Live Situational Awareness Component
- ⦿ **Cost Effective:** Outfit More Locations and Vehicles within Your Agency

ALPR CAMERAS

- 2MP Full HD
- Up to 60 FPS at 1080p (H.264)
- 12mm Lens
- 0.1 LUX in color Minimum Illumination for Optimal Low Light

Performance

- 0.0 LUX in B/W (IR on 40m Range)
- Auto Day / Night mode
- Action Button (Start/Stop)
- AAC Encoding, Integrated Mic
- Multiple Mounting Options



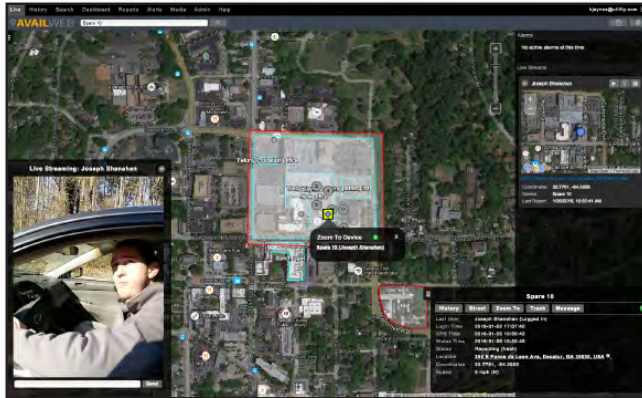
Smarter Digital Evidence Management

AVaiLWEB™ is a powerful web-browser solution that makes it easy yet secure to search, play, manage, redact, and share video and data with a secure chain of custody. The media interface allows multiple related video and audio feeds to be played simultaneously. AVaiLWEB also has live video streaming allowing dispatchers and supervisors to have complete situational awareness. It also provides an automatic real-time, map-based view of location and status of all mobile operations, including vehicles, personnel, and assets. AVaiLWEB provides Geofence alerts, live tracking, traffic and weather overlays, asset overlays and Street Views.

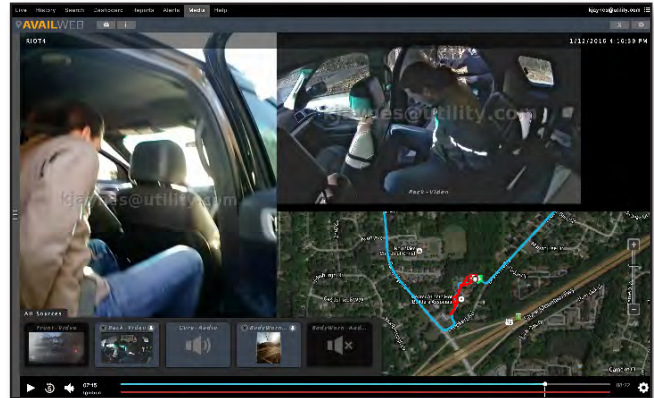
- Ⓢ **All-In-One Web-Browser Platform**
- Ⓢ **Seamless Transfer of Video**
- Ⓢ **Secure & Unlimited Cloud Storage**
- Ⓢ **Geofence & Action Zone Activation**
- Ⓢ **Synchronized Video & Audio**
- Ⓢ **Video Redaction Tools**
- Ⓢ **Comprehensive Chain of Custody**
- Ⓢ **Customizable Configurations**
- Ⓢ **Multiple Videos from an Incident**
- Ⓢ **Live Map View**
- Ⓢ **Live Video Streaming**
- Ⓢ **Interactive Reporting**
- Ⓢ **Send Real-Time Alerts**
- Ⓢ **Ultimate Witness Portal**



LIVE VIDEO STREAMING



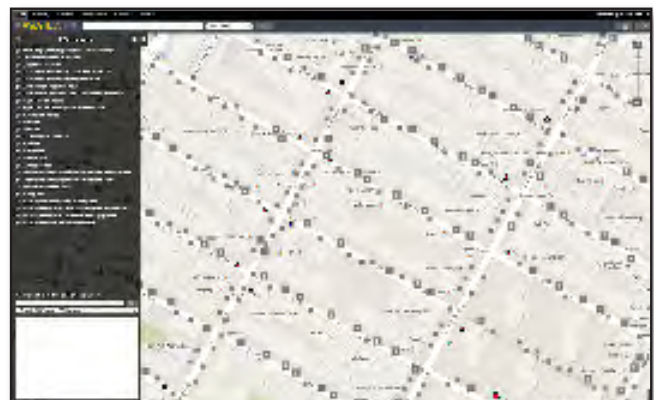
VIDEO TRACKING AND PLAYBACK



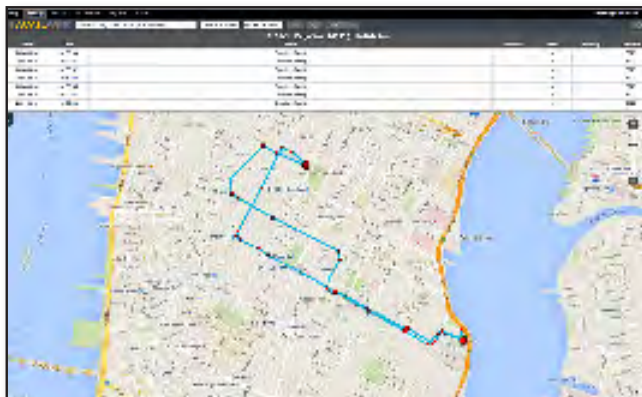
CUSTOM GEOFENCES



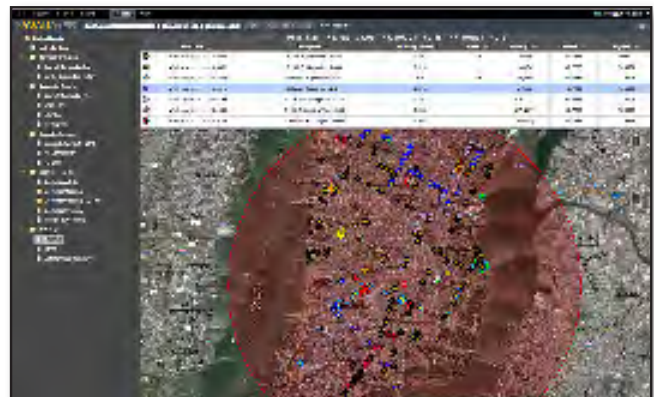
GIS/ESRI DATA OVERLAYS



HISTORICAL GPS TRACKING



CUSTOM DEVICE REPORTS





Smart Redaction

Automated Video Redaction

With SmartRedaction™, law enforcement agencies have the ability to redact video more effectively and efficiently when responding to Public Records Requests for video evidence, such as Freedom of Information Act (FOIA). The process of preparing videos for public dissemination, while maintaining privacy rights of those involved, can be time consuming and expensive. Not with Smart Redaction.



Smart Redaction identifies, tracks and redacts objects and people in a video, alleviating the need for large staff to work long hours to review and manually redact video. Smart Redaction is an industry-leading redaction tool, that protects the privacy of victims, innocent bystanders, minors and undercover officers, while saving time and money for the agency using it.

SMART ALPR

PAIRED WITH ROCKET IOT IN-CAR VIDEO

By incorporating ALPR into our in-car system, we've made LPR more cost-effective for agencies to outfit more vehicles within their agency.

The vehicle cameras catalog license plate data while searching hot-lists. Once detected, the system automatically sends an alert enabling the department to respond quickly.



IN
COLLABORATION
WITH SONY

REAL-TIME
CONNECTIVITY
TO HOT LISTS

FROM STATE, LOCAL &
FEDERAL DATA SOURCES

MOBILE &
STATIONARY
ALPR

WHEN A HOTLIST
PLATE IS DETECTED

CONFIGURABLE ALERTS TRANSMIT
TO ONE OR ALL OF THE FOLLOWING:

- BODYWORN DEVICE
- IN-CAR DISPLAY
- COMMAND & DISPATCH
- OTHER OFFICERS IN AREA

COST
EFFECTIVE

OUTFIT MORE
VEHICLES WITHIN
YOUR AGENCY

UTILIZES
A.I. AT THE
EDGE

FURTHER
ENHANCES THE
DEPARTMENT'S
ENFORCEMENT
CAPABILITIES

PLATE
LOOKUP

PROVIDES
HISTORICAL PLATE
DATA WITH
LOCATION & TIME

EXTENSION
OF THE ROCKET IOT
SYSTEM

CAMERAS &
CONNECTIVITY CAN BE
MANAGED BY THE
ROCKET IOT



Smart ALPR Specifications

Dimensions: 172mm(l) x 122mm(w) x 38mm(h)

Material: Cast Aluminum

Power: Dual (DC: 9 to 24Vdc or PoE 802.3at compliant)

Processor:

- CPU: Dual Core nVidia Denver 2 64-bit & Quad Core ARM Cortex-A57
- GPU: 256 Core nVidia Pascal

Memory: 32GB

RF Connectors: 2x RP-SMA
(802.11a/b/g/n/ac 2x2 867Mbps | Bluetooth 4.1)

Connectors: color coded, water tight, locking

- RED: Power
- BLUE: 10/100 Ethernet (802.3 PoE)
- BLACK: USB 2.0 (optional) | 5V /1.5A output

Environmental:

- Operational Temp Range: -20 to 70 deg C
- Storage Temp Range: -40 to 85 deg C
- IP-67: (submerge 1M for 30min w/ no water ingress)

Certifications:

- FCC
- MIL-810G: Shock, Vibration and Temperature

Delivering Intelligence on a Scale Never Before Imagined.

