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Section 1: Cover Letter





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30 April 2013

City of Milwaukee
Department of Public Works – Parking Operations
841 North Broadway
Room 501
Milwaukee, WI 53202
Attn: Cindy Angelos

RE: RFP for Parking LPR System
Official Notice No. 48

Dear Cindy:

PCS Mobile is pleased to submit our proposal for the referenced RFP.

PCS Mobile is a corporation that has focused on providing mobile technology solutions for State and Local agencies throughout the United States for nearly twenty (20) years. We are a key integrator of the Genetec AutoVu LPR system.

Reasons why PCS Mobile should be selected, we are:

- **Credible** - We are focused and financially sound
- **Reliable** - We are process oriented and responsive
- **Partners** - We listen and are accountable

As the Vice-President, I can testify that:

- I am authorized to represent PCS Mobile.
- We have reviewed and understand the elements of this RFP.
- Our proposal indicates our intent to perform that services as outlined in the RFP.
- We are willing to enter into an agreement under the terms and conditions outlined in Contract Management Principles of the RFP.
- PCS Mobile acknowledges Addenda #1 and #2 along with responses to all questions.



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Contact

Please use the following person as the contact during the RFP review process:

Martin (Marty) Murphy, Vice-President

Phone: 303.552.3952

Email: martym@pcsmobile

We look forward to the opportunity to serve the City of Milwaukee and ultimately its citizens.

Sincerely,

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

PCS Mobile

Martin Murphy
Vice-President

Section 2: Corporate Capabilities





2. Corporate Capabilities

PCS Mobile is a corporation that has focused on providing mobile technology solutions for State and Local agencies throughout the United States for twenty (20) years. We are a key integrator of the Genetec AutoVu LPR system.

The PCS Mobile Team provides the following capabilities in providing the Parking LPR System for the City of Milwaukee.

1. Name, FEI#, legal form, incorporation state & history

Portable Computer Systems, Inc. dba PCS Mobile

FEI# 84-1396969

S Corporation, incorporated in the State of Colorado

PCS Mobile was formed in 1992 and incorporated in 1993 by Kathleen Pakkebieer to provide reliable mobile data solutions for state and local agencies in order to gather information and access information anywhere, anytime.

2. Corporate size & market concentration in parking technology industry

PCS Mobile has grown from one person to a company of approximately forty (40) persons operating from three offices and implementing its formal fulfillment processes throughout the US. PCS Mobile has typically completed an average of approximately \$28 million in work annually in the last five years. The company was named the Top Panasonic Toughbook Partner in 2011.

For over 15 years, Genetec has led the development of world-class unified IP security solutions. Genetec began in 1997 by pioneering the first-ever IP video management software, giving customers at the time never-seen-before system flexibility, hardware freedom and ease of system growth through a powerful, open solution that was easy to use. Currently, Genetec employs just over 400 people worldwide.

3. Fiscal condition & stability (attach most recent audited financial or credit report)

PCS Mobile is financially stable with over \$1 million in equity reserves. The company is currently engaged in completing a \$10 million project in providing a major mobile data project for the City of Houston to replace mobile data computer systems for the Houston Police Department. The project team has completed nearly 75% of this project and the project is on time and budget. We have attached a copy of our most recent reviewed financials for the year 2011 (See Attachment A).

4. Insurance & bonding (e.g., carrier, coverage types, liability limits & policy dates)

Attachment B contains an example of coverage types and insurance limits

PCS Mobile has a bonding capacity for individual contracts in the \$13,000,000 to \$18,000,000 range. Our bond surety is The Hartford, please refer to the attached bonding letter from our bonding agent (reference Attachment 3).



5. *Relevant organizational experience (attach list of parking LPR System clients)*

Below is a list of experience in providing Parking LPR Systems:

<i>City of Napa</i>	<i>City of Regina, SK</i>
<i>City of Aspen</i>	<i>City of Sarasota, FL</i>
<i>City of Boulder</i>	<i>City of Tampa Parking</i>
<i>City of Ft. Collins</i>	<i>City of Boston</i>
<i>City of Monterey</i>	<i>City of Springfield, MA</i>
<i>City of Sacramento</i>	<i>City of Philadelphia</i>
<i>City of North Vancouver, BC</i>	<i>Borough of State College, PA</i>
<i>City of Newark; Newark, NJ</i>	

6. *Performance on recent, similar projects (attach 5 client references with contacts)*

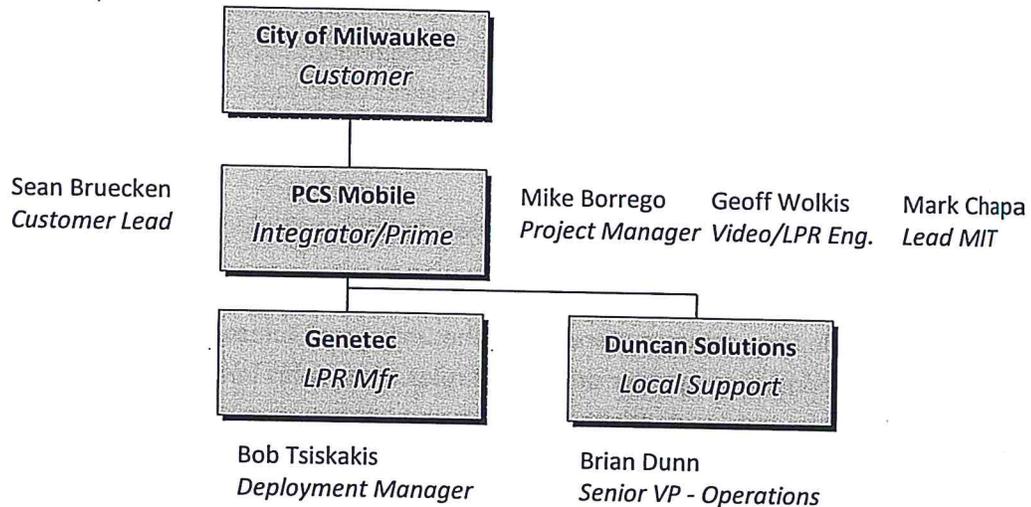
HPD – Mobile Computing	Houston Police Department
<i>Short Description</i>	Procure and Install Computing systems in 1,800+ cars
<i>Contact Name</i>	Patrice Cheesman
<i>Contact Phone</i>	(713) 247-8545
<i>Contact Email</i>	Patricia.Cheesman@cityofhouston.net
Loveland Mobile Video	Loveland Police Department
<i>Short Description</i>	In car and interview video systems and back end
<i>Contact Name</i>	Bill Westbrook
<i>Contact Phone</i>	(970)962-2330
<i>Contact Email</i>	WestbB@ci.loveland.co.us
San Diego Mobile Video	San Diego Unified Port District
<i>Short Description</i>	In boat video systems and back end
<i>Contact Name</i>	Thomas Lockwood
<i>Contact Phone</i>	(619) 686-6260
<i>Contact Email</i>	tlockwoo@portofsandiego.org
Harris County Mobile Video	Harris County
<i>Short Description</i>	In car video and back end
<i>Contact Name</i>	Chief Bob Hilsher (Pct. 1)
<i>Contact Phone</i>	713-755-7613
<i>Contact Email</i>	Bob_Hilsher@itc.co.harris.tx.us
Glendale Mobile Video	Glendale, AZ
<i>Short Description</i>	In car video and back end
<i>Contact Name</i>	Bruce Byron
<i>Contact Phone</i>	(623) 930-3071
<i>Contact Email</i>	Bbyron@glendaleaz.gov



3. Project Team

PCS Mobile has formed the following project team for the City of Milwaukee Parking LPR project.

a. Project team local office, organizational structure & reporting relationships



b. Capabilities of proposed project manager & other key personnel

The following staff of PCS Mobile, Genetec, and Duncan will fulfill key project duties:

PCS Mobile Personnel	Role	Reporting Entity/Position
Sean Bruecken	Customer Lead	PCS Mobile President
Mike Borrego	Project Manager	Customer Lead
Geoff Wolkis	Video/LPR Engineer	PCS Project Manager
Mark Chapa	Lead Mobile Installation Technician (LMIT)	PCS Project Manger
Assigned Staff	Field Service Reps	LMIT

Genetec Personnel	Role
Bob Tsiskakis	Deployment Manager
Gary Shull	Regional Sales Manager
Assigned Staff	Project Implementation and Training Assistance

Duncan Solutions Personnel	Role
Brian Dunn	LBE Point of Contact and Manager
Assigned Staff	Service and Maintenance



1. *Relevant occupational experience summaries for key personnel*

PCS Mobile Staff



Sean Bruecken / Business Development Manager, Customer Lead

Sean has a background in Construction Management and as a Journeyman Electrician. He both served in the USAF as an Electrical and Environmental Systems Specialist working on F-16 Fighter Aircraft and attended Bowling Green State University where he received a bachelor's degree in Construction Management. With a range of project management and technical experience, he brings great value to the PCS Mobile team.



Mike Borrego/Manager of Wireless Solutions, Project Manager

Mike has over 30 years of project management experience within the industry having held the position as **Director of the Division of Telecommunications for the state of Colorado**-- among other prestigious roles. During his tenure, he oversaw the development of the state-wide Digital and will be an integral member of the PCS Mobile team.



Geoff Wolkis/ Video – LPR Engineer

Geoff has a diverse 15 year background in the IT industry, including 10 years in the U.S. Navy working on LAN/WAN infrastructures. He earned his B.S. in Information Technology from the University of Phoenix and carries the following certifications; **Microsoft MCDST certified, CompTIA A+ Certified, Dell DCSE Certified, HP MasterTech Certified, Panasonic Arbitrator 360 Certified Integrator, and Genetec Security Center and AutoVu certified**



Mark Chapa/Lead Mobile Installation Technician

Mark has over 10 years of experience in the mobile installation industry. He has shown great success in his career with PCS Mobile and leads his installation teams with quality and schedule in mind. His certifications include; **Mobile Electronics Certified Professional, Studying for Associates in IT, and Genetec AutoVu Certified**



2. Project availability schedules for all key personnel

PCS Mobile fully intends to assign the listed personnel to your project. At this time the proposed project team is available so long as the City of Milwaukee’s proposed schedule of contractor selection and implementation is maintained. If these schedules extend there may be need to adjust certain personnel due to other project commitments. Should this occur, PCS Mobile assures the City that any replacement personnel will meet or exceed the qualifications of the initially listed project team.

3. Recent project manager performance (attach 3 references with contact data)

Mike Borrego is best suited for the Project Manager position of your project. Mike understands how to plan and execute a project successfully from start to completion. Mike has years of project management experience and continues currently to manage projects for PCS Mobile across the country. Please contact the below references as requested to get a better understanding of Mike, his capability and previous client satisfaction.

State of Colorado	
<i>Short Description</i>	Work on multiple communication and radio projects
<i>Contact Name</i>	Balta Moreno
<i>Contact Phone</i>	(303) 764-7979
<i>Contact Email</i>	Balta.Moreno@state.co.us

Evergreen Fire Rescue	
<i>Short Description</i>	Management of new radio systems
<i>Contact Name</i>	Chris Johnson
<i>Contact Phone</i>	(303) 674-3145
<i>Contact Email</i>	cjohnson@evergreenfirerescue.com

Colorado Department of Corrections	
<i>Short Description</i>	New Public Safety Radio System in State Penitentiary
<i>Contact Name</i>	Doreen Webb
<i>Contact Phone</i>	(719) 269-4066
<i>Contact Email</i>	Doreen.Webb@doc.state.co.us

Section 4: Product Plan





4. Product Plan

PCS Mobile will work with Genetec to provide a comprehensive product and warranty solution for the City of Milwaukee Parking LPR project.

a. Overview of LPR system & offerings

AutoVu is the IP license plate recognition (LPR) system of Security Center, Genetec's unified security platform. AutoVu automates the identification of vehicle license plates for agencies looking to enhance applications for parking enforcement.

Key Features of AutoVu

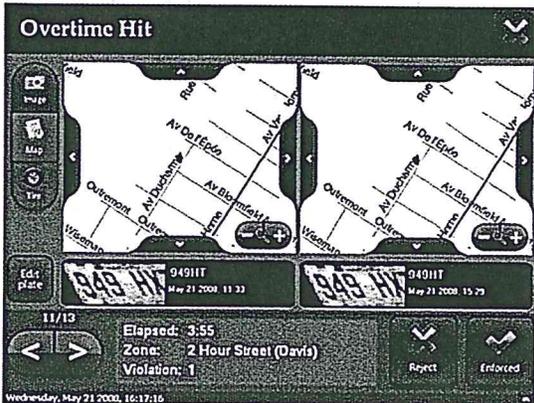
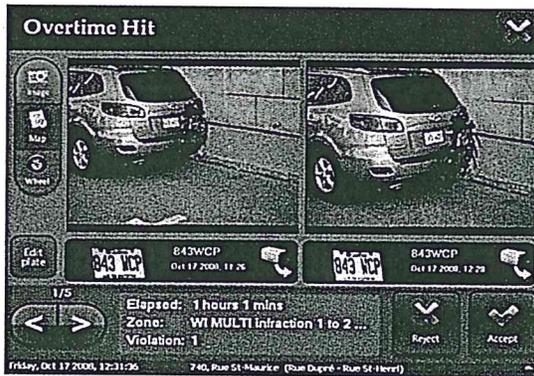
The municipal solution enables permit, overtime and scofflaw enforcement applications:

Time Limit Hits

If a vehicle read is identified as having been parked longer than the allowable time limit, the AutoVu Patroller will sound an audible alert. A window pops up that displays the LP read and hit information at time 1 and time 2.