Technical Supplement, Response to County of San
Diego CA RFB#10684 for Sheriff's Dept License Plate Readers





Communications & In-Car Video

Product Features & Specifications



Made in the USA



FEATURES:

- 4G LTE CAT-12 Internal Cellular Modem
- Supports All Major US Carriers
AT&T, FirstNet, Verizon, Southern Linc, Sprint, US Cellular
- Dual WiFi: Hotspot around the vehicle
Access Point for high-speed offload
- Integrated Crash Sensor
- Integrated Battery Monitoring & Internal
Temperature Sensor (for health monitoring)
- Optically Isolated Trigger Inputs & 1 Relay Output
(5 total, 4.5V to 24V)
- Integrated Siren Trigger Interface
- Integrated On-Board Diagnostics: J1979 (ISO 15675-4), J1939
(The ISO 15675-4 was mandated in 2008 for all US cars: Is
CAN interface)
- Under Voltage Warning / Shutdown
- Software Adjustable Shutdown Timer
- Integrated GPS with Antenna Detection Technology
(for health monitoring)
- Remotely manage network configurations: Firewall,
IPSec, Port Forwarding, Split networking, black and white list,
bandwidth management

ROCKET IOT

Dimensions: 197mm (l) x 150mm (w) x 43mm (h)**Material:** Cast Aluminum**Power:** 9 - 24Vdc / 14W**Storage:** 120GB Solid State Drive**Processor:** Intel Dual Core Atom Processor, 1.33GHz**Memory:** 2GB RAM, 1066 MT/s**Connectors:** Color Coded, Water Tight, Locking

- 1 RED: Power and On-Board Diagnostics
- 2 DARK BLUE: 4 Ethernet (802.3af PoE 10/100Mb)
- 1 BLUE: 1Gb Ethernet
- 1 BLACK: Triggers (1 Ignition, 4 Programmable Inputs,
1 Siren, 1 Relay Output)
- 1 Radar Interface (RS-232)
- 1 USB 2.0 (optional)

RF Connectors

- 2 Cellular
- 2 WiFi 2.4/5 GHz (WiFi 802.11 g/n/ac MIMO) Hotspot
- 2 WiFi 2.4/5 GHz (WiFi 802.11 g/n/ac MIMO) Access Point
- 1 SMA GPS

Environmental

- Temperature Range: -20° to 70° C
- IP-67 (submerge 1M for 30min w/ no water ingress)

Certifications

- FCC
- MIL-810G: Shock, Vibration & Temperature
- PTCRB
- FirstNet

IN-CAR CAMERAS

Front Camera

- 2MP Full HD
- 60 FPS at 1080p (H.264)
- 0.1 LUX Minimum Illumination for
Optimal Low Light Performance
- Auto Day / Night mode
- 4mm Lens (Wide Angle)
- Robust Low Profile Mounting
- Action Button (Start/Stop)
- AC Encoding, Integrated Mic

Back Seat

- 2MP Full HD
- 30 FPS at 1080p (H.264)
- 0 LUX Min Illumination
- Auto Day / Night mode
- Integrated Microphone
- 2.9mm Lens (Wide Angle)
- Robust Mounting Design



XLE Installation Guide

Apr 2020

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Introduction and Overview

This document is designed to instruct an experienced and qualified installer how to properly install all Utility Associates (UA) hardware for the Rocket IoT XLE (RIoT-XLE) system. This guide includes detailed specifications about the hardware as well as optimal power, and installation locations/techniques.

Rocket IoT XLE Hardware Installation Locations

1. The first step of installing any of the Utility Video and BodyWorn equipment is to first determine where existing equipment is currently located, or is going to be mounted in a vehicle. Here are the main components to consider:
 - Rocket IoT XLE processing and communications unit
 - ALPR Co-Processor unit - optional
 - Antennas
 - Power / Cabling
 - Cameras (Front and/or Rear) – optional
 - Tablet – Video Controller inside the front windshield - optional
 - Video Recording and Data Capture Triggers – Door Sensor, Lightbar, Siren, etc. – optional
 - LED Recording Light - optional
 - Vehicle Diagnostics Interface cable – OBD-II or JBUS – optional
 - Ethernet Devices in the vehicle – Laptop, ALPR processor, other - optional
 - RS-232 or USB Devices in the vehicle – Radar Gun, Printers, other – optional
 - ALPR Graphics AI Co-Processor - optional
2. When deciding on where the equipment is going to be installed, you need to take a few things into consideration especially because they are criteria for a “Certified Installation”. These criteria are emphasized here first because they always seem to come up first.
 - Never use self-tapping screws to mount the Rocket IoT XLE to the vehicle. The only approved method is bolts, washers and Keps nut or locking nylon nuts can be used.
 - Only factory or power distribution center power, ground, and ignition sense breakouts should be used for these main power connections.
 - In most police package or public safety vehicles there will be multi-amperage breakouts.
 - When in doubt go straight to the battery’s positive/negative terminals for power and ground and find a factory ignition sense to splice into.
 - Do not use “T” or Splice taps or Scotch locks for any wiring connections.

Solution Components

1. Rocket IoT XLE:



Rocket IoT XLE with Category 12 4G-LTE modem chipset.

- Vehicle power connector - Red
- Two dual 10/100 PoE Ethernet Port connectors – medium Blue
- One Gigabit non-POE Ethernet Port connector – Dark Blue
- Vehicle Diagnostics connector - Black
- RS-232 and USB connectors - Black
- Internal 128GB Solid State Hard Drive
- Cellular Modem Chipset slot and cover with rubber gasket
- External Antenna connectors – Two Cellular, Four WiFi, one GPS – on the back of the unit
- MIL-STD 810G – Dust and Vibration
- IP-67 – Dust and Waterproof up to one meter of water for 30 minutes
-

Rocket IoT XLE Dimensions:

- Long 197mm 7.756 inches
- Wide 150mm 5.905 inches
- High 43mm 1.693 inches

The distance between the centers of the two attach slots on the left and right edges of the housing is 184mm / 7.244 inches

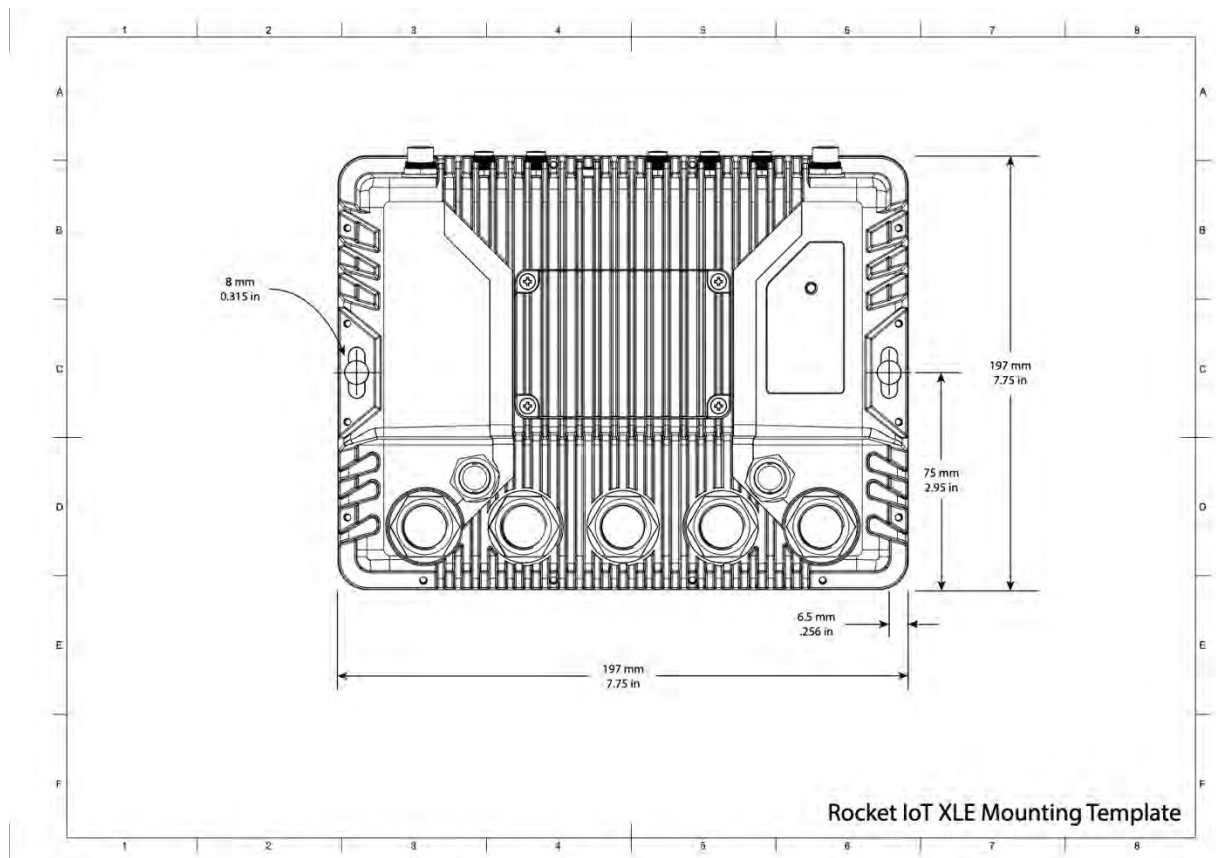


The edges of the cooling fins do not extend beyond the edges of the housing.