The review process includes:

- Review of the vehicle image and license plate at time 1 and time 2
- Review of the position of the vehicle on a map at time 1 and time 2





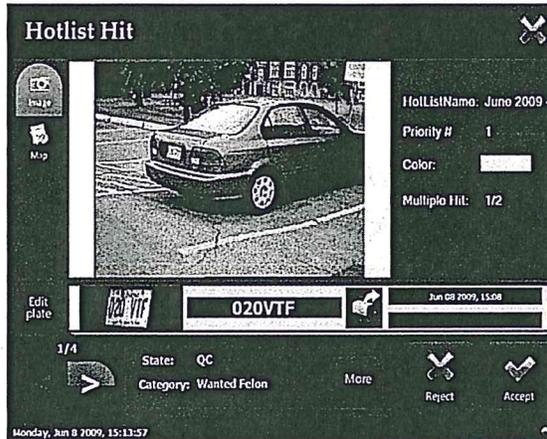
Permit Hits

If a vehicle is read that is not in the selected permit list, the AutoVu Patroller will sound an audible alert. A window pops up that displays the LP read and hit information for review. The process is similar to that a hot list hit.



Hot List Hits

Upon a match, the AutoVu Patroller will sound an audible alert. A window pops up that displays the LP read as well as the hit category, hotlist color and any additional information on the vehicle of interest from the hotlist. AutoVu systems can be configured to support a virtually unlimited number of different hot lists such as scaffolds, stolen vehicles, other wanted vehicles etc.



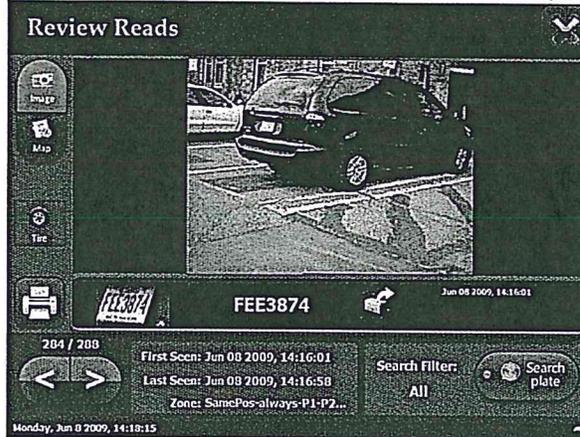
During the review process the AutoVu Patroller continues to process license plate reads and alert of potential hits against the hotlists. Alerts are stacked in order of priority and time. When rejecting a hit, the system can be configured such that the user has to select a reason for the rejection. Rejected hits can be reviewed in Security Center.

Users may want to add license plate numbers of new vehicles of interests to a hotlist directly in Patroller. These new entries remain in the manual hotlist until the expiry period, as defined by the system administrator.



In-Vehicle Data Mining

It is possible for parking enforcement officers to search for a full or partial license plate number in the in-vehicle database. If the read license plate data is in the system, the user will be able to review each read or hit corresponding to the search criteria, as well as any associated data on screen, including the street address.



In-Vehicle Mapping

In-vehicle mapping allows Parking Enforcement to precisely display on a map where a LP read or hit took place without having to decipher complex GPS coordinates. Users can pan as well as zoom in and out of the map to define a custom view point. The system is designed to work with mapping data; many clients have ESRI maps which can be converted to this format.



b. System component descriptions

1. Camera

- Monochrome progressive scan ALPR camera with a resolution of 1024X946(XGA) @ 30fps.
- Color context camera with a resolution of 640x480 @ 30fps.
- Capable of being equipped with a 12mm, 16mm, 25mm, 35mm or 50mm lens.

- Operating temperature range from -4°F to 131°, with an extended temperature option ranging from -40°F to 131°F.
- Storage temperature range of -40°F to 185°F.
- Supports vibration according to standard MIL-STD 810G 514.6 (Figure 514.6 C-1).
- Resists bumps according to standard IEC 60068-2-29 (Directions: ± X, ± Y, ± Z).
- Resists shock according to standard MIL-STD 810G 516.6.
- Unit is sealed according to standard IP67 IEC 60529.
- Unit has extruded aluminum housing.
- Unit has an integrated pulsed LED illuminator available in 850nm, 740nm and 590nm wavelengths.
- Dimensions: 1.65 (H) × 4.75 (W) × 4.75 (D) inches excluding cabling and mounting brackets.
- Weight: 1.5 lbs.
- Dynamic exposure allowing all-weather reading of dirty or obstructed plates. The camera can read at skew angles up to 45 degrees.
- Color context camera uses CMOS technology to capture color images in low light conditions.
- The camera status LED can be disabled for covert operations.

2. *Mobile LPR processor*

- Supports international license plate reading.
- Dedicated Atom™ N2600 per camera (XGA).
- Has up to 2 ALPR camera unit inputs.
- Two (2) 10/100/1000 Base-T Ethernet ports.
- Two (2) dry-contact inputs.
- 12V/500mA auxiliary power output.
- Two (2) output relays.
- Operating temperature range from -40°F to 150°F.
- Storage temperature range of -40°F to 185°F.
- Has a high-temperature auto shutoff protection mechanism.
- Operates on a 12-24VDC power supply @ 60W.
- Dimensions: 12.6 × 8.6 × 4.72 inches.
- Comes with brackets allowing for horizontal or vertical mounting.
- Provided with stabilizer bar with integrated wire strain relief.
- The central processing unit is able to output plate reads in a user-configurable XML format

3. *Back office hardware/software (e.g., CPU, memory, OS, browser)*

Security Center and the AutoVu module are capable of operation on a virtual server provided by the City of Milwaukee. Server and Client Station requirements are included in Attachment 4: Computer and Server Requirements.

Several key aspects of running the software on a virtual server include:



5. Service Plan

a. Overview of project phases, milestones & schedule

PCS Mobile will work as a team with the City and Genetec to comply with your process schedule as outlined in the City's RFP. The schedule following the testing and acceptance phase will follow the direction determined during initial discussions with the City and the Project Kick-Off Meeting. PCS Mobile has already confirmed procurement (acquisition) schedules for equipment and hardware with Genetec. Below is an outline of the overall project schedule. This schedule is subject to change per direction and preference by the City during initial project meetings.

- | | |
|---|--------------------|
| • Executed Contract | June 12, 2013 |
| • LPR System installed for testing | July 15, 2013 |
| • System functionality and operability confirmed | August 5, 2013 |
| • Obtain the City's final acceptance of system | August 20, 2013 |
| • Project Kick Off Meeting | August 21, 2013 |
| • Product delivered to site | September 3, 2013 |
| • Begin on-site implementation (2 weeks from acceptance) | September 4, 2013 |
| • Complete installation and testing of Security Center server | September 11, 2013 |
| • Complete training on LPR System | September 13, 2013 |
| • Mobile installation and testing completed of 30 vehicles
– assuming access to minimum of six (6) vehicles/week | October 9, 2013 |
| • Delivery of Close-out material | October 23, 2013 |

b. Description of acquisition & delivery phase

The details of the acquisition and delivery phase will be determined by initial discussions during contract negotiations and the testing period. PCS Mobile and Genetec are prepared to begin production and procurement of all equipment and hardware as soon as a contract has been negotiated. We anticipate delivery of equipment within approximately 2 weeks of final acceptance.

c. Description of implementation phase (e.g., including timing & description of installation, testing & training components)

Below is a sample of a Statement of Work for your project:



1. SERVICES OBJECTIVES

PCS will provide the following services for the City of Milwaukee:

- Installation of thirty (30) 2-camera AutoVu Mobile License Plate (LPR) systems in City Parking vehicles, mix to be determined.
- Extended warranty for each system (provided as OPTIONAL for years 2 through 5).
- User and administrative training.
- Back end software setup required for virtual server.

2. SERVICES SCOPE

Project Management: PCS Mobile will provide professional project management and staff during project deployment.

Mobile mount equipment:

- PCS will install the mobile AutoVu system in accordance with manufacturers recommended installation guidelines. When specifics for installation are not available from manufacturer, PCS will employ best practices for installation.
- The Control unit will be mounted on a trunk mounted public safety equipment tray. The unit will require approximately 15"x20" of mounting space.
- PCS Mobile will not be responsible for relocating equipment to make space available.
- Cameras will be mounted in one of three configurations unless specified on the quote.
- Network interface cable will be routed from the trunk along acceptable routes into the passenger compartment and then under trim along the passenger side of the vehicle to get to the Mobile Data Computer at the front of the vehicle.
- All wiring/cablings will be routed through grommets when necessary and/or will be dressed appropriately when exposed. All electrical connections will be made using solder and heat shrink when applicable.
- Power wiring will be routed according to best practices to a power distribution unit (PDU) either in the trunk or console. If connections are not available at the PDU or console, power wiring will be connected at the battery for 12V constant and ground and at the ignition harness for ignition sense.

Installation diagrams and specifics will be provided to the City during the closeout phase.

Training will be provided upon completion of installation of the back end system.

SERVICES APPROACH

PCS utilizes a project deployment process that breaks the entire process into 4 phases: Planning, Mobilizing, Deployment, and Close Out.

Planning: Work with the City on logistics and responsibilities of the project.

Mobilizing: Prepare necessary personnel and equipment for deployment.

City of Milwaukee

Public Works Department – Parking LPR





Deployment: Work performed according to SOW

Close out: Reconciliation of equipment, invoicing, punch lists and acceptance.

PCS expects the installations to be completed within 5 weeks of initial deployment, start date to be determined. Installation schedule is based on receiving 6 vehicles per week.

PCS typically utilizes one Video/LPR Engineer to install and configure the back end software and provide user and administrative training after the installations. The installation plan anticipates use of two (2) Mobile Installation Techs to complete installation and testing of mobile equipment and software.

3. ASSUMPTIONS AND REQUIREMENTS

PCS assumes the following conditions for completion of the SOW:

- Due to the nature of electronic equipment installations, PCS Mobile assumes that the customer will provide up to 2 garage bays for the installation.
- PCS Mobile assumes that customer will have fleet or mechanic personnel available for questions arising from aftermarket equipment installations.
- PCS Mobile assumes that customer will have a representative available for vehicle acceptance upon the completion of each install.
- PCS Mobile assumes that customer will provide access to an internal IT representative for data connection support.
- City needs to ensure proper amount of mounting space is available in each vehicle. If proper space is not available, PCS will work with the agency to relocate any equipment and will charge a base rate of \$65.00 per hour for this service with a minimum of 2 hours plus applicable travel and expenses.
- Agency needs to have a server available for Back end software installation. This server needs to be connected to the network and have the minimum requirements for a virtual server as outlined in Genetec Computer and Server Requirements.

4. EXCLUSIONS

The following items are excluded from the SOW:

- PCS Mobile will not provide Installation training.
- PCS will not provide Hardware or software other than what is included in quote.

5. DELIVERABLES

The following items will be delivered at completion of the SOW:

- Installation of thirty (30) total Mobile AutoVu License Plate recognition systems.
- Installation of Security Center/AutoVu software on City-provided virtual server configured per City requirements and tested per acceptance requirements.
- Training for users and administrators.
- Closeout Binder including completed acceptance forms, pre-installation checklists, work



orders, quality control checklists, record installation diagrams, manufacturer's warranty, recommended maintenance and operation instructions.

6. TRAINING

PCS Mobile's goal in developing curriculum for the City is to help ensure that PEO staff obtains the skills and competencies required to successfully deploy, operate and manage an effective LPR program.

- Training will be designed in consultation with the City to ensure necessary knowledge to deliver an effective program.
- Training will be designed specifically for the parking solution being deployed.
- Training will consist of specialized instruction for mobile camera operations as well as the AutoVu Patroller and Security Center software.

d. Description of maintenance phase (including timing & description of warranty inclusions & exclusions, maintenance program, items not covered by maintenance program, spare parts inventory & shipping approach, product upgrade process & software modification process)

PCS Mobile understands the City's need for an operable system with limited downtime. Thus, our proposal includes enhanced support services fulfilled by Genetec technical staff and local services of Duncan Solutions, Inc.

Phone and remote support will be provided 24/7 by Genetec technical staff. If incident severity level and status requires on-site service, the City may request such service by phone, email or web portal. PCS Mobile will deploy local support fulfilled by Duncan Solutions, Inc. On-site service will be tracked and coordinated thru Auto-Task software. The service-level goal of limiting down-time to two (2) hours will be facilitated through use of hot spare equipment provided for the deployment. It is anticipated that hot spare LPR equipment will be replenished within two (2) days.

Our proposal includes two (2) preventative maintenance visits per mobile deployment per year. Preventative maintenance may be provided during on-site service visits. Preventative maintenance will conform to a checklist developed mutually by PCS Mobile and the City.

We anticipate the following hot spare inventory for thirty (30) vehicles:

- (2) Base Unit (Sharp X CPU)
- (2) Power cables
- (4) Sharp X Cameras
- (4) Base Unit to Camera cables

Any product upgrade or software modifications that are available will be discussed with the City and determined if of value. If it is determined that these upgrades/modifications are necessary, proper coordinating will be made between PCS Mobile's Project Manager and the City to ensure that any upgrades are completed in a timely fashion with little to no impact on your parking operations.

Section 6: Costs





Proposed Cost Elements

Proposal: Request for Proposals (RFP) for Parking LPR System
 Customer: City of Milwaukee, Dept of Public Works - Parking Operations

Date: 30-Apr-13
 Estimator: M. Murphy

6a. PROPOSED COST ELEMENTS - SUMMARY

Cost Element	Price
Acquisition Costs	\$ 673,731.25
Implementation Costs	\$ 59,900.00
Service Costs - for First Year	\$ 29,750.00
Subtotal	\$ 763,381.25
Performance Bond at Bonding Rate of: 1.25%	\$ 9,542.27
Base Project Total	\$ 772,923.52

Deduct - Mobile Computer Assembly

Deduct Mobile Computer Assembly	\$ 150,000.00
Deduct Installation of Mobile Computer Assembly for 30 vehicles	\$ 6,750.00
Deduct Total if Proposed Mobile Computer Assembly is not required	\$ 156,750.00

Notes:

1. Proposed Alternative Costing Elements are not included in the Base Project Total.
2. Requirements for Mobile Computer are provided in Attachments.

6a.1 ACQUISITION COSTS

Item Number	Item	Item Description	Quantity	Unit Price	Extended Price
AU-K-U2X-850	LPR Kit	AutoVu SharpX LPR Dual base KIT includes main processing unit, hard mount brackets, wiring, GPS antenna, high resolution LPR units and in-vehicle license.	30	\$ 16,593.75	\$ 497,812.50
PS-F-50UNIV-ALL	Zone Configuration	Custom development for LPR Package (ex: Zone editor, mapping, custom enforcement rules). Up to 50 lots	1	\$ 562.50	\$ 562.50
GSC-Av-S	Security Center	GSC AutoVu Standard Base Package. Works with Genetec Security Center (sold separately) SQL 2008 Express Edition included. Full Microsoft SQL Server 2008 package not included. Camera connection NOT included	1	\$ 1,243.75	\$ 1,243.75
AU-M-USCNTY	Mapping/In-Vehicle	In-vehicle mapping data for one US County	1	\$ 8,437.50	\$ 8,437.50
GSC-CUSTOM-PBPLUS	Interface for Handheld	Enhanced Patroller Context Package (PBP, XML Export and Plate Copy).	1	\$ 562.50	\$ 562.50
AU-K-X-EWUP-1Y1	Warranty Upgrade	Advanced swap warranty service upgrade from return and repair for first year of sale for SharpX system	30	\$ 393.75	\$ 11,812.50
	Shipping	FOB Destination	1	\$ 3,300.00	\$ 3,300.00
COM-PROD	Mobile Computing Assembly	Panasonic Toughbook CF19 Dual Mode Notebook. Complete Kit. Includes 3 year warranty on the laptop Laptop, Mounting Hardware (VEHICLE MAKE AND MODEL MANDATORY AT TIME OF ORDER), Docking Station, and Vehicle Power Adapter.	30	\$ 5,000.00	\$ 150,000.00
Subtotal					\$ 673,731.25
Performance Bond at Bonding Rate of: 1.25%					\$ 8,421.64
Acquisition Costs - Total					\$ 682,152.89



Proposed Cost Elements

Proposal: Request for Proposals (RFP) for Parking LPR System
 Customer: City of Milwaukee, Dept of Public Works - Parking Operations

Date: 30-Apr-13
 Estimator: M. Murphy

6a.2 IMPLEMENTATION COSTS

Item Number	Item	Item Description	Quantity	Unit Price	Extended Price
VID-SERVICE	Security Center Installation and Configuration	Installation of Security Center and AutoVu Module on server and configuration of system to meet Customer specific requirements and testing. Includes installation of In-Vehicle Mapping and Interface for Handheld System - INCLUDES TRAVEL AND EXPENSES	1	\$ 7,200.00	\$ 7,200.00
VID-SERVICE	Training	Onsite Training services for one (1) day as described in Training Plan – INCLUDES TRAVEL AND EXPENSES.	1	\$ 1,200.00	\$ 1,200.00
VID-SERVICE	Mobile Installation	Installation of AutoVu on Mobile Computer Assembly in each vehicle, installation of software, configuration and testing. INCLUDES TRAVEL AND EXPENSES.	30	\$ 1,500.00	\$ 45,000.00
VID-SERVICE	Project Management	Project management services.	1	\$ 6,500.00	\$ 6,500.00
Subtotal					\$ 59,900.00
Performance Bond at Bonding Rate of: 1.25%					\$ 748.75
Implementation Costs Total					\$ 60,648.75

6a.3 SERVICE COSTS

Item Number	Item	Item Description	Quantity	Unit Price	Extended Price
SMA-PLUS	SMA Plus	Software Maintenance Agreement plus 24/7 Phone and Remote Support for one (1) year warranty period	1	\$ 16,250.00	\$ 16,250.00
VID-SERVICE	On-site Support including Preventative Maintenance for one (1) year warranty period	On-site support and Preventive Maintenance fulfilled by Duncan Solutions. Refer to Service Plan for detail. Preventative maintenance of thirty (30) vehicle installations. Includes two (2) preventative visits withing one (1) year warranty period.	30	\$ 450.00	\$ 13,500.00
Subtotal					\$ 29,750.00
Performance Bond at Bonding Rate of: 1.25%					\$ 371.88
Service Costs Total					\$ 30,121.88



Proposed Cost

Proposal: Request for Proposals (RFP) for Parking LPR System
 Customer: City of Milwaukee, Dept of Public Works - Parking Operations

Date: 30-Apr-13
 Estimator: M. Murphy

6b. PROPOSED COSTING ALTERNATIVES

Item Number	Item	Item Description	Quantity	Unit Price	Extended Price
AU-K-O2X-850	OVERTIME LPR KIT	AutoVu SharpX OVERTIME Dual base KIT includes main processing unit, hard mount brackets, wiring, Navigator Kit w/GPS, Tire Cameras, high resolution LPR units and in-vehicle license. THIS ITEM - IF SELECTED - WOULD REPLACE LPR KIT INCLUDED IN BASE PRICE.	30	\$ 22,612.50	\$ 678,375.00
SMA-PLUS	SMA Plus	Software Maintenance Agreement plus 24/7 Phone and Remote Support for one (1) year warranty period - Year 2	1	\$ 16,250.00	\$ 16,250.00
SMA-PLUS	SMA Plus	Software Maintenance Agreement plus 24/7 Phone and Remote Support for one (1) year warranty period - Year 3	1	\$ 16,250.00	\$ 16,250.00
SMA-PLUS	SMA Plus	Software Maintenance Agreement plus 24/7 Phone and Remote Support for one (1) year warranty period - Year 4	1	\$ 16,250.00	\$ 16,250.00
SMA-PLUS	SMA Plus	Software Maintenance Agreement plus 24/7 Phone and Remote Support for one (1) year warranty period - Year 5	1	\$ 16,250.00	\$ 16,250.00
AU-K-U2X-EWAS-P2	Extended Warranty with Advance Replacement Coverage - thru Year 2	Extended Warranty for AU-K-U2X Sharp with Advance Replacement coverage - 2 Years pre-paid at time of system purchase	30	\$2,385.00	\$ 71,550.00
AU-K-U2X-EWAS-P3	Extended Warranty with Advance Replacement Coverage - thru Year 3	Extended Warranty for AU-K-U2X Sharp with Advance Replacement coverage - 3 Years pre-paid at time of system purchase	30	\$4,168.13	\$ 125,043.90
AU-K-U2X-EWAS-P4	Extended Warranty with Advance Replacement Coverage - thru Year 4	Extended Warranty for AU-K-U2X Sharp with Advance Replacement coverage - 4 Years pre-paid at time of system purchase	30	\$5,844.38	\$ 175,331.40
AU-K-U2X-EWAS-P5	Extended Warranty with Advance Replacement Coverage - thru Year 5	Extended Warranty for AU-K-U2X Sharp with Advance Replacement coverage - 5 Years pre-paid at time of system purchase	30	\$7,259.06	\$ 217,771.80
VID-SERVICE	On-site Support including Preventative Maintenance Year 2	On-site support and Preventive Maintenance fulfilled by Duncan Solutions. Refer to Service Plan for detail. Preventative maintenance of thirty (30) vehicle installations. Includes two (2) preventative visits within Year 2 period.	30	\$ 450.00	\$ 13,500.00
VID-SERVICE	On-site Support including Preventative Maintenance Year 3	On-site support and Preventive Maintenance fulfilled by Duncan Solutions. Refer to Service Plan for detail. Preventative maintenance of thirty (30) vehicle installations. Includes two (2) preventative visits within Year 3 period.	30	\$ 450.00	\$ 13,500.00
VID-SERVICE	On-site Support including Preventative Maintenance Year 4	On-site support and Preventive Maintenance fulfilled by Duncan Solutions. Refer to Service Plan for detail. Preventative maintenance of thirty (30) vehicle installations. Includes two (2) preventative visits within Year 4 period.	30	\$ 450.00	\$ 13,500.00
VID-SERVICE	On-site Support including Preventative Maintenance Year 5	On-site support and Preventive Maintenance fulfilled by Duncan Solutions. Refer to Service Plan for detail. Preventative maintenance of thirty (30) vehicle installations. Includes two (2) preventative visits within one (1) year warranty period.	30	\$ 450.00	\$ 13,500.00

Attachment 1: Recent Financial Report



**PORTABLE COMPUTER SYSTEMS INC.
FINANCIAL STATEMENTS**

March 31, 2013

(With Independent Accountant's Report Thereon)

PORTABLE COMPUTER SYSTEMS, INC.

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Independent Accountant's Report

The Board of Directors and Stockholders

Portable Computer Systems, Inc.:

We have compiled the accompanying balance sheets of Portable Computer Systems, Inc. as of March 31, 2013, and the related statement of earnings for the year then ended, in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants.

A compilation is limited to presenting in the form of financial statements information that is a representation of management of Portable Computer Systems, Inc. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express such an opinion or any other form of assurance on them.

The corporation, with the consent of its shareholders, has elected small business corporation status under provisions of the Internal Revenue Code. A small business corporation pays no income tax. The shareholders report the income of the corporation on their personal tax returns and the shareholders pay the tax. However, the shareholders have consented to allow the corporation to provide estimates of income tax expense at 35% on the financial statements for planning purposes.

David Wancura, CPA, P.C.

David Wancura, CPA, PC
April 18, 2013

**PCS Mobile
Balance Sheet
March 31, 2013**

ASSETS

----- Cash in Bank -----	
Cash On Hand	14
Vectra Bank Checking Account	6,867
Vectra Payroll Checking Account	0
Total Cash in Bank	6,881
----- Accounts Receivable -----	
Accounts Receivable Control Account	5,692,493
Allowance for Uncollectibles	(13,629)
Other Receivables	0
Western Sky Receivable	288,741
Employee Advance	0
Note Receivable - Employee Loan	0
Note Receivable - C Pedersen	8,681
Total Accounts Receivable	5,976,286
----- Inventory -----	
Inventory Control Account	690,974
Inventory Non-Stock	0
Total Inventory	690,974
----- Fixed Assets -----	
Furniture & Fixtures	89,878
Software	123,627
Equipment	257,468
Demo Equipment	213,868
Vehicles	230,129
Leasehold Improvements	131,663
Intangible Assets	41,504
Accumulated Depreciation	(667,189)
Total Fixed Assets	420,948
----- Other Assets -----	
Deposits	6,582
Prepaid Expenses	61,526
Bid Bonds	0
Total Other Assets	68,108
Total ASSETS	7,163,197

**PCS Mobile
Balance Sheet
March 31, 2013**

LIABILITIES

----- Current Liabilities -----	
Accounts Payable Control Account	1,932,587
Accounts Payable Uncleared Checks	1,302,319
Purchase Order Clearing Account	485,470
California LCD Recycling Fee Payable	1,894
Commissions Payable	273,521
Sales Tax Payable	22,951
Customers Deposits	186,627
Vectra Bank Line of Credit	1,011,820
Total Current Liabilities	<u>5,217,189</u>
----- Other Liabilities -----	
Accrued Sales Returns	45,000
Accrued Expenses	0
Deferred Revenue	353,885
Other Payables	34,380
Total Other Liabilities	<u>433,265</u>
----- Payroll Liabilities -----	
Total Payroll Liabilities	<u>72</u>
----- Long Term Liabilities -----	
Total Long Term Liabilities	<u>0</u>
Total LIABILITIES	<u><u>5,650,526</u></u>

EQUITY

----- Shareholder's Equity -----	
Common Stock	100
Additional Paid In Capital	30,454
Shareholder Contributions	0
Shareholder Distributions	(13,623)
Retained Earnings	1,172,296
Total Shareholder's Equity	<u>1,189,227</u>
Year-to-date Net Income	323,444
Total EQUITY	<u><u>1,512,671</u></u>
TOTAL LIABILITIES AND EQUITY	<u><u>7,163,197</u></u>

PCS Mobile
Balance Sheet Comparison
For Month Ending February 28, 2013 and January 31, 2013