Rocket IoT XLE Mounting Template:

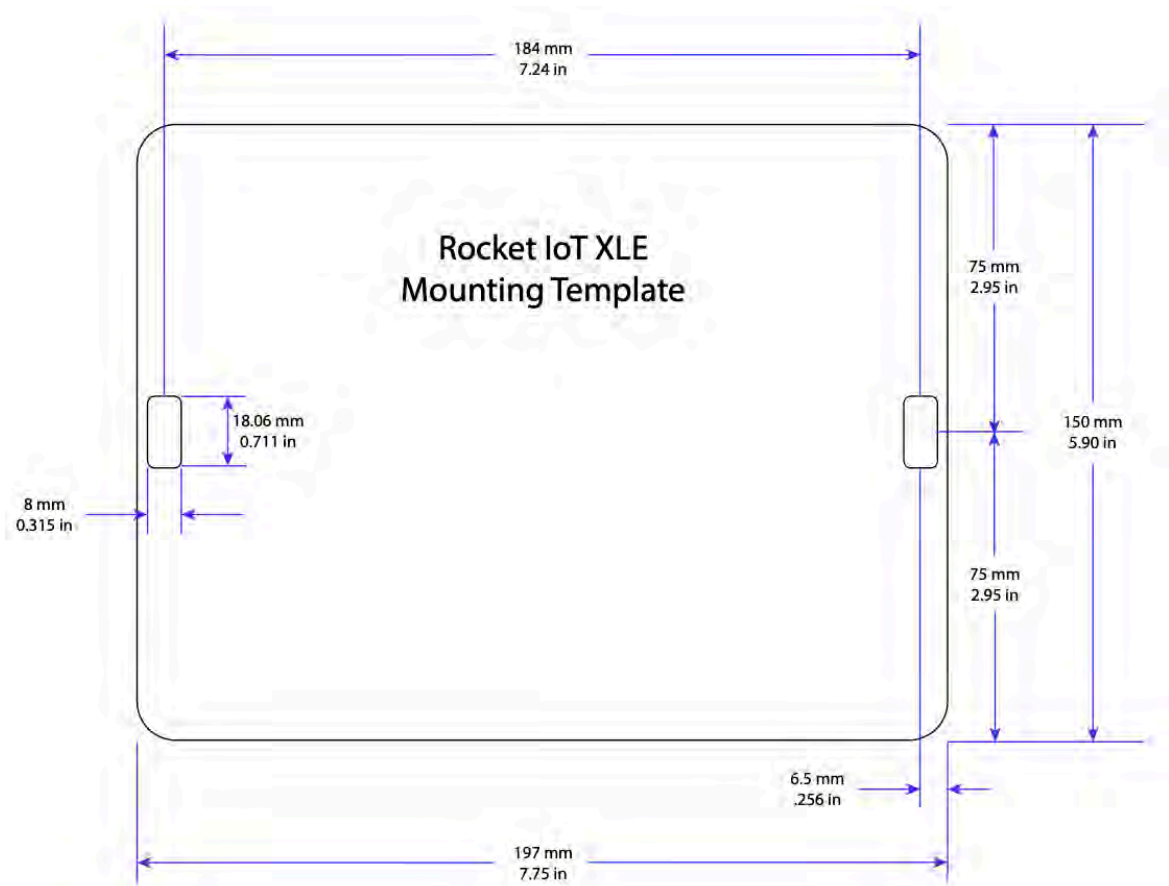
This template displays the footprint dimensions of the Rocket IoT XLE, and the location and dimensions of the mounting slots on the left and right edges of the housing.

The recommended install is to use threaded mounting pins or bolts through the mounting slots to firmly attach the Rocket IoT XLE to an underlying metal electronics tray, console, or other hard vehicle surface. Use washers and bolts to secure the Rocket IoT XLE hardware so that it never comes loose and becomes loose inside the vehicle cab, which could become the safety hazard of being a metal projectile flying around inside the vehicle cab in the event of a vehicle crash. Washers, nuts, and potentially gaskets securely tight will also minimize rattles and cable attachments working loose.



A simplified mounting template schematic is shown on the following page.

This diagram shows the outer dimensions and the location of the mounting slots on the left and right side of the Rocket IoT XLE.



2. Quad-Band External Permanent Mount Antennas:

- Two separate quad-band antennas for each Rocket IoT XLE
- Dual antennas are required to provide Cellular and WiFi diversity required by the Category 12 4G-LTE Cellular Modem chipset, and 802.11ac WiFi. Only one antenna is not acceptable, and will not allow the Rocket IoT XLE to reliability connect to 4G-LTE cellular service. **MUST** be two cellular antennas on every Rocket IoT XLE install.
- Each Antenna includes one Cellular Antenna, one GPS Antenna, and two WiFi Antennas
- Antenna Post: 3/4" diameter by 1/2" length post (1" option – fire trucks)
- Antenna Cable length: 15 feet (20' and custom length cables available).
- Each quad band antenna has four antenna elements:
 - 1 x Cellular. Designed to cover 694-894 Mhz (3 DBi gain) and 1.7 – 2.7 Ghz (5 DBi gain) frequency ranges; FME connector.
 - 1 x GPS. 1575.42 Mhz (+/- 2 Mhz), 5 DBi gain. SMA connector.
 - 2 x WiFi. 2.1-2.5 Ghz (5 DBi gain) and 4.9 – 6 GHz (5 DBi gain); RPSMA connector.
- Antenna Colors: White or Black.



Alternative Antennas

Magnetic mount Quadband external antenna. Same format and configuration as a permanent mount Quadband antenna with one cellular, one GPS, and two WiFi antennas, but magnetically affixed to the outside of the vehicle. Proper ground plane required for magnetic mounted antennas. Antenna cable exits the antenna housing at the side, and the cable enters into the vehicle cabin between the vehicle frame and a door. The door gasket more or less seals the gap around the antenna cable. This antenna option is not water-tight. The typical use is for a temporary install, and is not recommended for permanent installations.

Glass-mount internal window Cellular / GPS covert antenna. Includes one cellular antenna and one GPS antenna. Permanently affixed to glass window somewhere inside the cabin of the vehicle, so the antenna cable can be routed directly to the Rocket IoT XLE. Two antennas are required to provide Category 12 4G-LTE Cellular modem diversity. Glass-mount cellular / GPS antennas must be paired with four glass-mount single WiFi antennas, or four WiFi Rubber Duck antennas directly connected to the WiFi RSPMA antenna connectors on the Rocket IOT XLE.



Antenna dimensions are 140mm x 40mm x 18mm. 5.5 inches x 1.59 inches x .71 inches. The antenna cable is ten feet (10') long.

Glass-mount internal window covert WiFi antenna. Require a total of four antennas for the four Rocket IoT XLE WiFi antenna diversity connectors.



Antenna dimensions are 61mm x 17mm x 9mm. 2.4 inches x .65 inches x .35 inches. The antenna cable is twelve feet (12') long.

“Rubber Duck” direct connect WiFi antenna. Require a total of four antennas for the four Rocket IoT XLE WiFi antenna diversity connectors.



Antenna dimensions are 175mm from the bend, and 12mm in diameter. 6.88 inches x .48 inches.

Other Utility BodyWorn certified antennas with a combination of cellular, WiFi, and/or GPS antennas inside an antenna housing may become available in the future. Check with your Utility BodyWorn sales representative about new antenna options that may have become available since this Install Guide was published.

ANTENNA NOTICE

Antennas are a core part of the real-time Situational Awareness and Connectivity solution. Each Rocket IoT XLE requires two cellular antennas, one GPS antenna, and four WiFi antennas, to support MIMO (Multiple Input – Multiple Output) antenna diversity for cellular and WiFi wireless communications.

A single cellular or WiFi antenna (non-MIMO install) cannot be certified for support, performance, or reliability. The Cellular and WiFi chipsets are specifically designed as MIMO requires two antennas to be connected.

Only antennas certified by Utility BodyWorn can be used for Certified installations. Utility takes no responsibility for the performance or reliability of unknown 3rd party antennas that may claim to be “just as good” as the tested and certified antennas provided by Utility.

Utility does not test or warrant 3rd party antennas for performance or reliability. 3rd party antennas void Warranty and Support obligations. Any Utility BodyWorn Help Desk Support and/or Field Engineer time and travel expenses spent to troubleshoot 3rd party antennas are billed at current billing rates then in effect.

3. Cables:

- For a typical police car dual camera install, the Rocket IoT XLE uses four proprietary M12 connector cables for power, PoE cameras, and General Purpose IO (GPIO).
 - Power Cable – Red – Part No: 602-0000075RA
 - PoE Camera Cables – Dark Blue – Part No: 602-0000087
 - Ethernet Docking Cable – Light Blue – Part No: 602-0000079RA
 - GPIO (Trigger Cable) – Black – Part No: 602-0000072RA



- For a non-camera install, only Power and Ethernet Docking cables are required

4. Cameras (Optional):

- Rocket IoT can be upgraded to provide in-car video (ICV) as well as mobile vehicle communications with the addition of two cameras per system.
- Front Camera: Bullet Camera with Utility supplied visor mount.



- Rear Seat Camera: Dome IR Camera with built-in microphone for in-car audio.



5. Video Controller Tablet (Optional):

- The Rocket IoT XLE In-Car Video (ICV) system can be accessed via web browser on a customer's laptop (standard). However, if this is not an option or a separate monitor is required for this purpose, the tablet upgrade option is available.
- The optional tablet upgrade includes the tablet, cradle, and power cable with visor or console mounting options. All of these components are supplied by Utility along with the tablet software.
- Power cable for charging the tablet should always be connected to +12v switched ignition source, not constant power. The USB cable is 5v DC out to tablet. You will install 5v-12v adapter that Utility will supply with the kit.



6. Door Sensor (Optional):

For Triggering of Door opening and closing. This input is used as one of several events that can be used by the Rocket IoT XLE Rules Engine to automatically start or stop video recording, send alerts, and as a trigger for other real-time and audit trail reporting.



7. LED Recording Light (Optional):

(This light will be on when the ICV unit is in record mode)

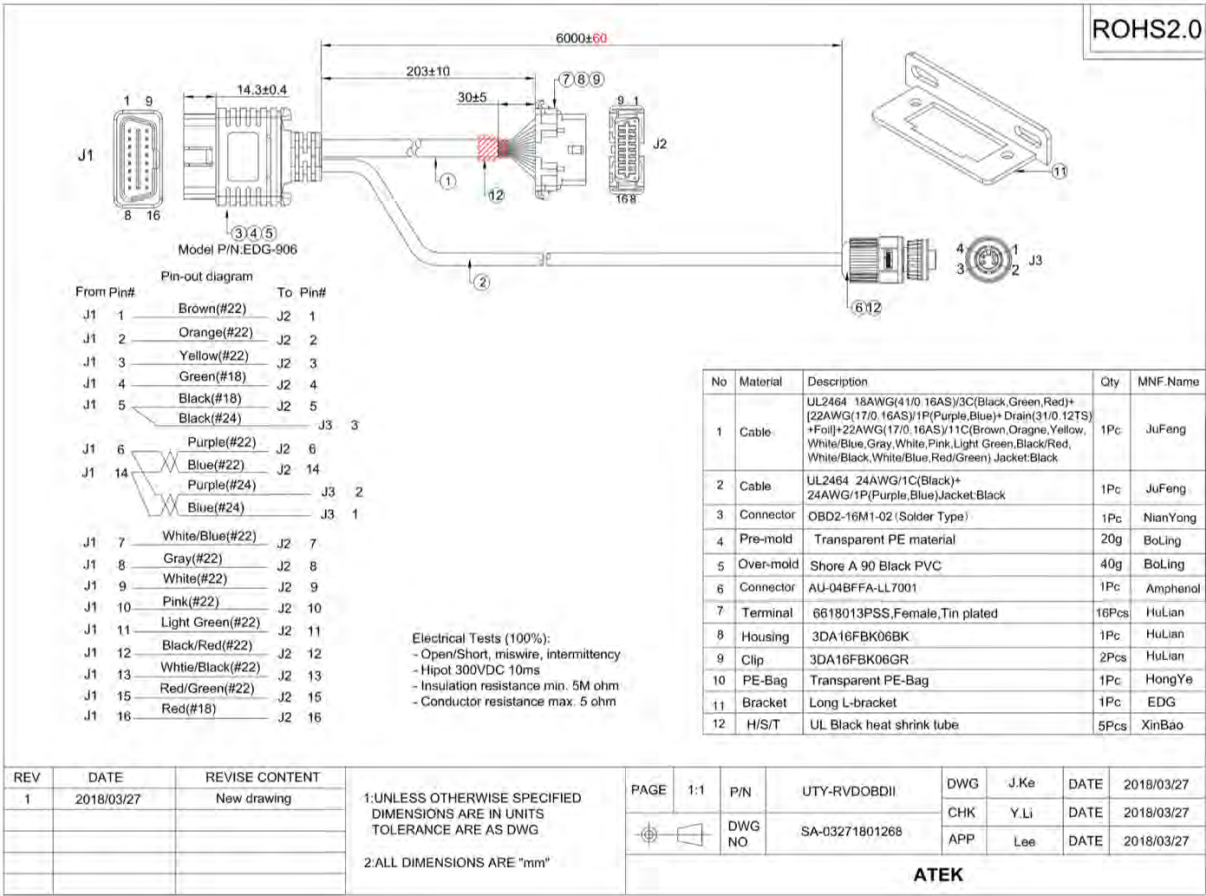


8. Vehicle Diagnostics Cable (Optional):

Cable connecting the Rocket IoT XLE to the vehicle engine diagnostics port. A vehicle will have one of two types of vehicle Diagnostics interface plug. OBD-II or JBUS Type 2.

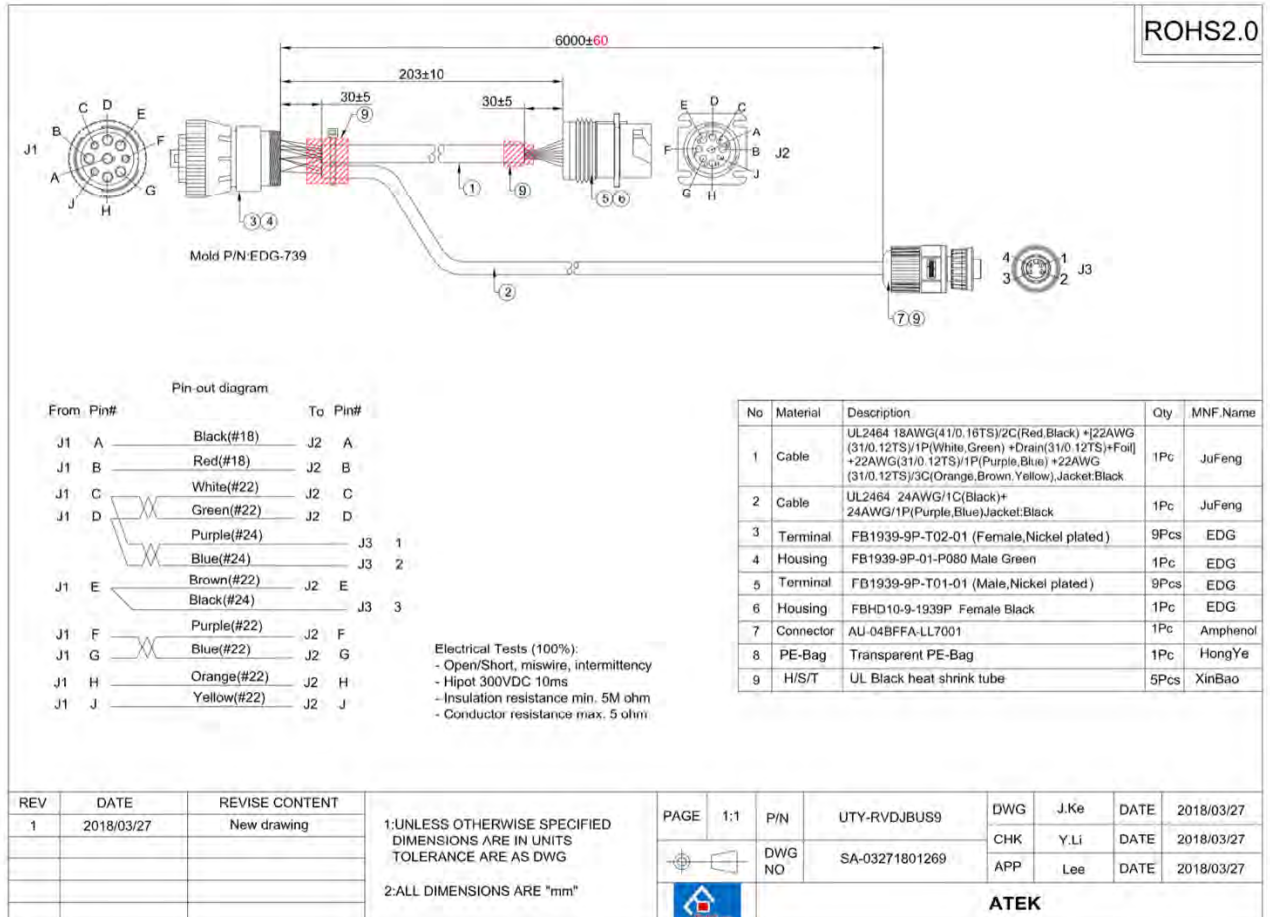
OBD-II

Cars, Pickup Trucks, SUVs, and Lighter Duty Trucks typically up to about a Ford F250 use the OBD-II standard cable type. The OBD-II plug is typically located within one meter under or nearby the steering wheel. The Y cable is .2 meters long on the short side, and 6 meters with an M-12 connector on the long side to connect to the Rocket IoT XLE. The Y cable allows the vehicle maintenance team to connect to the short cable for vehicle diagnostics reporting, while leaving the Rocket IoT connected to the OBD-II port. Never have to disconnect the Rocket IoT XLE from the vehicle diagnostics port.



JBUS Type 2

The JBUS Type 2 standard diagnostics connector is typically used for heavy vehicles – fire engines, ambulances, prisoner transport vehicles, bucket trucks, vactor trucks, crane and heavy inventory transport vehicles, etc. Typically Ford F-350 and up class heavier vehicles.



A Y splitter cable is used so that the Rocket IoT XLE is connected to the JBUS-Type 2 port, leaving one connector available to be connected to Fleet Maintenance Shop diagnostics scanners. The long side of the Y cable splitter with an M-12 connector always remains connected to the Rocket IoT XLE. The second Y cable connector is available to be connected to the Fleet Maintenance Shop vehicle engine diagnostics scanner.

A Y Splitter cable avoids a Shop Mechanic forgetting to plug the Diagnostic cable back into the Rocket IoT XLE. This would cause the Rocket IoT XLE to not report vehicle engine diagnostics Trouble Codes and other data.

The short side of the JBUS Y cable is .2 meters. The long side of the JBUS Y cable is 6 meters.

9. RS-232 Serial Port and USB Devices (Optional):

RS-232 9 pin cables are well known. Vehicle accessories such as a Radar Gun and Ticket Printers sometimes have an RS-232 serial cable interface for using the Radar Gun as a video recording trigger, or for connecting a mobile data terminal to a ticket printer or other similar device.

USB v 2.0 cables are also well known. Ticket printers and other accessory devices may have a USB cable Interface.