ASSETS	March 31, 2013	February 28, 2013	Dollar Variance
Cash in Bank			
Cash On Hand	14	14	0
Vectra Bank Checking Account	6,867	7,395	(528)
Vectra Payroll Checking Account	0	0	0
Total Cash in Bank	<u>6,881</u>	<u>7,409</u>	<u>(528)</u>
Accounts Receivable			
Accounts Receivable Control Account	5,692,493	3,958,773	1,733,720
Allowance for Uncollectibles	(13,629)	(13,629)	0
Other Receivables	0	0	0
Western Sky Receivable	288,741	288,741	0
Employee Advance	0	0	0
Note Receivable - Employee Loan	0	0	0
Note Receivable - C Pedersen	8,681	8,975	(294)
Total Accounts Receivable	<u>5,976,286</u>	<u>4,242,860</u>	<u>1,733,426</u>
Inventory			
Inventory Control Account	690,974	754,570	(63,596)
Inventory Non-Stock	0	0	0
Total Inventory	<u>690,974</u>	<u>754,570</u>	<u>(63,596)</u>
Fixed Assets			
Furniture & Fixtures	89,878	89,878	0
Software	123,627	123,627	0
Equipment	257,468	257,468	0
Demo Equipment	213,868	210,876	2,992
Vehicles	230,129	230,129	0
Leasehold Improvements	131,663	131,663	0
Intangible Assets	41,504	41,504	0
Accumulated Depreciation	(667,189)	(659,689)	(7,500)
Total Fixed Assets	<u>420,948</u>	<u>425,456</u>	<u>(4,508)</u>
Other Assets			
Deposits	6,582	6,582	0
Prepaid Expenses	61,526	48,764	12,762
Bid Bonds	0	0	0
Total Other Assets	<u>68,108</u>	<u>55,346</u>	<u>12,762</u>
Total ASSETS	<u><u>7,163,197</u></u>	<u><u>5,485,641</u></u>	<u><u>1,677,556</u></u>

PCS Mobile
Balance Sheet Comparison
For Month Ending February 28, 2013 and January 31, 2013

	<u>March 31, 2013</u>	<u>February 28, 2013</u>	<u>Dollar Variance</u>
LIABILITIES			
----- Current Liabilities -----			
Accounts Payable Control Account	1,932,587	2,501,713	(569,126)
Accounts Payable Uncleared Checks	1,302,319	47,101	1,255,218
Purchase Order Clearing Account	485,470	125,231	360,239
California LCD Recycling Fee Payable	1,894	1,762	132
Commissions Payable	273,521	245,742	27,779
Sales Tax Payable	22,951	33,155	(10,204)
Customers Deposits	186,627	183,627	3,000
Vectra Bank Line of Credit	1,011,820	662,160	349,660
Total Current Liabilities	<u>5,217,189</u>	<u>3,800,491</u>	<u>1,416,698</u>
----- Other Liabilities -----			
Accrued Sales Returns	45,000	45,000	0
Accrued Expenses	0	21,690	(21,690)
Deferred Revenue	353,885	363,380	(9,495)
Other Payables	34,380	32,088	2,292
Total Other Liabilities	<u>433,265</u>	<u>462,158</u>	<u>(28,893)</u>
----- Payroll Liabilities -----			
Total Payroll Liabilities	<u>72</u>	<u>89</u>	<u>(17)</u>
----- Long Term Liabilities -----			
Total Long Term Liabilities	<u>0</u>	<u>0</u>	<u>0</u>
Total LIABILITIES	<u>5,650,526</u>	<u>4,262,738</u>	<u>1,387,788</u>
EQUITY			
----- Shareholder's Equity -----			
Common Stock	100	100	0
Additional Paid In Capital	30,454	30,454	0
Shareholder Contributions	0	0	0
Shareholder Distributions	(13,623)	(1,866)	(11,757)
Retained Earnings	1,172,296	1,172,296	0
Total Shareholder's Equity	<u>1,189,227</u>	<u>1,200,984</u>	<u>(11,757)</u>
Year-to-date Net Income	323,444	21,919	301,525
Total EQUITY	<u>1,512,671</u>	<u>1,222,903</u>	<u>289,768</u>
Total Liabilities and Equity	<u>7,163,197</u>	<u>5,485,641</u>	<u>1,677,556</u>

**PCS Mobile
Income Statement
For the Month Ended March 31, 2013**

	March 31, 2013	% of Sales
SALES		
Product Sales	3,152,213	94.82
Service Sales	172,199	5.18
Other Sales Accounts	0	0.00
Total Sales	<u>3,324,412</u>	<u>100.00</u>
COST OF GOODS SOLD		
Cost of Sales - Products	2,723,237	81.92
COS - Subcontractors	4,122	0.12
COS - Payroll	59,935	1.80
COS - Expenses	13,216	0.40
Total Cost of Goods Sold	<u>2,800,510</u>	<u>84.24</u>
Gross Margin	<u>523,902</u>	<u>15.76</u>
EXPENSES		
Advertising and Marketing	9,059	0.27
Communications	2,686	0.08
Education and Development	2,066	0.06
Interest and Finance Charges	2,160	0.06
Insurance	4,461	0.13
Office and Facilities	38,648	1.16
Personnel	130,442	3.92
Professional Fees	11,042	0.33
Travel and Lodging	21,846	0.66
Total Expenses	<u>222,410</u>	<u>6.69</u>
Net Income from Operations	<u>301,492</u>	<u>9.07</u>
OTHER INCOME		
Other Income	34	0.00
Other Expenses	0	0.00
Total Other Income / Expenses	<u>34</u>	<u>0.00</u>
NET INCOME	<u><u>301,526</u></u>	<u><u>9.07</u></u>

PCS Mobile
Income Statement Compare - YTD
For Year-To-Date Ending march 31, 2013 and March 31, 2012

	Mar 2013	Mar 2012	Dollar Variance
SALES			
Product Sales	7,589,320	5,864,232	1,725,088
Service Sales	384,451	253,380	131,071
Other Sales Accounts	0	0	-
Total Sales	7,973,771	6,117,612	1,856,159
(change YTD Sales)			30.34%
COST OF GOODS SOLD			
COS- Products	6,744,051	5,363,200	1,380,851
COS - Subcontractors	49,541	166	49,375
COS - Payroll	169,701	111,783	57,918
COS - Expenses	59,251	38,971	20,280
Total Cost of Goods Sold	7,022,544	5,514,120	1,508,424
Gross Margin	951,227	603,492	347,735
(change YTD GM)			57.62%
EXPENSES			
Advertising and Marketing	13,737	19,668	5,931
Communications	9,590	13,310	3,720
Education and Development	12,220	2,627	(9,593)
Interest and Finance Charges	13,516	22,252	8,736
Insurance	13,383	11,897	(1,486)
Office and Facilities	112,983	91,907	(21,076)
Personnel	381,507	318,579	(62,928)
Professional Fees	23,102	49,259	26,157
Travel and Lodging	48,869	57,563	8,694
Total Expenses	628,907	587,062	(41,845)
(change YTD Exp)			-7.13%
Net Income from Operations	322,320	16,430	305,890
(change YTD NI - Oper)			1861.78%
OTHER INCOME			
Other Income	1,111	399	712
Other Expenses	0	0	-
Total Other Income / Expenses	1,111	399	712
NET INCOME	323,431	16,829	306,602
(change YTD NI)			1821.87%

**PCS MOBILE
STATEMENT OF CASH FLOWS
FOR THE MONTH ENDED MARCH 31, 2013**

NET INCOME	\$ 301,526
Adjustments to Reconcile Net Income to Net Cash provided by Operating Activities:	
Depreciation Expense	7,500
Changes in Accounts Receivable	(1,733,427)
Changes in Inventory	63,596
Changes in Payables and accrued expenses	1,045,331
Changes in Other Liabilities	(7,203)
Changes in Other Assets	<u>(12,762)</u>
NET CASH PROVIDED BY OPERATING ACTIVITIES	(335,439)
 CASH FLOWS FROM INVESTING ACTIVITIES:	
Net Capital Expenditures	<u>(2,992)</u>
NET CASH USED IN INVESTING ACTIVITIES	(2,992)
 CASH FLOWS FROM FINANCING ACTIVITIES:	
Changes in Notes Payable	349,660
Changes in FSB Note Payable	0
Change in Income Tax Reserve	0
Shareholder Distributions	<u>(11,757)</u>
NET CASH PROVIDED BY FINANCING ACTIVITIES	337,903
 Net Increase (decrease) in cash and cash equivalents	 (528)
Cash and Cash equivalents at February 28, 2013	<u>7,409</u>
Cash and Cash equivalents at March 31, 2013	<u>\$ 6,881</u>

See accompanying notes and accountant's report.

NOTES TO FINANCIAL STATEMENTS

(1) Summary of Significant Accounting Policies and Practices

This summary of significant accounting policies of Portable Computer Systems, Inc. (the "Company") is presented to assist in understanding the Company's financial statements. The financial statements and notes are representations of the Company's management who is responsible for their integrity and objectivity. These accounting policies conform to generally accepted accounting principles and have been consistently applied in the preparation of the financial statements.

(a) *Description of Business*

Portable Computer Systems, Inc. (the "Company") was incorporated in March of 1997 and is a privately owned corporation. The Company is headquartered in Denver, Colorado and is primarily a reseller of notebook computers. Portable is a Panasonic preferred provider to governmental public safety agencies in a seventeen state region. The Company provides notebook sales, repairs, support and part allocation for all makes and models. Portable offers a full line of notebooks called the ToughBooks™ series.

(b) *Inventories*

Inventories are stated at the average costs. Average cost is determined using the specific identification method for all inventories.

(c) *Fixed Assets*

Fixed assets are stated at cost. Depreciation is calculated on the straight-line method over the following estimated useful lives:

Demonstration equipment	5 years
Furniture and fixtures	7 years
Software	3 years
Equipment	5 years
Automobiles	5 years

(d) *Income Taxes*

The Company is not directly subject to federal or state income taxes as the Company has elected the Subchapter-S Corporation status. Therefore, the Company's profits are passed through to the owner and taxed on a personal basis.

See accompanying notes and accountant's report.

(e) *Financing of Inventories*

In January 2013, the Company renewed an inventory financing arrangement with Vectra Bank Colorado, National Association. The financing arrangement is in the form of a two-year promissory note for the amount of \$2,500,000; where the proceeds will be advanced on an as-needed basis. Inventory and substantially all of the unsecured assets of the Company collateralizes the agreement. The owner has personally guaranteed the loan up to 50% of the balance. The loan includes a debt to tangible net worth covenant of 3 to 1. Accrued interest will be paid on the 25th of each month thereafter at the Wall Street Journal Published Prime Rate + 0% with a 4.5% floor. The rate may change on a daily basis. The Commitment fee on the Promissory Note is .65% per annum and is non-refundable.

(f) *Revenue Recognition*

The Company recognizes revenue on sales when products are shipped and the customer takes ownership and assumes risk of loss.

(2) **Cash Equivalents**

Cash equivalents of \$6,881 at March 31, 2013 consist of cash in the Company's various checking and lockbox accounts. The Company's checking account with Vectra Bank Colorado is covered by the Line of Credit. A negative balance in this account is outstanding checks that will be covered by money from Line of Credit but not yet transferred.

(3) **Accounts Receivable**

The recorded accounts receivable for which an impairment has been recognized and the related allowance for doubtful accounts at March 31, 2013 were \$13,629.

(4) **Inventories**

The Company maintains its inventory levels at amounts sufficient only to meet existing sales. Consequently, changes in the market prices of inventory do not impact the Company's ability to recover the cost of inventory.

See accompanying notes and accountant's report

(5) Fixed assets and depreciation

At month-end the Company's depreciation expense was \$7,500 and the fixed assets consisted of the following:

	<u>01/01/13</u>	<u>Additions</u>	<u>Deletions</u>	<u>3/31/13</u>
Furniture and Fixtures	\$ 89,878	0	0	\$ 89,878
Software	119,497	4,130	0	123,627
Equipment	256,605	863	0	257,468
Demo Equipment	199,938	13,930	0	213,868
Automobiles	230,129	0	0	230,129
Leasehold Improvements	131,663	0	0	131,663
Intangible Assets	<u>41,504</u>	<u>0</u>	<u>0</u>	<u>41,504</u>
Accum. Depreciation	<u>(644,489)</u>	<u>0</u>	<u>(22,700)</u>	<u>(667,189)</u>
	<u>\$424,725</u>	<u>\$18,923</u>	<u>(\$22,700)</u>	<u>\$ 420,948</u>

(6) Other Assets

As of March 31, 2013 the Company had other assets of \$6,582 consisting of deposits, which were paid on leases to secure the rental of various office space utilized by the Company. Also, Prepaid Expenses of \$61,526 consisting of various Insurances and maintenance agreements, (expensed over the corresponding months).

(7) Accrued Expenses

Accrued expenses \$0 includes insurance, rent, payroll and sales taxes payable, credit cards payable and contract sales fees.

(8) Deferred revenue

The Company has on-going maintenance/service contracts, whereby the Company provides a 24-hour response service for clients experiencing severe technical issues. The Company's responsibilities are primarily service as equipment and other costs are typically covered by a manufacturer's warranty. Payments for the contracts are paid in advance and often cover more than one year. Income is recognized over the life of the contract on a straight line basis.

(9) Retirement Plan

The Company has a defined contribution 401k plan covering substantially all of its employees. The Company's contributions to the plan are completely discretionary.

See accompanying notes and accountant's report.

(10) Related Party Transactions

The Company has a note receivable of \$288,741 from Western Sky Real Estate, LLC. The sole shareholder of the Company owns a 50% share of Western Sky Real Estate, LLC, which was formed to purchase an office building in Tempe, AZ, and Denver, CO that provides office space. Currently the Company has a lease with Western Sky Real Estate, LLC for \$7,000 per month.

See accompanying notes and accountant's report.

Attachment 2: Sample Insurance Certificate





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/26/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Blue Sky Ins 7208 S. Tucson Way # 230 Centennial CO 80112		CONTACT NAME: Sharon Fraley PHONE (A/C No. Ext): (303) 647-5477 E-MAIL ADDRESS: sharonf@bskyins.com		FAX (A/C No.): (303) 265-9370
INSURED PCS Mobile / Portable Computer Systems, Inc. / Western Sky, LLC 1200 W. Mississippi Ave. Denver CO 80223		INSURER(S) AFFORDING COVERAGE INSURER A: Travelers Insurance Company		NAIC #
		INSURER B:		
		INSURER C:		
		INSURER D:		
		INSURER E:		
		INSURER F:		

COVERAGES CERTIFICATE NUMBER: CL1292900745 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Per Project Aggregate GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	x	x	H630-0C067499-TIL-12	6/1/2012	6/1/2013	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	x	x	BA-0C067499-12-TEC	6/1/2012	6/1/2013	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	x	x	HSM-CUP-0C067499-TIL-12	6/1/2012	6/1/2013	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional/E&O	x	x	ZPL-14R69260-12-I3	6/1/2012	6/1/2013	\$1,000,000
A	Crime						\$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Joel Walker/SHARON <i>[Signature]</i>

Attachment 3: Bonding Letter





Surescape Insurance Services
7800 S. Elati Street, Suite 100
Littleton, CO 80120

(303) 225-8030 Phone



(303) 225-8034 Fax



April 29, 2013

California Office
California License: OB95668
77-564 Country Club Drive, Suite 401
Palm Desert, CA 92211

City of Milwaukee
Department of Public Works – Parking Operations
841 North Broadway
Room 501
Milwaukee, WI 53202
Attn: Cindy Angelos

RE: PCS Mobile
Bonding Capacity

Dear Ms. Angelos:

This letter is to confirm that our company services the surety bond program for PCS Mobile and attest to their integrity and commitment to providing quality systems and workmanship. PCS Mobile has a very strong resume of performance on some of the most challenging and fast track projects throughout the Western U.S.

Surety bonds for PCS Mobile are underwritten by Hartford Insurance Company, rated A XV (Excellent) by A.M. Best. Bonding capacity is \$13,000,000 single project and \$18,000,000 aggregate.

Please note that underwriting and approval of individual bonds is subject to favorable review of the contract documents, bond forms and verification of financing for private projects. Execution of performance and payment bonds is a matter between PCS Mobile and Hartford Insurance Company and we assume no liability to third parties or to you if for any reason we do not execute bonds for a particular project.

We are proud to work with PCS Mobile and are confident you will be pleased with their performance as part of your project.

Sincerely,

Doug Rothey
President



Attachment 4: Computer and Server Requirements





Requirements Compliance Matrix

Project: City of Milwaukee - Public Works Department - Parking Operations
Parking LPR System

Date: 4/30/2013

Section/Sub Section	Description	Compliance	Comments
1A - Operational (license plate scanning & recognition)			
1. Scanning	Convenient method for PEOs to scan & digitize photos of LPS & parked vehicles	C	
	Sophisticated software & technology for finding LPs & enhancing LP images	C	
	Real-time capture of alphanumeric, date/time, site, image & other required LP/vehicle data	C	
	Ability to capture parked vehicle LPs from all jurisdictions & other vehicle data (e.g., color image, GPS coordinates & scan date/time stamps) at all times whether PEO vehicle stopped or moving & regardless of parked vehicle position (e.g., parallel or angle-parked)	C	The system will be optimized for the plates where the system is installed. You will not have the same accuracy on plates of other Jurisdictions.
	Full accommodation of state/nation LP design variances (e.g., fonts, colors, position & gaps)	C	The system will be optimized for the plates where the system is installed. You will not have the same accuracy on plates of other states.
	LP data capture rates of at least 98% (of scanned vehicles) even in adverse conditions	PC	The accuracy of LPR is hard to define only if all variables are perfect will any LPR system achieve such high accuracy
2. Reading & recognition	Real-time on-site processing of captured LP data (with remote processing option)	C	LP can be processed in the vehicle but the information can also be sent live to the server where more processing can be done
	Robust algorithms to ensure high resolution & accurate reads (e.g., LP localization, orientation & sizing, image normalization, character segmentation, OCR, syntax analysis & geo-analysis)	C	Genetec OCR algorithms are robust and our LPR cameras are high resolution
	Robust image manipulation & OCR techniques to ensure high resolution & accurate reads	C	Genetec LPR camera will extract only the plate from the image and analyze it.
	Superb recognition at varying speeds, angles (e.g., up to 60°) & distance (e.g., 4" - 6')	C	This is dependent on many factors such as speed, angles, distance. Our cameras can read between 7' and 21' away in a variety of angles which cover parallel parked vehicles, 45 degree parking and 90 degree parking.
	Detection of LPs from multiple formats & jurisdictions (e.g., all reflective & non-reflective LPs)	C	The system will be optimized for the plates where the system is installed. You will not have the same accuracy on plates of other states.
	Superb LP resolution & recognition accuracy rates of at least 90% in any conditions (e.g., glare, ambient light, inclement weather)	C	there are many variables to consider when calculating accuracy. If all variables are optimal, we can meet and exceed the spec.
	Real-time processing of parking data from citation processing system	C	The existing back end parking system of permit and scofflaw data will update our LPR system real-time.
	Real-time transfer of accurate LP data to citation processing system	C	
	Real-time ability to match LP numbers of parked vehicles against pre-loaded database	C	The database will need to be imported in SC. This could be in the form of a text file. All plates can be matched against this file.
	Compliance with National ACPO ANPR Standards (NAAS) for data capture & accuracy	PC	To the extent possible, we comply with NAAS standardizations.
1B - Operational (parking enforcement)			
1). Time violations	Ability to distinguish different parking zones & time periods (e.g., 30, 90 & 120 minutes)	C	The system will not automatically tell you which zone you are in but you can configure all these zones in the system and select the appropriate zone to enforce.
	Full support of citations for all time zone restrictions (e.g., 15 minutes, 1 hour or 2 hours)	C	The system will not automatically tell you which zone you are in but you can configure all these zones in the system and select the appropriate zone to enforce.
	Full support of automatic chalking mode (e.g., images for marking time & vehicle movement)	C	Our system can be configured with different time restrictions and will digitally "chalk" vehicles with vehicle imaging and GPS information. Enhanced "chalking" is available with Optional Overtime solution.
	Ability to note precise location of time limit violation via flexible method (e.g., GPS or zone)	C	Violations are marked with GPS location and enforcement zone.
	Display of violation evidence (e.g., map, vehicle position, wheels, read times & elapsed times)	C	The violation contains the enforcement zone, map location, time stamps, elapsed time, overview image
2). Other parking violations	Full support of citations for other parking violations (including pay-by-space violations)	C	Based on current back end processing providing updated lists of data. Pay by space violations can be monitored
	Full integration with citation processing system	C	Genetec has current integration with Duncan however minor modifications may be required.



Requirements Compliance Matrix

Project: City of Milwaukee - Public Works Department - Parking Operations
Parking LPR System

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Section/Sub Section	Description	Compliance	Comments
	Full field capabilities for PEOs to query citation processing system & verify violations	C	Based on current vendor providing updated information
	Ability to enforce all metered spaces (single-space or multi-space parking meters)	PC	If the meters are pay-by-plate, we can use our integration with PBP to do LPR enforcement.
3). Scofflaw identification	Automatic import/storage of all parking scofflaw data from citation processing system	C	Genetec system can import text files, CSV or excel documents to use as a hotlist in the LPR system
	Real-time access to & real-time wireless retrieval of all parking scofflaw data (e.g., LP data)	C	The system comes with 5 concurrent connections. Any networked PC can access to server data including scofflaw data.
	Automatic identification of scofflaws by matching LP numbers against scofflaw database	C	Our system can import text files, CSV or excel documents to use as a hotlist in the LPR system
	Full field capabilities for PEOs to query citation processing system & verify scofflaw match	C	Based on current vendor providing updated information
4.) Optional needs	Automatic population of correct TID data fields for any violation (LPR transfers data to TIDs)	C	System has capability to export data to TID's system
	Ability to support subsequent citation issuance by mail in lieu of affixing citation to vehicle (LPR system transfers violation-related LP images & data to citation processing system)	C	System has capability to export data
	Ability to equip other City vehicles to support parking enforcement (e.g., sanitation trucks)	C	Scalability allows additional vehicle systems.
1C - Operational (parking permitting)			
1). Sales	Full integration with parking permit sales process at all City-approved centers, including MPD kiosks, violation bureaus, Tow Lot & automated payment centers	C	Genetec system is setup to receive permits from Duncan's back end system
	Automatic import/storage of all parking permit data sold manually & electronically	C	The LPR systems looks for a text file which contains the permit information. When any changes are made to the file, the DB is updated.
2). Zone management	Automatic recognition of all permit zones (e.g., commuter-impacted & RPP permit zones)	C	Our system is configured with the appropriate permit zones. If a university system is purchased, the zones recognized and placed at the top of the list.
	Ongoing maintenance of all required permit zone data (e.g., street & address data)	C	All modifications to the zones can be done in the back-end software
	Real-time access to permit zone database & updates (e.g., for inquiries)	C	
3). Account management	Automatic recognition of all permit account data (e.g., name, number, address, vehicle & LP)	C	The LPR system will link all the LPR reads to the data that is in the permit text file for that License plate
	Seamless interface with permit account database & citation processing system	C	
	Real-time access to permit account database & updates (e.g., for LP/permit inquiries)	C	All permit information is store in a text file and the backend software can query that specific file.
4). Enforcement	Convenient scanning of LP data for matching against Permit Database (Invalid Permit List)	C	The system will push permit data to the LPR system and when a plate is not on the list, an alarm is raised. This can be a manual plate entry or an automated plate read
	Automatic detection of permit violators by matching against Permit Database (Invalid Permit List)	C	The system will push permit data to the LPR system and when a plate is not on the list, an alarm is raised. This can be a manual plate entry or an automated plate read
	Real-time alerts for PEOs of LPR-captured LPs without valid parking permit	C	
	Ability to simultaneously enforce permits, permit zones & permit regulations (including odd/even & day-of-week parking) & other regulations (e.g., time restrictions)	C	The system will be set up with the different parking permits and time limit enforcement rules and the officer will have to select which permit to enforce and if he also wants to do time limit on vehicles who don't have a permit the officer will select a time limit to enforce.
5). Optional needs	Seamless integration with MPD database	C	System can export data in XML format and can also import hotlists in CSV, text or excel file
	Ability to read, recognize & enforce disabled parking permits	C	If it is just adding different number plates in the permit list then we will treat these as normal permits
1D - Operational (suspect vehicle identification)			
1) Data management	Real-time access to MPD stolen vehicle database (Suspect Vehicle List) wireless or via file exchange	C	If the MPD database information is in a text file or CSV file available on the server, we can do real-time searches on that database.
	Storage (with real-time access) of all City-furnished suspect vehicle data (Suspect Vehicle List)	C	All the hits will be stored in a data base which can be accessed with Security Center until the retention period is reached.



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Section/Sub Section	Description	Compliance	Comments
	Accurate maintenance of suspect vehicle data for at least 365 days	C	All the hits will be stored in a data base which can be accessed with Security Center until the retention period is reached.
	Access to other relevant data for supporting criminal justice investigations (e.g., witness identification, pattern recognition or suspect individual tracking)	C	
2) Scanning	Ability to scan LPs of suspect vehicles while simultaneously identifying parking violations	C	System can monitor for parking violations as well as hotlist infractions
	Automatic, real-time detection of suspect vehicles by type via LP/database match	C	One can have different hotlists for different types of hits and will get different alerts for each hotlist
	Automatic, real-time alerts for detected suspect vehicles (with digital documentation)	C	One can have different hotlists for different types of hits and will get different alerts for each hotlist. All information stored in the hotlist will be shown on screen
3). Optional needs	Mechanism for accessing NCIC database downloads & other relevant databases	C	
	Real-time access to daily updated NCIC criminal data from all cities	C	
	Full compatibility & seamless interface between MPD & DPW systems (as requested by MPD)	C	Based on information coming in a industry standard format (XML, FTP, CSV)
	Integration of identifying driver data (e.g., photo) for supporting MPD law enforcement strategies	C	We are able to take in drivers information. Photo inclusion will require minor development
1E- Operational (other system requirements)			
1). Hardware & equipment	Compact design (e.g., compact weatherproof housing for camera, illuminator & processor)	C	See SharpX Specs
	Rugged, infrared mobile cameras mountable on vehicles with requisite camera shutter speed & lens configurations to enable plate reads from multiple distances & angles	C	
	Small, durable processors housed easily in vehicles & seamlessly linking OCR technology	C	See SharpX Specs
	High-capacity battery & flexible power options (e.g., solar & DC in-vehicle adaptor)	C	Our system will operate off multiple power sources
	Full redundancy (e.g., power, fiber connectivity & disk arrays)	C	Our application can run in a virtual environment with the version specified in the system requirements.
	High manufacturing standards (e.g., compliance with ISO 9001:2000 standards)	C	See certification sheets
2). Software & interfaces	Requisite integration of LPR system with TIDs to ensure efficient field use of LPR technology & automatic population of appropriate citation fields in TIDs)	C	
	Full, real-time data access & integration with citation processing system & parking databases	C	
	Open architecture & feasible communications for facilitating integration with other applications	C	Genetec has integration with Duncan however minor modifications may be required
	Compatibility with Windows operating system & Internet Explorer 7.0 or later browser	C	See system requirements
	Automatic data conversion to key Windows-based programs (e.g., Word & Excel)	C	Our reports can be exported in Excel or PDF formal.
	Accreditation of software for Web-based services	PC	We offer software for web based services
	Full integration capabilities with relevant smart/cell phone apps	C	we can export all LPR data in XML format and in can be brought in any 3rd party system
	Requisite flexibility & scalability to meet long-term needs (including field upgradeability)	C	Genetec is the leading manufacturer for LPR in parking enforcement and we offer the best feature set and scalability
	Adequate security controls for protecting LPR data from unauthorized access (e.g., firewall, password controls, PCI/HIPAA compliance & data communications encryption)	C	For LPR, the environment will be secure and the security level is extremely granular but the payment part of it will be the responsibility of the citation company.
3). Data management	Automatic uploads of synchronized time zone, parking violation, scofflaw, parking permit & suspect vehicle data from citation processing system to LPR units	C	when any of the text files we point to are modified, there will be an update in the vehicle with the new information. This is done in almost real time if there is a live connection in the car (wireless).
	Prompt storage of captured images & data	C	The LPR data is stored in real time on the laptop and when there is a connection to the server, the information is pushed to the server.
	Sufficient storage capacity for parking enforcement, permitting & suspect vehicle program needs	C	This will be in function of the available disk space available on the database server
	Flexibility to transfer images & other data to remote PC for subsequent processing & retrieval	C	All information is stored in a central database. You can use a web client if you wish to access the database without having access to the network.