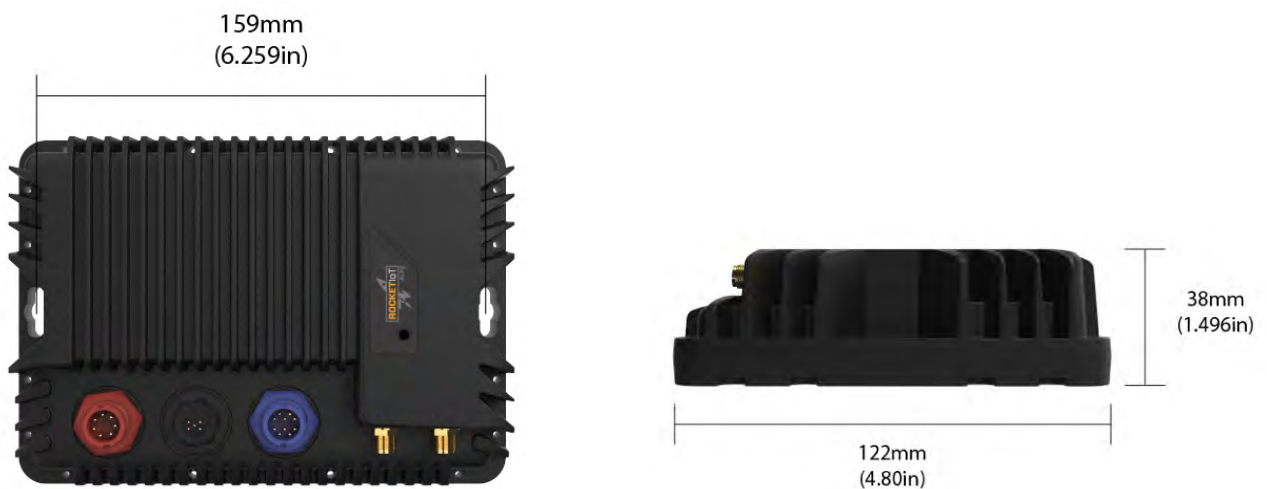
Order an M12 connector RS-232 Serial or USB Cables for the Rocket IoT XLE if you need to attach devices that have an RS-232 9 pin connector or a USB connector.

10. ALPR Graphics AI Co-Processor unit (Optional):

An optional Automatic License Plate Reader Graphics Artificial Intelligence processor connected to a dedicated PoE HD digital camera that reads license plates on vehicles in the front and right lanes in front of the vehicle. The Co-processor contains a very high-performance Graphics AI processor and memory that can perform Video Recognition Artificial Intelligence to identify license plate numbers, and other VR AI recognition as trained.

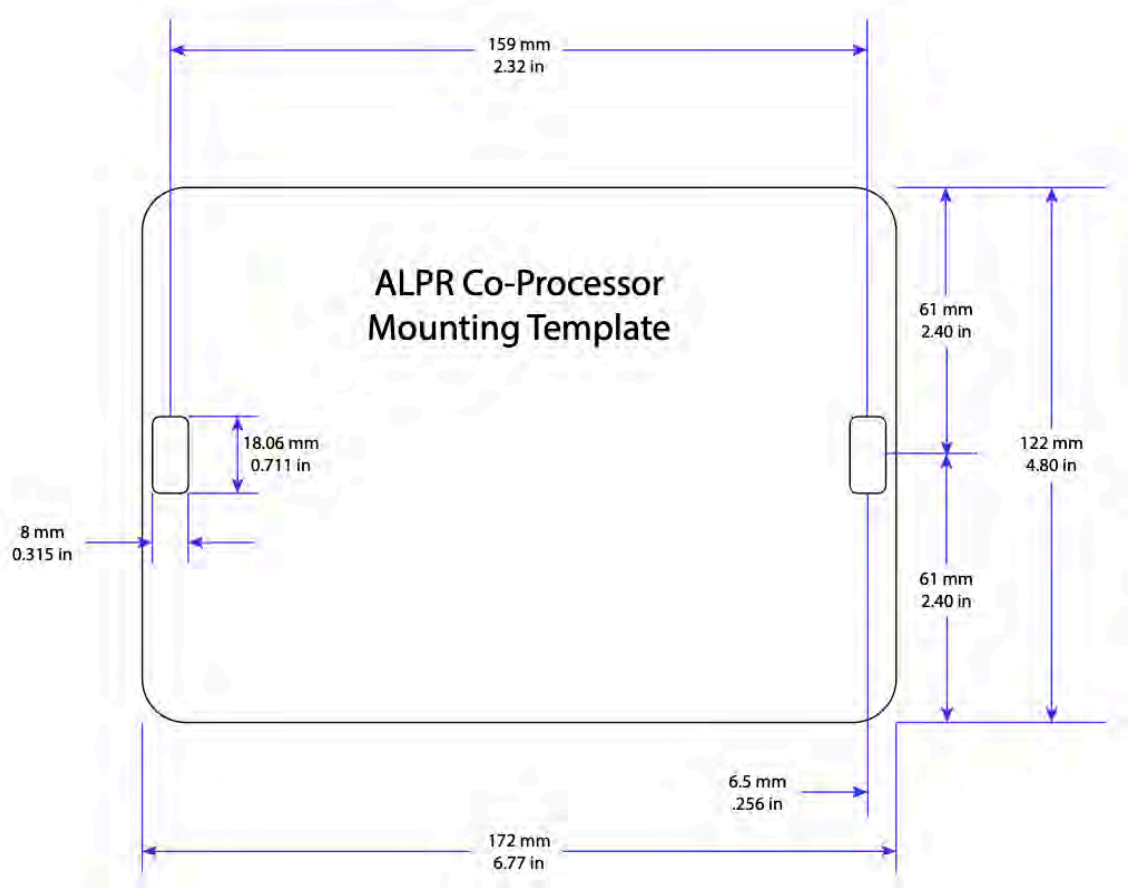


The M12 connector colors are the same as for the Rocket IoT XLE. Light blue is a 1GB Ethernet port to connect to the Rocket IoT XLE. The smaller black connector is USB for peripherals. The Red M12 connector is for vehicle power and ignition, and is the same as power and ignition for the Rocket IoT XLE.



Like the Rocket IoT XLE, the ALPR Graphics AI Co-Processor is MIL-STD 810G for operating temperature and vibration, and IP-67 rated for operating under one meter of water for 30 minutes.

This diagram shows the outer dimensions and the location of the mounting slots on the left and right side of the ALPR Graphics AI Co-Processor.



Rocket IoT XLE Mounting and Placement

1. Mounting Site Selection:

Below are Utility's best practices when considering a proper mounting location for the Rocket IoT XLE.

- Orientation of the Rocket IoT XLE does not matter. The hardware is all solid-state, with no spinning hard drive or other components where the force of gravity might have an impact on hardware operation.
- Must be able to easily access the hardware unit and cable connectors. When choosing an install location, it is important to ensure there is enough clearance to allow for installing and removing the Rocket IoT XLE and associated internal peripherals and cables.
- Mount the Rocket IoT XLE in a secure location in the vehicle i.e., electronics tray, electronics bay, storage area, trunk or rear of the vehicle where possible.
- Vehicles with limited trunk area may require a panel/mounting board or plate to be installed somewhere in the trunk, cab or on the back of the passenger seat to provide a stable mounting surface for the Rocket IoT XLE.
- The bracket should always be mounted to the vehicle using ¼ inch x 1 inch (zinc or stainless steel) bolts, 1 inch fender washers and matching nylon locking nuts.
- Never use self-tapping screws that can work loose from vehicle vibration, and/or rust or corrode over time.

CAUTION: Make sure to check first what is below the mounting hole locations to avoid drilling into brake, transmission, air conditioning, or other lines, or other critical vehicle components.

2. ALPR Graphics AI Co-Processor Mounting Site Selection:

The same best practices apply to the mounting location ALPR Graphics AI Co-Processor hardware unit

- Orientation of the ALPR hardware does not matter. The hardware is all solid-state, with no spinning hard drive or other components where the force of gravity might have an impact on hardware operation.
- Must be able to easily access the hardware unit and cable connectors. When choosing an install location, it is important to ensure there is enough clearance to allow for installing and removing the ALPR hardware unit and associated internal peripherals and cables.
- Mount the ALPR unit in a secure location in the vehicle i.e., electronics tray, electronics bay, storage area, trunk or rear of the vehicle where possible.
- Vehicles with limited trunk area may require a panel/mounting board or plate to be installed somewhere in the trunk, cab or on the back of the passenger seat to provide a stable mounting surface for the Rocket IoT XLE.
- The bracket should always be mounted to the vehicle using ¼ inch x 1 inch (zinc or stainless steel) bolts, 1 inch fender washers and matching nylon locking nuts.
- Never use self-tapping screws that can work loose from vehicle vibration, and/or rust or corrode over time.

CAUTION: Make sure to check first what is below the mounting hole locations to avoid drilling into brake, transmission, air conditioning, or other lines, or other critical vehicle components.

3. Rocket IoT XLE Install Mounting:

- Locate an appropriate mounting location, in this example the vehicle is a 2013 Chevy Impala and the mounting location is in the trunk on the passenger side.
 - Step 1. Locate and place the Rocket IoT XLE template so that holes can be drilled through the vehicle or electronics tray sheet metal to provide solid base mount points.



- Step 2. Using a Sharpie marker mark the holes and drill out the holes with a 5/8" drill bit.
 - Step 3. Attach the Rocket IoT XLE using ¼ X 1 inch or ¼ x 1 ¼ inch (zinc or stainless) threaded bolts w/nylon nuts and fender washers (bolts from the bottom up for a cleaner appearance).
 - Step 4. Mount the Rocket IoT XLE and all associated equipment.
- Once the Rocket IoT XLE is mounted in suitable location, attach all cabling and power connections. Wrap (loose) all cables, and check that all components are secure and do not rattle.