Requirements Compliance Matrix

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Section/Sub Section	Description	Compliance	Comments
	Good database formatting flexibility (e.g., customize screens & alarms based on system hits)	C	Security Center is highly customizable. For reports, you can determine which columns to show; for the GUI, you can determine which panels to hide, and for security can you force users to see only specific tasks
	Continuous back-ups to archived data to ensure no loss of vital data	C	Backing up information will be the responsibility of the city but our database will keep the information as long as the customer wants or as long as there is disk space.
	Database management by qualified entity (e.g., ISO 9001:2008 & Microsoft Gold certification)	C	Genetec is a Microsoft Gold Partner
4). Data analysis & reporting	Comprehensive daily, weekly, month & yearly permit program reports	C	We offer read and hit reports which can be filtered with an absolute time or relative time
	Comprehensive daily, weekly, month & yearly parking enforcement reports on full spectrum of enforcement data (e.g., violations by type, street & PEO)	C	We offer read and hit reports which can be filtered with an absolute time or relative time. All hits will have information associated to it.
	Generation of all other management reports in format required by City, including ad hoc & customizable reports requested by City (e.g., LPs captured/ read, photos & system usage)	C	We have many reports available (see report PDF) and we can export those reports in Excel or PDF.
	Mapping feature for displaying geo-coded enforcement, permitting & suspect vehicle patterns & tracking discrete LP locations, multiple vehicle activity & violations by area using LPR data (attach geo-coded digital file to citation, permit or suspect vehicle)	C	LPR system is equipped with a GPS. All reads, hits and violations are associated to GPS coordinates. From there, we can plot the events on a map and do filters by geographical area.
	Real-time display of every LPR-issued citation issued from TIDs & all other collected data (e.g., scofflaws, suspect vehicles, violations, wheel images for time zones & route & system usage data)	C	if there is a live connection in the vehicle to the server, all information for reads/hits will be seen live
	Provision of all management reports in frequency & manner required by City	C	Reports can be generated at the users discretion
	Automatic alerts to back office when LPR system inactive or off	C	If the system has a live connection to the server, the vehicle icon will become red to indicate that the LPR system is offline.
5). Optional needs	Ability to import all City-required national & regional databases (public safety interface)	C	We can take any CSV or text file to import it into our system
	Ability to cross-reference driver ID data with LP database	PC	We can add a driver ID to hotlists and display it on hits
	Ability to handle multiple video inputs from color cameras	PC	Security Center is also a VMS, if IP cameras are plugged into the network and are support by Genetec, you can have the video in Security Center
	Ability to manually correct previously incorrectly-read LP data	C	When plates are not well read, you can type in the correct plate
	Flexibility to transfer data in real time via SIM card or batch process upload/download	C	If there is a live connection we can transfer real time. If not, we will transfer when there is a connection to the server
	Ability to attach photo of captured LP image to citation issued to violator	C	XML file sent from Patroller to existing handheld that includes LP image
	Ability to add notes to images captured by system	C	Software has ability to add additional information with the image
	Ability to record, track & display actual PEO routes during assigned shifts	C	The LPR system can be tracked on a map and you can have a route playback of where the vehicle has been and where it got hits/reads
2 - Implementation requirements			
1). Installation	Flexible installation options especially for vehicle-mounted components	C	Our cameras can be bolted on to the roof, they can be mounted on a light bar, they can clip on to the lid of the trunk or simply be installed with magnets. The processing unit can be placed in the trunk or under a seat. Power can be supplied by the cigarette lighter or a direct connection to the battery.
	Proper positioning of vehicle cameras (e.g., optimum proximity of camera for good LPR reads)	C	
	Simple, easy system/equipment installation & deployment	C	
2). Testing	Rigorous testing protocol to ensure full system operability by first day of permit sales	C	
	Simple, easy & quick operability (e.g., easy-to-use software interfaces)	C	
3). Training	At least three one-hour on-site classroom training sessions (one for each shift)	C	
	One online training manual/guide for all employees	C	
	At least ten (10) hard copies of training manual/guide for leads & other designated employees	C	



Requirements Compliance Matrix

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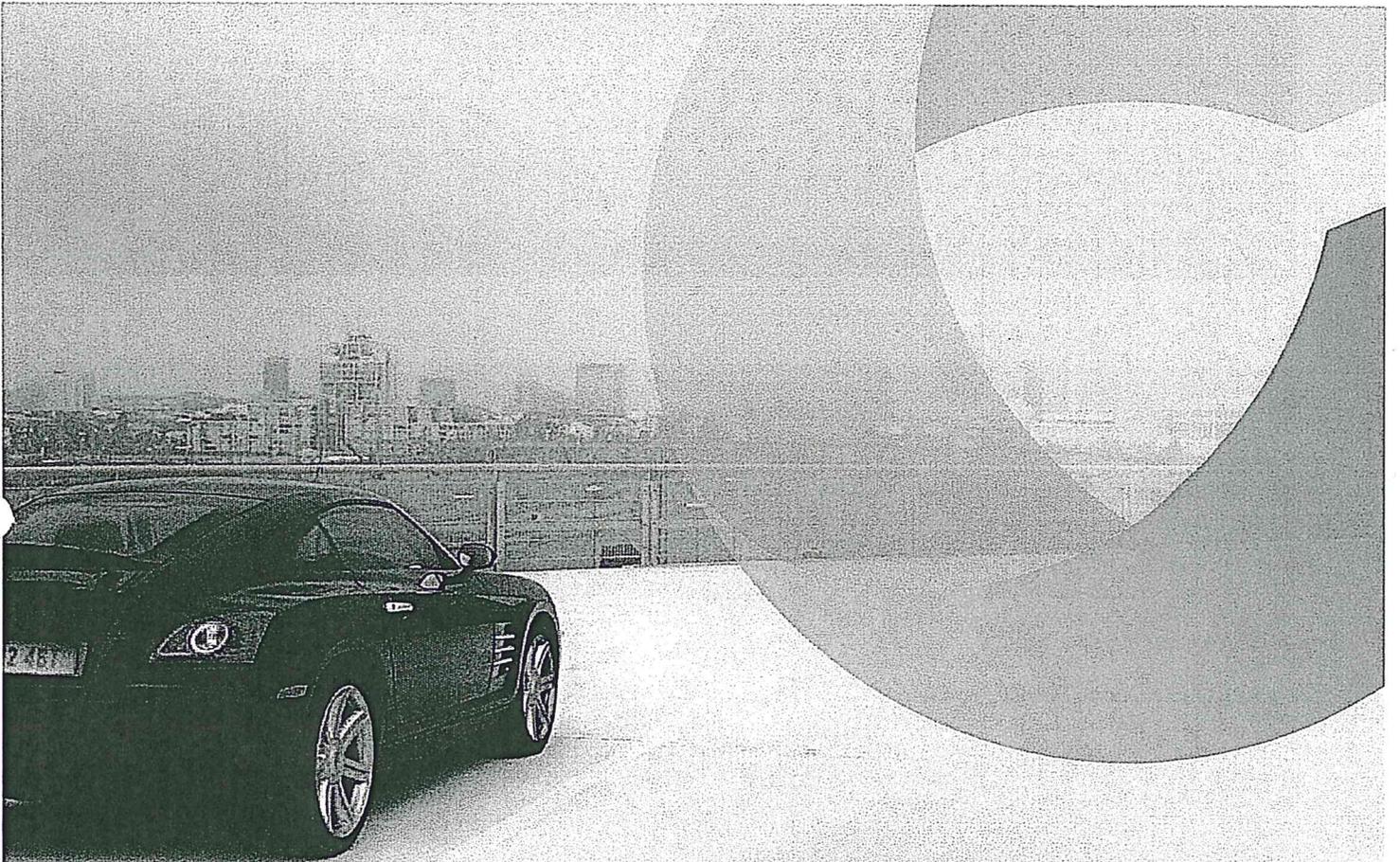
Section/Sub Section	Description	Compliance	Comments
3 - Service requirements			
1). Service	At least 99.9% uptime for all system components	PC	99.9% uptime on our back end can be achieved utilizing existing hardware, software and network redundancy
	Full warranty coverage for first 12 months of operation	C	
	Remote technical assistance access with 24/7 customer service line	C	SMA Plus
2). Maintenance	Local service capabilities for ensuring timely repairs or replacement	C	Fulfilled by Duncan Solutions, Inc.
	24x7 customer service/technical support telephone line for customer inquiries & troubleshooting	C	SMA Plus
3). Updates	Commitment to providing all system updates to City in a timely fashion	C	
	Contractual mechanism for modifying system to meet City's dynamic needs	C	

Notes: Compliance Legend: C = Compliant PC = Partially Compliant N = Non-compliant

Attachment 8: Genetec Product Information



Genetec



License Plate Recognition
That Makes
Your Job Easier

Innovative Solutions

AutoVu™ is the IP license plate recognition (LPR) system of the Security Center, Genetec's unified security platform. From your vehicle or office, AutoVu helps you automate the identification of vehicle license plates. Organizations looking to enhance applications in law enforcement, parking enforcement, license plate inventory, security and access control choose AutoVu for the right reasons:

Be Automatically Notified of Vehicles of Interest

All you have to do is focus on your job. AutoVu automatically reads surrounding vehicle plates, compares them to a database and alerts you when you need to take action. This LPR system comes with powerful features to make you even more efficient: use graphical maps for configuration; conduct data-mining in your vehicle or office; and get image and time capture on every license plate read.

Rely on Accurate License Plate Reads

AutoVu is an LPR system you can rely on. With AutoVu, you will catch all license plates in the camera's field of view. AutoVu reads license plates with the highest accuracy rates in the industry. And, thanks to its unique Fuzzy Matching feature, you get the best possible matches to your database even when license plates may be undecipherable.

Reduce The Operator Learning Curve with Ease-of-Use

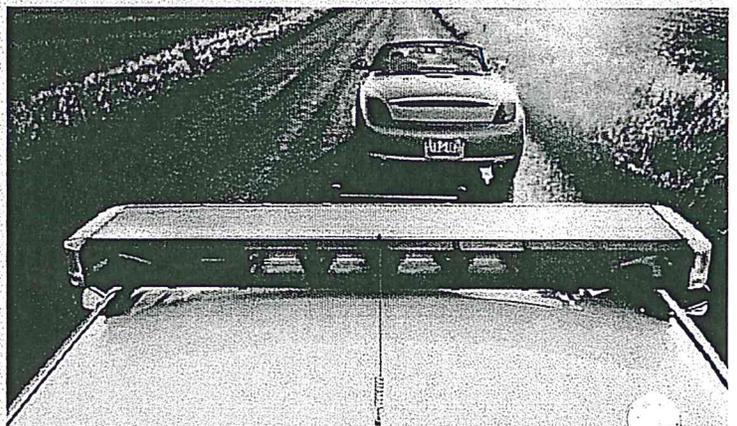
As part of Genetec's unified security platform, AutoVu comes with a very intuitive and user-friendly interface. Operators with any level of computer experience will feel at ease with this LPR system. In the office, drag and drop reads to see an image of the vehicle and its plate. Use graphical maps to review LPR data. And get reports with one click of the mouse. In the vehicle, large buttons and touch-enabled functions make training a breeze.

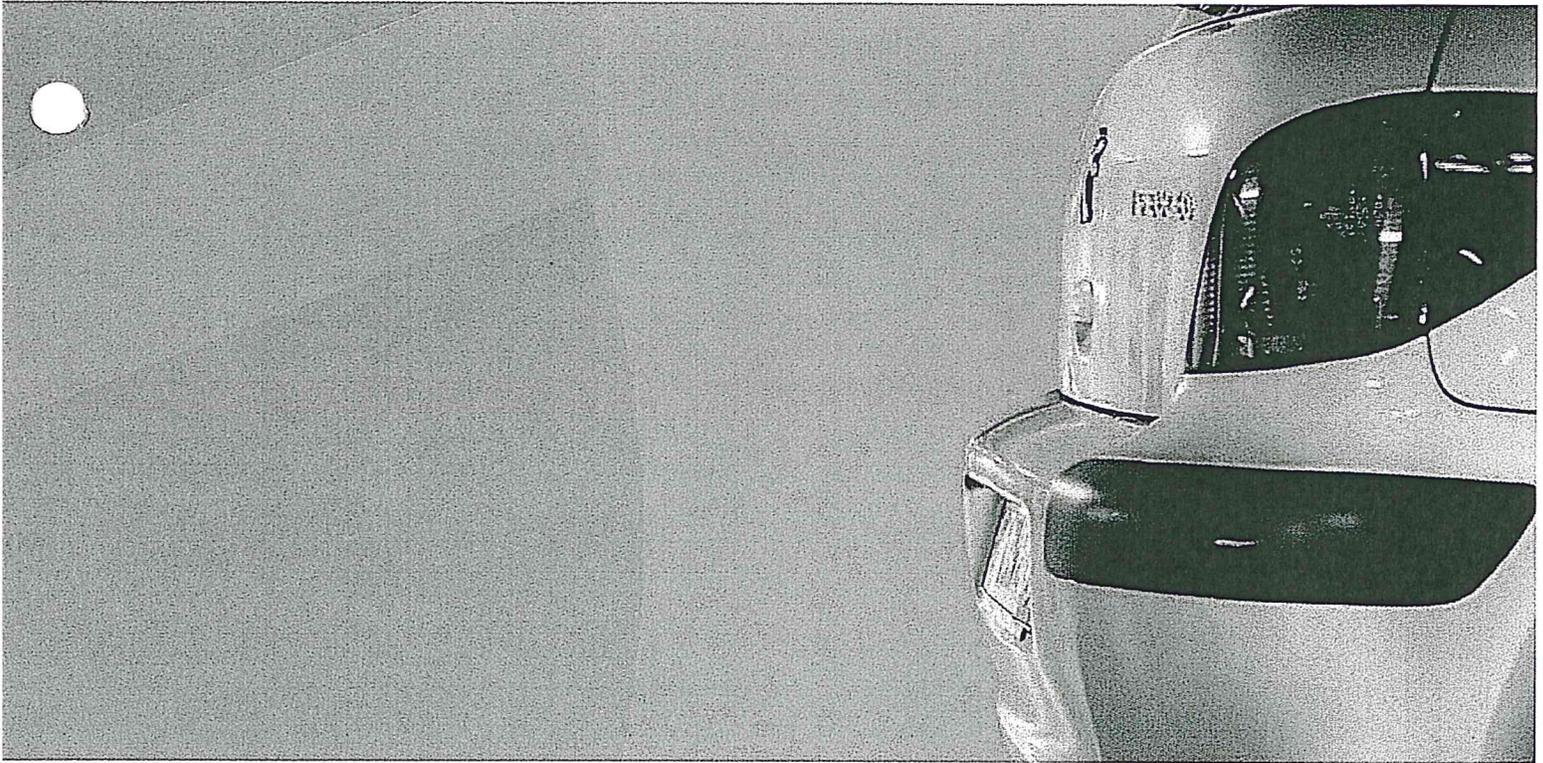
Obtain Real-Time LPR Information with IP Connectivity

AutoVu is IP-ready. There is no waiting for LPR information. You get real-time monitoring and identification of vehicle plates. The transfer of license plate information from the vehicle to your office is instantaneous. So you can take immediate action if necessary. And you can even configure and manage your LPR system over any IP network.

Take Minimal Time to Get Your System Installed

Getting AutoVu up and running is simple. Once the AutoVu camera is installed, you only need to make minimal adjustments and configuration to get your LPR system going. Databases can be uploaded at each shift or automatically on a pre-set time frame. It's an easy three-step process to LPR automation.





The AutoVu Hardware



The **AutoVu SharpX** is the latest IP-based license plate recognition camera designed for law enforcement. The AutoVu SharpX is the smallest high-resolution LPR camera on the market with integrated illumination. It also offers the highest read rates in the industry and a fully equipped vehicle is able to capture up to 5,000 license plates per minute, across three lanes of traffic.

Key features of the AutoVu SharpX

Plate capture across three lanes of traffic

Up to 5,000 plate captures per minute

Plate capture up to differential speeds of 200 MPH (320 km/h)

Plate highlight feature for vehicle identification when many vehicles are within the field of view

International plate reading support

Compatible with Genetec's Unified Security Platform, the Security Center



The **AutoVu Sharp** is the IP-based license plate recognition camera. This rugged LPR device offers advanced digital video processing and superior plate reading performance. The AutoVu Sharp camera also conducts processing on the edge. This means all the processing and analytics are done inside the unit itself, making the solution compact and easy to install.

Key features of the AutoVu Sharp

Available for both fixed and mobile applications

Support for various international plate styles and formats

On-board video compression and streaming

Plate capture spanning two lanes of traffic on either side of vehicle

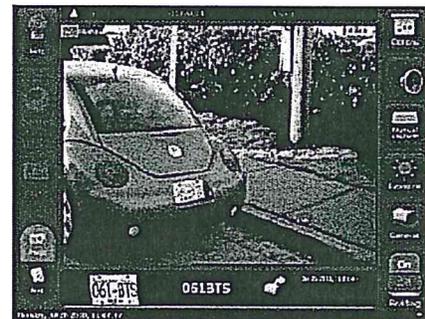
Plate capture of vehicles parked in parallel, or at 45 or 90 degrees

Portability from vehicle-to-vehicle

The AutoVu Software

AutoVu is the IP LPR system of Genetec's unified security platform, the Security Center. The AutoVu system within the Security Center gives you back-office management capabilities. You can access and review all collected data for further analysis.

AutoVu Patroller is the in-vehicle software of the AutoVu LPR system. You will be surprised at how easy the AutoVu Patroller is to use. With large buttons and touch-enabled functions, training on the system is easy for operators with all levels of technical experience.



Applications

Law Enforcement

Manually verifying license plates is unsafe and inefficient. With the AutoVu camera mounted on a vehicle, officers can automate the verification of vehicle license plates without distraction. So instead of reading dozens of plates during a shift, officers can benefit from reading hundreds or thousands of plates, effortlessly. Not only will this increase officer safety, but AutoVu will also help to improve the recovery rate of stolen and wanted vehicles and apprehend more suspects.

Specific Law Enforcement Applications

Wanted vehicle and felon identification

In-vehicle data-mining

Real-time monitoring and reporting

Back-office data-mining and geo-fencing

Some System Features for Law Enforcement

Color, Sound and Priority Assignment to Hotlists. Assign different priorities to hotlists. Configure each priority with a different color and alarm tone. Get both a visual and audible alert to easily identify the type of hit and its importance.

Covert Hotlists. Ensure the discretion of an on-going investigation or a special operation with a covert hotlists. When there is a hit, only the officer at the police department using the AutoVu system within the Security Center will be alerted. The in-vehicle officer will not be alerted.

Wildcard Hotlists. Create a wildcard hotlist database with only partial license plate numbers. Use this feature when you only have a few license plate numbers of a vehicle associated with a crime.

Map Display. See the in-vehicle system's current position and the areas covered on the map from the back-office system as the vehicle moves. Maximize the use of the system by covering as much ground as possible during each shift.

Parking Enforcement

Checking permits and tire-chalking manually is overly time-consuming. Operators can mount the AutoVu camera on a vehicle, and automate city or university parking enforcement for many types of permits and time limit zones at once. Operators will become more efficient at covering vast areas, and AutoVu will help improve the collection of unpaid vehicle infractions.

Specific Parking Enforcement Applications

University or city scofflaw and permit enforcement

University or city time-limited enforcement (block face, same space and district)

University lot counts

Vehicle identification

Data-mining and evidence review

Route management and reports

Some System Features for Parking Enforcement

Show Due Prompt. Prompt AutoVu to display the areas where the time limit has expired, indicating potential vehicles that are due for verification. This way, the parking agent knows where to go next.

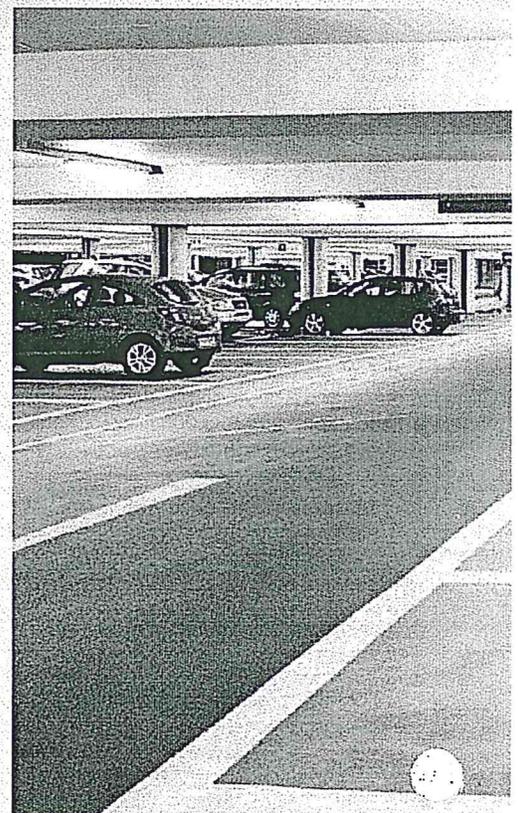
Enhanced Positioning Technology. Get accurate location data needed to support infractions with built-in GPS functionality and odometry. This is possible even in dense urban areas where GPS signal is not always accurate.

Wheel Imaging. Use wheel imaging capabilities to gather pictures of vehicles' wheels for comparison between initial and subsequent passes in a city zone. This acts as digital tire chalking. These images serve as additional evidence against infractions for same position parking enforcement.

Configuration Tool. Use the AutoVu system within the Security Center to assign parking rules and regulations to each zone. And link one or more zones to a list of associated permits and schedules.

GPS-Assisted Parking Lot Selection. With the help of integrated GPS functionality, a list of lots will appear in order from nearest to furthest to simplify the operator's task of selecting the lot to be enforced at a university.

Map-Based Lot Definition. Use the AutoVu system within the Security Center to geographically define lots by a polygon with Microsoft Bing™. Reduce the time needed for lot configuration and maintenance within your university's grounds.



Mobile License Plate Inventory (MLPI)

Manually collecting a daily vehicle inventory wastes time and resources. Mount an AutoVu camera on your vehicle to automatically collect license plate inventory in your parking facility. Every day, your operators will be more efficient and you will get automated vehicle inventory and activity reports.

Specific MLPI Applications

-
- Automated vehicle inventory collection
 - Inventory reconciliation and data-mining
 - Inventory reporting
-

Some System Features for MLPI

Zone and Route Selector. Keep track of the location of every license plate read by selecting a route or a zone and row that you would like to begin scanning. Zones and rows or route selection are pre-configured during the installation phase.

Handheld Device Integration. Input license plate information into a handheld device when a vehicle is backed into a parking spot and has no front license plate. Offload the handheld inventory list into the AutoVu system within the Security Center at the end of the inventory collection.

Automatic Reconciliation. After offloading the license plate inventory, the AutoVu system in the Security Center will do an automatic reconciliation of all license plate reads. It merges data from the previous inventory so you get a detailed inventory report ready for querying and reporting.

Security and Surveillance

Stop relying on outdated technology. Mount AutoVu cameras above traffic lanes, at entrances or exits, at toll booths and other locations. AutoVu will help you secure entries and exits of facilities, get audit trails, identify wanted vehicles at your gates, on a street or a highway.

Specific Security and Surveillance Applications

-
- Wanted vehicle and felon identification
 - Vehicle audit trail
 - Automated access control
 - Traffic management
 - Bus and taxi lane exemption
-

Some System Features for Security and Surveillance

Integrated Video Surveillance. Unify your LPR system with video surveillance and access control within the Security Center. Monitor live video feeds along with LPR reads and receive alerts of flagged vehicles from the AutoVu system. And review video associated with LPR reads or hits in investigations.

Automatic Event and Alarms. Get automated alarms or events from the AutoVu system when a black-listed, wanted, or stolen vehicle is detected. That means you can choose to respond only to events that are deemed urgent.

Advanced Data-Mining. Conduct searches of vehicles based on factors such as date and time, complete or partial license plate numbers, one or more specific geographic areas, or type of hit. Or, search by the other data associated with the hotlists such as VIN, make, model or year of the vehicle of interest.

Standalone or Unified with Video Surveillance and Access Control

AutoVu can be installed as a standalone LPR system or unified with Genetec's Omnicast IP video surveillance and Synergis IP access control systems within the Security Center. Unification within the Security Center offers customers a single platform from which to manage and monitor all of their security and safety applications, generate consolidated reports, and centralize all of their alarm management.

Third-Party System Integration. Integrate other software applications to fit with existing business processes with an advanced SDK. Or use an XML plugin to easily share information between systems without the efforts of a full integration.