Electronics Tray Install



Motorcycle Install

Antenna Placement and Installation

1. Antenna Site Selection: The location of the Quad band antennas is extremely important for the proper functioning of the Rocket IoT and all peripherals. Below are Utility's best practices when considering a proper mounting location for the Rocket IoT Locker:

- The antennas must be installed a minimum of 18 inches away from any other antennas.
- The antenna should not be installed on a fiberglass roof on inside the vehicle unless a metal ground plane is used under the antenna.
- Utility's antennas are designed to be installed on the exterior of the vehicle, either on the roof or on the trunk of the vehicle. Use caution when pulling antenna wires through hole not to nick or cut any of the co-axial cables; the antenna will have to be replaced if any of the co-axial cable is nicked.

Examples of Correct Placement of Antenna mounting location
(Permanent Roof, Trunk and Magnetic mounted)



2. Antenna Installation:

For this example the antenna is mounted on the trunk of the vehicle (2013 Chevy Impala).

- Step 1. Position the Antenna away from any existing antenna install(s) a minimum of 18 inches from the center of the desired install location point.



- Step 2. Locate the center of your mount point and using an antenna hole saw designed for use on sheet metal and start your hole. In the case of a trunk with a support bracket you will have to drill out a larger diameter hole in the support bracket to allow for the final 3/4" hole to allow for mounting of the antenna.



- Step 3. Once the area is cleared of obstructions drill out the 3/4" hole for the multiband antenna ensure that the paint is removed around the 3/4" hole for grounding connectivity.
- Step 4. Feed the cables through the hole and cover with loom ensuring that none of wire insulation gets damaged. Always place a bead of silicone around the base of the antenna prior to mounting it to the vehicle. Tighten and secure the multiband antenna to the desired location on the vehicle and secure the extra antenna cables as to not impede with the safety and functionality of the trunk.



Providing Power to the Rocket IoT XLE – Utility Best Practices

The most important part of a Rocket IoT XLE installation is the proper provisioning of power.

1. Power connections for the Rocket IoT.

Several components are generally required.

- Waterproof Inline Fuse Holder (Supplied by UA). ATO or mini-blade fuse. Used on the power and ignition sense (where an “Add-A-Circuit” is not used).



- Power Cable (Supplied by Utility). This includes 20 feet of cable to ensure it can reach the vehicles battery if no factory breakout is available. Constant +12v power (red), chassis ground (black), and ignition (yellow) wires included in this power cable that need to be connected to factory breakouts.
- Add-A-Circuit fuse tap can also be used for Ignition sense (Not supplied by Utility).



- Dual Walled Butt Splice (Supplied by Utility). Used to connect power, ground and ignition sense wiring. This type of connector provides a crimped connection as well as a waterproof seal.



- Dual Walled Ring Terminal (Supplied by Utility). Used to connect power and ground; provides a crimped connection as well as a waterproof seal.



2. Proper Power Connection Fundamentals:

- Ignition power should always be connected to a switched ignition source. The Rocket IoT has a built in timer that is configurable through the Rocket IoT software. This internal timer begins to count down once the system no longer detects ignition voltage on the yellow power wire.
- Do not connect the yellow ignition power wire to another timer in the vehicle, such as a Havis Charge Guard or other similar power timer. Doing this essentially is connecting one power timer to another power timer.

Only connect power from an original equipment manufacturer (OEM) breakout. Vehicles without OEM breakouts should be wired directly to the battery for constant power and chassis ground unless a certified power distribution unit (PDU) is used. Utility will validate any (PDU) used by an installer to ensure compliance with standards.



(Factory Power and Ground Breakout 2013 Chevy Impala)

- Only use 16 or 18 gauge primary wires for any power, ground or ignition sense wiring.
- Check all voltages with a good quality multi-meter before using.
- Power and ignition sense should ALWAYS be fused as close to the main power source or original equipment manufacturer (OEM) factory vehicle power break out or source as possible.

Providing Power to the ALPR Graphics AI Processor

Like the Rocket IoT XLE, the most important part of an ALRP Graphics AI Processor installation is the proper provisioning of power. The power connections for the ALRP Graphics AI Processor are the same as the Rocket IoT XLE.

Several components are generally required.

- Waterproof Inline Fuse Holder (Supplied by UA). ATO or mini-blade fuse. Used on the power and ignition sense (where an “Add-A-Circuit” is not used).



- Power Cable (Supplied by Utility). This includes 20 feet of cable to ensure it can reach the vehicles battery if no factory breakout is available. Constant +12v power (red), chassis ground (black), and ignition (yellow) wires included in this power cable that need to be connected to factory breakouts.
- Add-A-Circuit fuse tap can also be used for Ignition sense (Not supplied by Utility).



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GPIO Trigger Cable

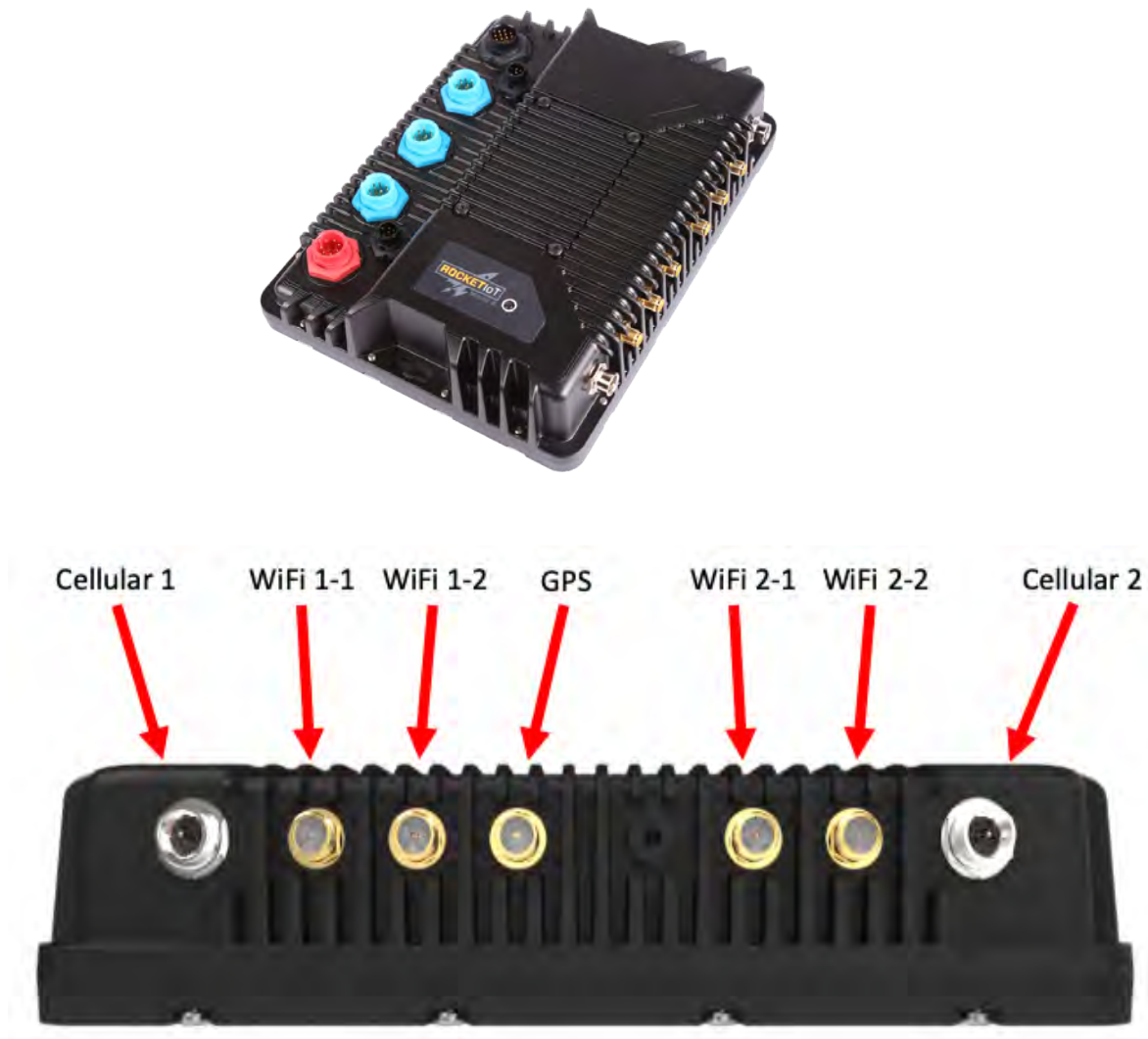
Triggers: The Rocket IoT can provide up to four Digital +12v triggers for the in-car video and/or BodyWorn cameras.

Wire Color	Description	Comments
Yellow	Ignition	Ign. Input can be connected to the GPIO or the Yellow Wire in the Power Cable. Standard is Connection to the Power Cable.
Orange	Trigger #1	Lightbar (Standard Trigger)
Brown	Trigger #2	Door (Standard Trigger)
Purple	Trigger #3	Brakes (Optional)
White	Trigger #4	Gun Lock (Optional)
Light Green	Siren A	Optional Trigger
Dark Green	Siren B	Optional Trigger
Pink	Relay Output B	Trigger for Red LED Light (Black Wire from LED)
Red	Relay Output A	Required Ground
Black	Primary Ground	Required Ground
Gray	Isolated Ground	Required Ground
Blue	Isolated Ground	Required Ground

NOTE: All four ground wires must be connected to chassis ground or triggers will not function properly.

Antenna connections to Rocket IoT XLE:

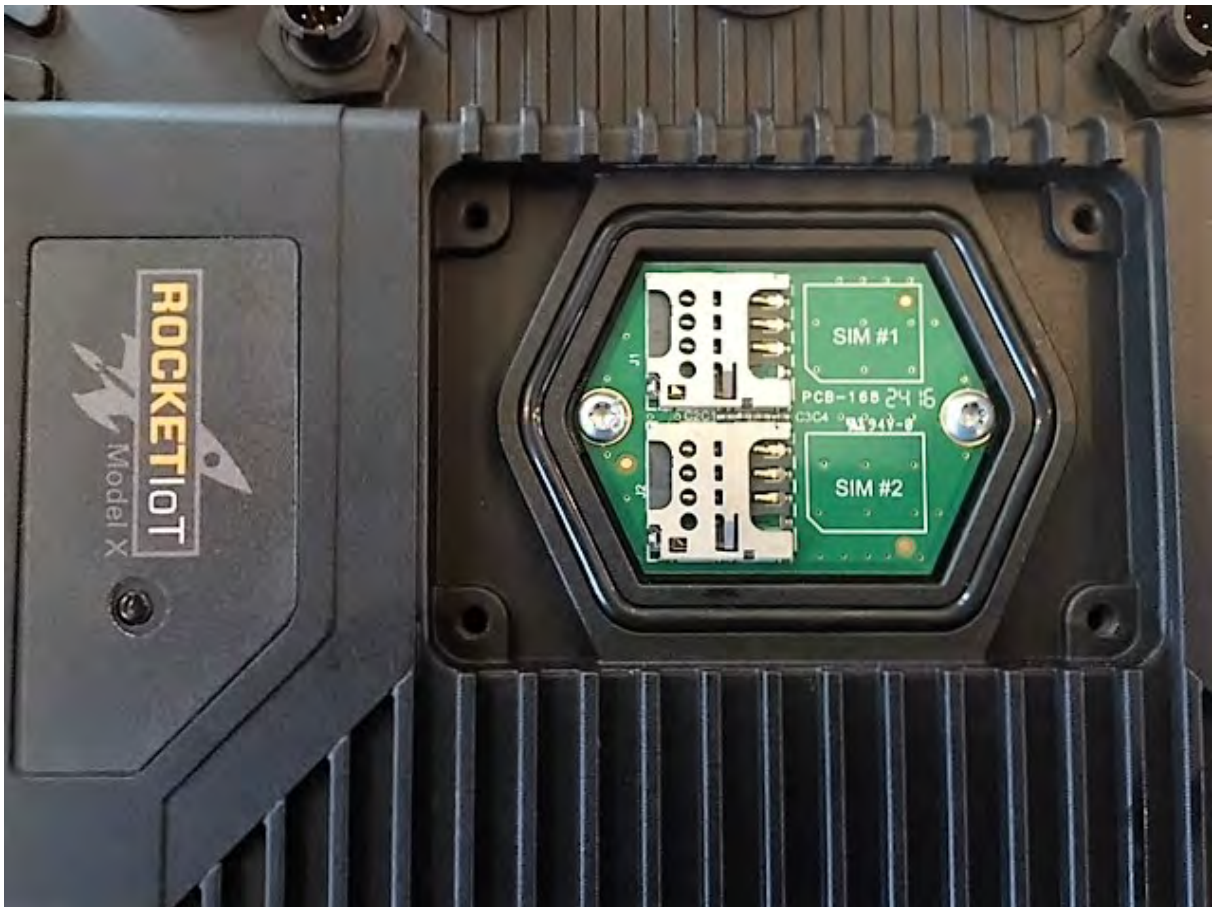
NOTE: The main cellular connection, two docking Wi-Fi connections and GPS should come from the same quadband antenna. The AUX cell connection and two AP Wi-Fi connections should come from the other quadband antenna. There will be one GPS cable that is not used.



In the case of alternative internal vehicle GlassMount antennas, the cellular antenna cable can be attached to either antenna connector on the Rocket IOT XLE. In a likewise manner, four WiFi Glassmount or Rubber Duck antennas can be connected in any order to the WiFi antenna connectors.

SIM Card Installation

- Utility Associates uses a Micro SIM card (3FF) to provide communications for the Rocket IOT XLE system.
- The SIM card is always inserted into the SIM #1 port located under the SIM card door pictured below.
- If dual carriers are being used, the primary SIM card goes into the SIM #1 slot and the secondary failover SIM card goes into the SIM #2 slot.
- The SIM Card cover and gasket provides an IP-67-rated water tight seal to prevent moisture from getting inside the Rocket IoT XLE case.
- Once the SIM card has been installed, it is important to make sure the SIM Card cover gasket is properly in place before reinstalling the SIM card cover and tightening down the four corner screws. See rubber gasket shown below.



Finishing the Hardware Installation

1. Once the hardware installation is completed there are several items that should be verified:
 - Rocket IoT has a built-in power indicator light that shows when the device is powered on (blinking green), when it is in the shutdown process (blinking amber) or when it is off (not lit up).
 - Verify that any exposed wiring has been loomed. This includes excess antenna, power, network cabling in the front of the vehicle etc. This also covers any cabling in the engine compartment. Cable must be neatly loomed and electrical taped or zip tied where appropriate.
 - Excess cable is hidden wherever possible.
 - All dual walled butt splices and ring terminals have been heat shrunk.
 - All antennas cables snugged up with an 8mm or 5/16 wrench. Torque seal on the FME connectors (not Loctite).
 - All cables checked to make sure they are plugged in correctly.
 - All kick plates, body molding, head liners, seat belts, etc. must be re-installed. Try to leave it better than you found it.

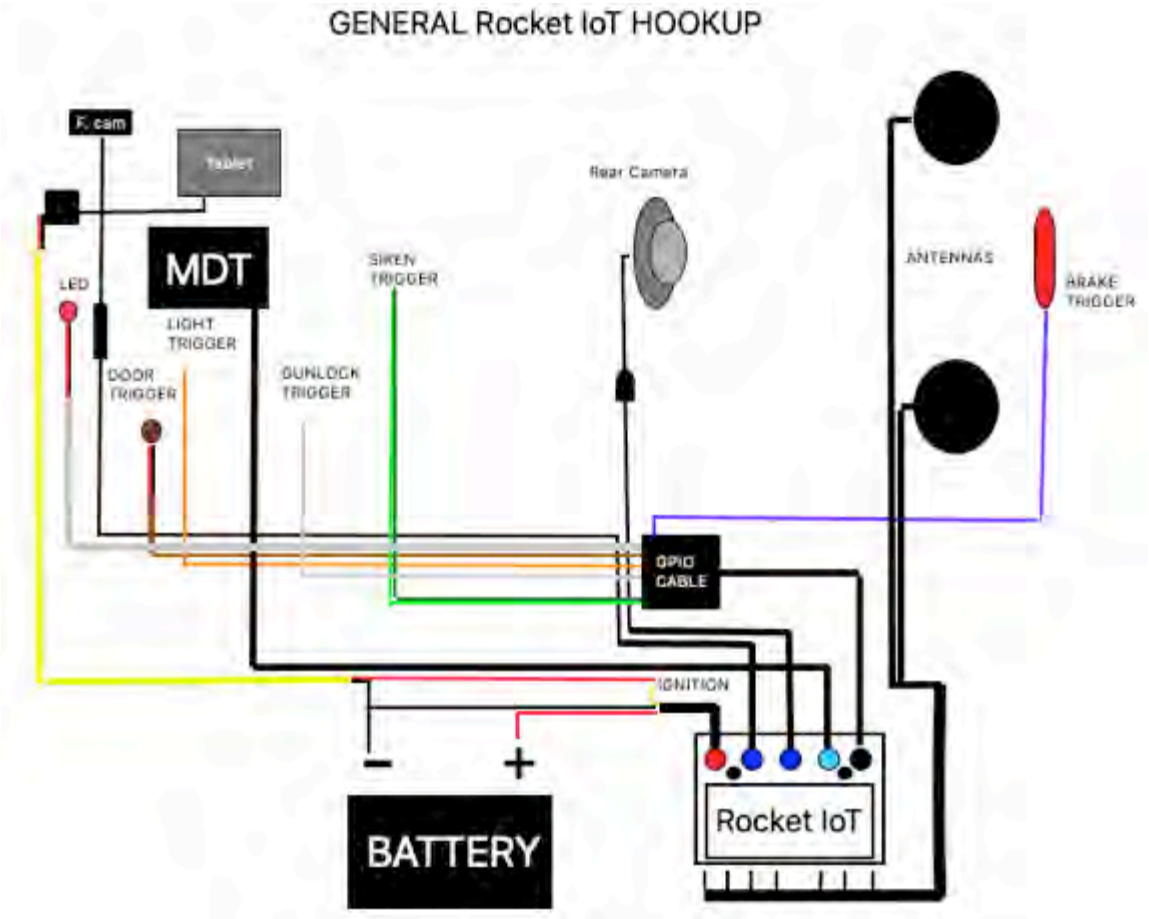


Rocket IoT XLE Blink Codes

1 Green Blink	System is Running – Input power exceeds 12.75v DC
2 Green Blinks	System shutting down - Input power exceeds 12.75v DC
Orange Blink	System shutting down - Input power below 12.75v DC
Red Blink	Power below 9.5v DC