More System Capabilities and Technical Specifications



User Interface

- Fully configurable and task-oriented user interface
- Dedicated LPR tasks for monitoring and reporting
- User configurable event list and display tile views
- View LPR events, associated pictures and video within each tile
- Advanced reporting tool for LPR reads and hits

System Configuration and Monitoring

- Monitoring and management of LPR events and alarms
- Management of all LPR entities
- Automatic email notifications
- Manual license plate input
- Accept/reject hit confirmation
- Fuzzy matching including OCR equivalent characters
- In-vehicle data-mining with full or partial license plate searches
- Map-based hit and read review
- Silent operation mode
- Import tool for third-party data (CSV file format)
- Support for custom metadata fields
- Macros or custom scripting support
- LPR XML import/export

Advanced Reporting

- Configuration, hit and read, route playback, inventory, license plate read/hits per day, daily usage statistics and logons per day reports
- Advanced search filters based on date, time, patrolling unit, hotlist, geographical area, vehicle make, model, year or VIN
- Print and email actions
- PDF, Microsoft Excel, and CSV export options
- Customization options include setting filters, report lengths, and timeout period
- Automatic email schedules of pre-configured report templates

Alarm Management

- Customized license plate read and hit alarm triggers
- Full range of alarm management controls
- User-defined procedures
- Mandatory incident entry upon alarm acknowledgement

System Security

- Encrypted communications between client and server applications
- Configurable user and user group privileges
- Secure remote access capabilities
- Authenticated user logins
- Support for Windows Active Directory
- User activity logs and audit trails
- HTTPS support for web client

LPR Read and Hit Transmission

- LPR hits and reads transmitted over standard LANs, WANs, Internet and via USB
- Wireless connectivity over 802.11a/b/g or cellular
- Remote access via DSL, cable, cellular, ISDN, T1 or T3

Hardware and Software Integrations

- Unified with Omnicast video surveillance and Synergis IP access control within the Security Center unified security platform
- Video analytics solutions, server or edge-based
- Perimeter protection systems
- Intelligent transportation systems (ITS)
- Ticketing systems
- Major third-party access control systems
- In-vehicle and rugged laptops
- Hard-held computers
- Video walls

About Genetec

Genetec is a pioneer in the physical security and public safety industry and a global provider of world-class IP license plate recognition (LPR), video surveillance and access control solutions to markets such as transportation, education, retail, gaming, government and more. With sales offices and partnerships around the world, Genetec has established itself as the leader in innovative networked solutions by employing a high level of flexibility and forward-thinking principles into the development of its core technology and business solutions. Genetec's corporate culture is an extension of these very same principles, encouraging a dynamic and innovative workforce that is dedicated to the development of cutting-edge solutions and to exceptional customer care. For more information, genetec.com.





SharpX

The World's Smallest High-Resolution License Plate Recognition Camera with Integrated Illumination

The AutoVu SharpX 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 SharpX can scan thousands of vehicles per shift, and alert officers when a suspect's vehicle is within the vicinity.

Why Every Law Enforcement Agency Needs AutoVu SharpX

Smallest high-resolution (1024x946) LPR camera on the market

Plate capture across three lanes of traffic (XGA)

Highest read rates in the industry

Up to 5,000 plate captures per minute

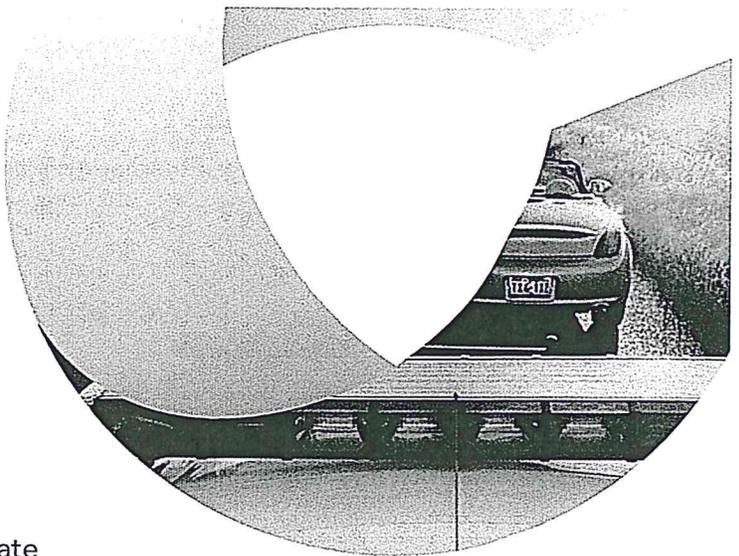
Scalable architecture includes up to one dedicated processor per camera

Plate capture up to differential speeds over 200 MPH (320 km/h)

Plate highlight feature for vehicle identification when many vehicles are within the field of view

International plate reading support

Compatible with Genetec's Unified Security Platform

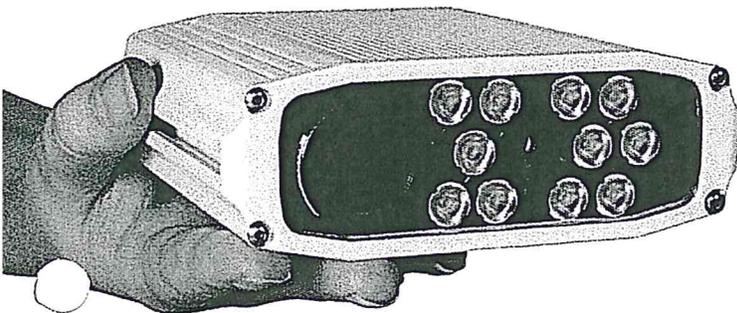


Discreet Form Factor – The AutoVu SharpX is the smallest high-resolution LPR camera on the market with integrated illumination. The AutoVu SharpX's robust IP67 aluminum body stands at 1.65 inches (42 mm) tall, limiting light bar occlusion and making it less obvious to vandals. Its clever design also offers universal mounting for the grill, light bar, trunk or just about anywhere.

Unsurpassed Reading Accuracy – The AutoVu SharpX uses a progressive scan sensor with 1024 x 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 SharpX is designed with a state-of-the-art color context camera to provide the best images in a variety of environmental conditions. From morning to late night, officers can expect quality images to help identify the make, model, and even the color of a suspect vehicle.

Unified within the Security Center – The AutoVu system and SharpX 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.



AutoVu SharpX

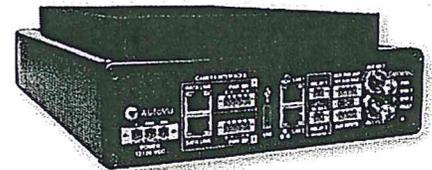
The World's Smallest High-Resolution License Plate Recognition Camera with Integrated Illumination



Specifications	AutoVu SharpX	AutoVu SharpX VGA
Camera lens options	• 12 mm, 16 mm, 25 mm, 35 mm, 50 mm	• 12 mm, 16 mm, 25 mm, 35 mm, 50 mm
Camera sensor	• LPR Camera XGA 1024x946 progressive scan @ 30 fps, monochrome • Color camera 640x480 @ 30 fps	• LPR Camera VGA 640x480 progressive scan @ 30 fps, monochrome • Color camera 640x480 @ 30 fps
Temperature	• -4°F to 131°F (-20°C to 55°C) operating environment • -40°F to 185°F (-40°C to 85°C) storage • includes hi-temp auto shutoff protection	• -4°F to 131°F (-20°C to 55°C) operating environment • -40°F to 185°F (-40°C to 85°C) storage • includes hi-temp auto shutoff protection
Extended Temperature Option	• -40°F to 131°F (-40°C to 55°C) operating environment	• -40°F to 131°F (-40°C to 55°C) operating environment
Vibration	• MIL-STD 810G 514.6	• MIL-STD 810G 514.6
Shock resistance	• IEC 60068-2-27	• IEC 60068-2-27
Housing and mounting	• Extruded aluminum housing with universal T-slots on either side for universal mounting	• Extruded aluminum housing with universal T-slots on either side for universal mounting
Illuminator	• Pulsed LED illuminator for effective use in 0 lux (total darkness) environments • Up to 100-foot (30-meter) range with reflective license plates • Different illumination wavelengths available	• Pulsed LED illuminator for effective use in 0 lux (total darkness) environments • Up to 70-foot (21-meter) range with reflective license plates • Different illumination wavelengths available
Water resistance / sealing	• IEC 60529: IP65 + IP67	• IEC 60529: IP65 + IP67
Dimensions	• 1.65 (h) x 4.75 (w) x 4.75 (d) inches (4.2 x 12 x 12 cm) • Excludes cabling and mounting bracket	• 1.65 (h) x 4.75 (w) x 4.75 (d) inches (4.2 x 12 x 12 cm) • Excludes cabling and mounting bracket
Weight	• 1.5 lbs (0.7 kg)	• 1.5 lbs (0.7 kg)

Specifications – AutoVu LPR Processing Unit

External interface	• 2 x 10/100/1000 Base-T Ethernet ports • 2/4 x LPR camera inputs
Dimensions	• 12.6 x 8.6 x 4.72 inches (32 x 22 x 12 cm)
Processor	• Intel® Atom™ Processor N450. One dedicated processor per camera (XGA) or per 2 cameras (VGA) to ensure maximal, per-camera, processing performance
Power supply	• 12/24 VDC @ 60 W typical (76W for 4 camera model)
Temperature	• -40°F to 150°F (-40°C to 65°C) • -40°F to 185°F (-40°C to 85°C) storage • includes hi-temp auto shutoff protection



Powerful and Scalable Processing – Often a mobile LPR solution includes a trunk unit with a single processor which is divided amongst several cameras. Each AutoVu SharpX system comes with up to 4 dedicated Intel processors, ensuring that individual camera performance will not suffer with the addition of more cameras. A fully equipped vehicle can read up to 5,000 plates per minute.

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Autovu SharpX Certifications Summary

Document version: 1.1
Last updated on: January 31, 2013

genetec.com



The Autovu SharpX system has been tested and found compliant to the following list of certification tests, under specified test conditions. All members of the product family were covered (X1, X2, X2M, X4M ; XGA, VGA).

Environmental tests

TEST	STANDARD	CONDITIONS	TEST LABORATORY	TEST DATE
Low temperature and cold start	IEC 60068-2-1:2007 Category Ad	-40°C, -10°C increments @30 minutes min 2.5 hrs cold start dwell time @ -40°C	Fiarex Inc.	Feb 2012
High temperature	IEC 60068-2-2:2007 Category Bd	+55°C (camera module) +65°C (processing unit)	Fiarex Inc.	Feb 2012
Random vibration	MIL-STD-810G Method 514.6C, Cat 4	3 axis, 4 hours/axis, 10-500Hz X: 1.46grms, Y: 1.46grms, Z: 2.08grms	Fiarex Inc.	Feb 2012
Mechanical shock – Bump	IEC 60068-2-27:2008 Test Ea	10g, 3 axis, 16ms pulse width, half-sine XY: 10 shocks per direction Z: 1000 shocks per direction	Fiarex Inc.	Feb 2012
Thermal shock	IEC 60068-2-14:2009 Category Na	-40°C to +60°C, 50 cycles <15 sec transfer time, 1 hour dwell	Fiarex Inc.	Mar 2012
Water ingress resistance	IEC 60529:2001-02 IPx5, IPx7	IPx5: 1 min per side, 12.5 liters / min IPx7: 30 minutes @ 1 meter immersion	Fiarex Inc.	Mar 2012
Solids ingress resistance (dust)	IEC 60529:2001-02 IP6x	8 hours dust chamber test -20mbar EUT de-pressurization	Fiarex Inc.	Mar 2012
Packaged free fall	IEC 60068-2-31:2008 Test Ec, Procedure 1	60 cm heights 3 surfaces, 3 edges, 3 corners	Fiarex Inc.	Apr 2012

Electro-magnetic compliance (EMC) tests

TEST	STANDARD	CONDITIONS	TEST LABORATORY	TEST DATE
Electromagnetic emissions (US / Canada)	- FCC part 15 Subpart B - ICES-003 Issue 4	Class A limits (ITE) Line voltage: 120V/60Hz	Global EMC	Jul 2012
Electromagnetic emissions (international, IEC/CE)	CISPR22: 2008 / EN55022:2010+AC2011	Class A limits (ITE) Line voltages: 230V/50Hz, 220V/60Hz, 100V/50Hz	Global EMC	Jul 2012
Electromagnetic immunity (international, IEC/CE)	CISPR 24: 2010 / EN 55024:2010	ITE general levels unless otherwise noted IEC 61000-4-2 ESD: +/- 4kV, +/-8kV IEC 61000-4-3 Rad RF imm: 10V/m enhanced level IEC 61000-4-4 EFT: 1kV, 0.5kV IEC 61000-4-5 Surge: 1kV, 2kV IEC 61000-4-6 Cond RF imm: 3Vrms IEC 61000-4-8 Mag imm: 3A/m IEC 61000-4-11	Global EMC	Jul 2012
EMC Directive (CE marking)	2004/108/EC	ITE Class A EN55022, EN55024 IEC 61000-3-2, IEC 61000-3-3	Global EMC	Jul 2012
Automotive EMC Directive (CE marking)	2004/104/EC	Aftermarket ESA Sections 6.5, 6.6, 6.8 and 6.9 CISPR25 :2002 ISO 7637-2: 2004	Global EMC	Jul 2012