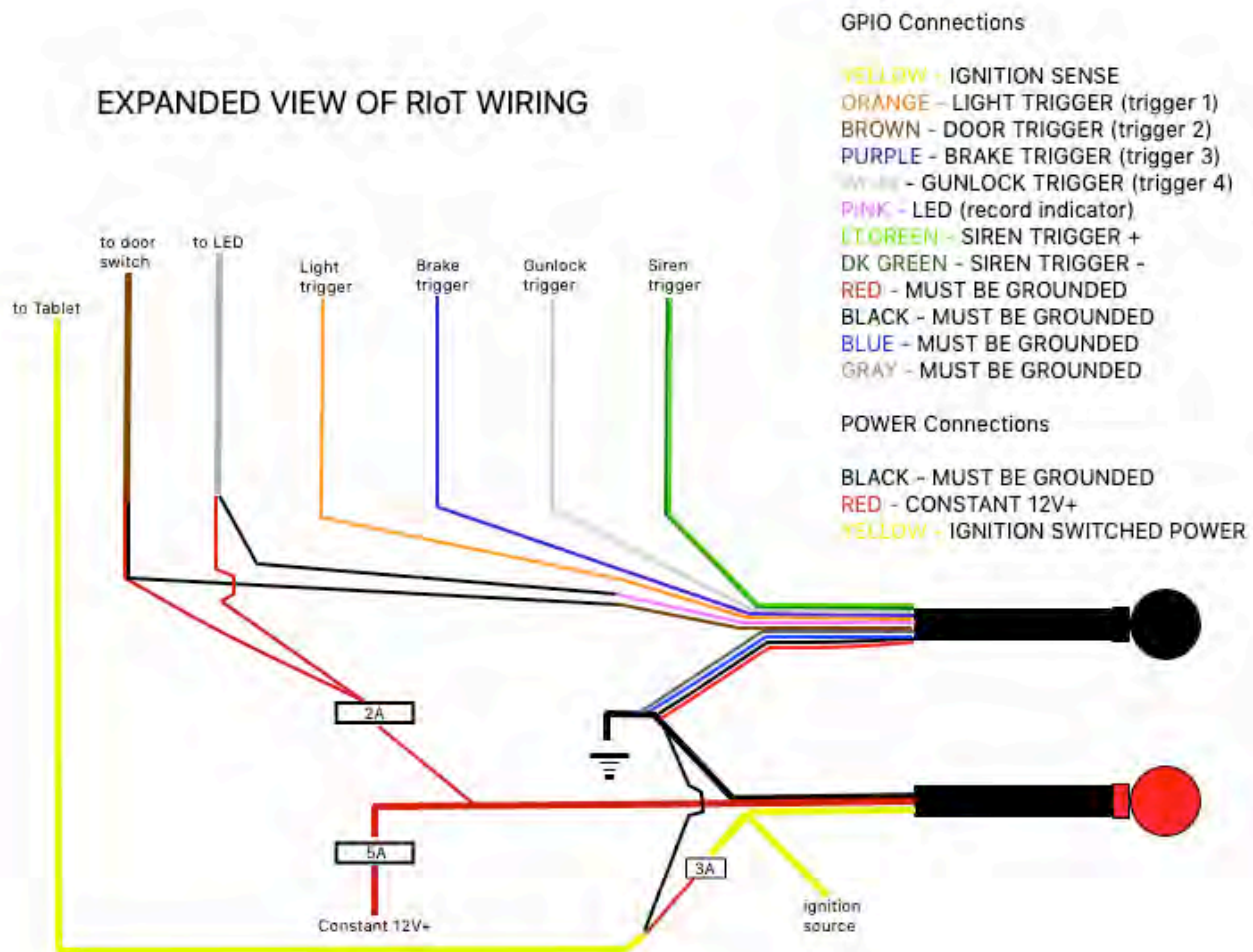
Recommended Fuse Sizes

Description	Fuse Size
Main Power	5 Amp
Ignition	3 Amp
Door & LED	3 Amp Shared
Tablet	3 Amp



GPIO Expanded Wiring View

EXPANDED VIEW OF RiOT WIRING





Support Help Desk

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Discussion of Warranties, Agreements, Terms and Conditions

Full details regarding Warranties for the Rocket IoT ALPR™ solution can be accessed in the documents described below, and can be accessed through the links provided.



Utility Rocket IoT Hardware Warranty

<http://bit.ly/RIOT-Hardware-Warranty>

The Utility Rocket IoT Hardware Warranty describes the warranty provided on Utility's Rocket IoT manufactured devices. Under this agreement, Utility guarantees that its devices are free from defects, and agrees to replace any parts or devices that have not been broken under malicious intent or subjected to extreme conditions.



Service Level Agreement

<https://www.bodyworn.com/service-agreement>

The Service Level Agreement describes the levels of service, software agreement, and terms and conditions that the client will receive from Utility (the supplier).

The client depends on Utility IT equipment, software and services, some of which are of critical importance to the client. As such, the SLA sets out what levels of availability and support the client is guaranteed to receive, forms an important part of the contract, and enables the two parties to work together effectively.

The Utility "System as a Service" Agreement (SaaS Agreement) describes Utility's service commitment of system provided to client. The document details the services that will be provided, the environment under which the software will operate, how the software may be upgraded, the uptime of the service, and the hours where support can be reached. Further, the document details permitted usage of the software, restrictions on software usage, the fees that will be assessed, and the terms under which they are due.

The Utility Terms and Conditions detail the conditions under which Utility conducts sales of its proprietary products. This includes liability limitations, logistics of product transfer, protection of intellectual property, payment information, and the jurisdiction under which legal action may be taken.



Utility Data Security Documentation

bit.ly/UA-Data-Security

This Utility Data Security Documentation is a summary overview of the security, performance, reliability, and scalability for Utility hardware, software as a service, and hosting environment. Utility uses a combined hardware and software defense-in-depth architecture to protect the confidentiality, integrity, and availability of customer information. The security and performance architecture adapts automatically to changes in technology, internal and external threats to networks and applications, and to client operations. Third party security risk evaluations are performed to assure the effectiveness of our procedures, methodology, equipment, facilities, and personnel.



Amazon Web Services (AWS)

Utility purchases services from Amazon Web Services to provide backend processing and storage for its software packages. The following documentation explains Amazon's security standards, obligations, and assurances provided for the safety, security, and accessibility of all client data.

AWS Service Organization Controls 3 Report - bit.ly/AWSControls

The AWS Service Organization Controls 3 Report provides an overview of how Amazon maintains operation of technology, people, data, and infrastructure supporting its AWS services.

AWS Overview of Security Processes - bit.ly/AWS-SecurityReport

The AWS Overview of Security Processes describes the systems put in place to assure that Amazon is able to meet the high service and security standards that its clients demand. This includes an in-depth review of how Amazon maintains both physical and electronic security over its cloud services.

CJIS Compliance on AWS - bit.ly/Utility-is-CJIS-Compliant

The CJIS Compliance on AWS document provides Amazon's perspective on and approach to being fully compliant with Criminal Justice Information Standards (CJIS). These standards are set nationally by the Federal Bureau of Investigation (FBI) for information storage, usage, and sharing within law enforcement.



Procurement Information on CJIS Compliance

Utility's RocketIoT ALPR™ with AvailWeb™ is a Cloud-based solutions that meets and exceeds standards for CJIS Compliance, and offer a scalable license plate reader and digital management and storage platform with high availability and dependability. Cloud-based solutions outperform the alternate — on-premise storage — and protect the confidentiality, integrity, and availability of criminal justice information and data. Cloud-based solutions are fundamental to credibility, by projecting transparency, and preserving your Community's trust.

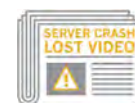
Security - Cloud-based storage is unparalleled security and redundancy.

Rest assured that your video data in the Cloud is much more secure than what lives on a tower or in your server room. Those with the most to protect – from leading defense agencies to global companies - have chosen Cloud-based storage. There is a long and successful track record of law enforcement customers using the Cloud for a wide range of sensitive federal and state government workloads, including CJIS data.



Reliability - Cloud-based storage is unparalleled reliability.

A Cloud-based provider platform virtually eliminates risk of downtime. Amazon S3, for example, is designed to provide 99.99999999% durability and 99.99% availability over a given year, redundantly stored on multiple devices across multiple facilities in geographically separate locations. It is an illusion to think criminal justice information is more reliable in a Department's on-premises local storage facility. One incident with rebuilding 'on-prem' crashed servers - and its unbudgeted cost - is all it takes to prove it. You don't want to be that case study.



Budget - Without the Cloud, agencies spend a lot of the IT budget to manage storage.

That takes funding off the streets, and requires hiring that is difficult to defend and pay for. With cloud storage, that's no longer an issue. Now, you can focus on how the police camera video solution will help you further your law enforcement mission. The video IT piece belongs to somebody else.

Flexibility - Scale up and down to meet your current needs.

In business, this flexibility is key. In government, new expenditures are tough to defend and pay for. With Cloud-based solutions, you no longer have to build for the future, or be constrained by decisions made or contracts signed in the past. You can adjust your video storage expenditures to meet your agency's immediate needs.

Resiliency - No law enforcement agency can ignore resiliency threats.

Yet few have the resources alone to deliver security when your Community itself is in harm's way. Cloud providers' resiliency programs identify, respond to, and recover from a major incident, with contingency management, business continuity, and disaster recovery plans. Cloud-based providers identify critical system components required to maintain the availability of the system, and recover services in the event of an outage from physically separate locations, maintain authoritative backups, employ continuous infrastructure capacity planning, and monitor to ensure successful replication. Cloud-based resiliency means you can keep your promises "To Serve" when most needed in your Community.





Procurement Information on CJIS Compliance Continued

Cost - Using Cloud technology reduces your storage and maintenance fees.

No more servers, software, and update fees. Many of the hidden costs typically associated with video storage, (and with software implementation, customization, hardware, maintenance, and training) are rolled into a transparent subscription fee. No more need to explain any unanticipated cost – you are covered.

It's Mobile - Internet standards and web services allow you to interconnect services.

Today's cloud-based solutions for law enforcement are managed under secure controls, and in continuous alignment with federal, state and local law enforcement Criminal Justice Information Security (CJIS) policy. This means that you can centralize your law enforcement video and access it from anywhere in the world, on any computer or mobile device, at any time. Your mission-critical video information is fully mobile.

Utility and AWS CJIS Compliance in the Cloud

Utility is fully committed to continually exceeding industry standards for data security including Criminal Justice Information Standards (CJIS). The following documentation provides details on how Utility ensures customer data is secured.

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Utility's Data Security Documentation is a summary overview of the security, performance, reliability, and scalability for Utility hardware, software as a service, and hosting environment.

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