



MIAMI BEACH, FL RFP #2019-093-JC

Red Light Violation Camera Enforcement System & Related Support Services

Due 06/14/19 @3pm

Contact: Andrew Noble



(978) 922-7294 x210



(480) 315-1388



a.noble@sensysgatso.com

Sensys Gatso's

STORY IN NUMBERS

5% reduction in speed results in 20% reduction in fatal crashes¹

30 years
the longest active system

60+ years
of experience

20-50 million
people injured on roads every year¹

45,000
Systems delivered around
the world

60 countries
worldwide with Sensys Gatso systems in operation

\$500 billion
economic consequences
of crashes¹

1.3 million
people killed on roads every year¹

100%
evidence integrity

¹Sources: WHO - Global Plan for the Decade of Action for Road Safety 2011-2020

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June 10, 2019

City of Miami Beach
Procurement Department
1755 Meridian Avenue, Third Floor
Miami Beach, Florida 33139

Re: Red Light Violation Camera System and Related Support Services 2019-093-JC

Dear Selection Committee:

Sensys Gatso is pleased to provide this solicitation response to the City of Miami Beach for a turnkey Red Light Camera System and related services. Our submittal will include a brief overview of our company and a detailed narrative of our technology, which will quantify our ability to perform all requirements outlined in the Scope of Work. Response information will be presented in the particular format and sequence requested by the City.

In 2015 Gatso Beheer BV merged with Sensys Traffic AB to create the Sensys Gatso Group AB, now the world's largest automated photo enforcement company, with over 45,000 installations in 60 countries. Ongoing Major photo enforcement Projects include:

- 2015** Albany, New York - **36** Red Light Cameras
- 2015** West Hollywood, California - **16** Red Light Cameras
- 2012** Project EG100, Netherlands - **237** Red Light/Speed Cameras
- 2009** Interior Ministry, France - **477** Red Light/Mobile Speed Cameras
- 2010** Queensland, Australia - **107** Red Light/Speed Cameras
- 2009** Cedar Rapids, Iowa - **30** Red Light/Speed Cameras
- 2008** Department of Transport, Hong Kong - **77** Red Light Cameras
- 2019** Pawtucket, Rhode Island - **14+** Red Light/Speed Cameras
- 2019** Buffalo, New York - **30** School Zone Enforcement Cameras

The wide international acceptance of our solution speaks to our ability to meet a variety of technological, governmental, regulatory and performance challenges. Our equipment enjoys the highest level of national and international certification, and most importantly is considered the de facto standard for automated photo enforcement around the world. Our reputation speaks for itself in the areas of integrity and ability to deliver. For this important safety program, we offer Miami Beach our flagship radar-based enforcement platform - the T-Series. This unit is a future-proof RLC/Speed/ALPR system, with integrated functionality and flexibility previously unheard of in a fixed enforcement platform. Our latest T-Series offering boasts several exciting technological advancements:

- A fully turnkey RLC enforcement and back-office solution
- Web-based user interface & XILIUM Back-office Software Suite
- Local and remote access, setup, configuration and control
- Virtual lane designation and isolated signal recognition technology
- Latest TLS & IPSec standards for data transmission and security
- Unmatched system robustness and ease-of-use
- Instant Speed-on-Green functionality
- Self-communicated, port-forwarded reports
- Unparalleled international certification
- Built-in deployment flexibility & wireless utility

Sensys Gatso takes great pride in partnership. Our corporate officers remain intimately involved with day-to-day

operations for all of our programs. This philosophy informs our delivery model - develop well-defined program business rules with our municipal partners, and put into place a program that is technologically reliable, predictable and scalable. Then, provide program deliverables to our partners with professionalism, honesty and accountability. Make program decision-makers available to our partners whenever they are needed. Finally - represent our cities as a true partner in safety should, with the goal being public acceptance of the program.

Our Project Manager Rich Kosina has overseen 1300 North American photo enforcement installations over the last two decades, including many in the state of Florida. Our solution will be fully compliant with all applicable laws. To complement our own engineers and build team, our local engineering and commercial electrical subcontractors are in place. We have provided more than the required number of references for your consideration. Our proposed exceptions to the contract terms are included within. Our Business Conduct Guidelines are enclosed within. We acknowledge the four addenda associated with this RFP. Sensys Gatso agrees to be bound by and in compliance with the Terms and Conditions for General Services - Type 1.

We would truly welcome the opportunity to partner with the City, and we thank you for your kind consideration. Please call me directly if I can be of assistance or service.

Sincerely,

A handwritten signature in blue ink, appearing to read "A. Noble".

Andrew Noble - President

Sensys Gatso USA

Proposal Certification Form A-1


APPENDIX A1 - PROPOSAL CERTIFICATION FORM

This document is a **REQUIRED FORM** that must be submitted fully completed and executed.
FAILURE TO SUBMIT THE PROPOSAL CERTIFICATION FORM WITH ITS PROPOSAL SHALL RESULT IN THE PROPOSAL BEING DEEMED NON-RESPONSIVE.

Solicitation No: 2019-093-JC	Solicitation Title: Red Light Violation Camera Enforcement System And Related Support Services	
Procurement Contact: Jason Crouch	Tel: 305-673-7490	Email: JasonCrouch@MiamiBeachFL.gov

PROPOSER'S NAME: Sensys Gatso USA, Inc.		
NO. OF YEARS IN BUSINESS: 12 years in US; 61 years overall	NO. OF YEARS IN BUSINESS LOCALLY: 12	NO. OF EMPLOYEES: 65
OTHER NAME(S) PROPOSER HAS OPERATED UNDER IN THE LAST 10 YEARS: Gatso USA, Inc.		
FIRM PRIMARY ADDRESS (HEADQUARTERS): 900 Cummings Center, Suite 316-U		
CITY: Beverly		
STATE: MA	ZIP CODE: 01915	
TELEPHONE NO.: 978-922-7294		
TOLL FREE NO.: 1-855-474-8833		
FAX NO.: 480-315-1388		
FIRM LOCAL ADDRESS: N/A		
CITY:		
STATE:	ZIP CODE:	
PRIMARY ACCOUNT REPRESENTATIVE FOR THIS ENGAGEMENT: Andrew Noble		
ACCOUNT REP TELEPHONE NO.:	978-922-7294 x210	
ACCOUNT REP TOLL FREE NO.:	1-855-474-8833	
ACCOUNT REP EMAIL:	a.noble@sensysgatso.com	
FEDERAL TAX IDENTIFICATION NO.:	75-3249780	


Except as stipulated in General Condition 36, Proposer agrees: to complete and unconditional acceptance of the terms and conditions of this document, inclusive of this solicitation, all specifications, attachments, exhibits and appendices and the contents of any Addenda released hereto; to be bound, at a minimum, to any and all specifications, terms and conditions contained herein or Addenda; that the Proposer has not divulged, discussed, or compared the proposal with other Proposals and has not colluded with any other proposer or party to any other proposal; that proposer acknowledges that all information contained herein is part of the public domain as defined by the State of Florida Sunshine and Public Records Laws; that all responses, data and information contained in the proposal are true and accurate.

Name of Proposer's Authorized Representative: Andrew Noble	Title of Proposer's Authorized Representative: President
Signature of Proposer's Authorized Representative: 	Date: June 4, 2019

Questionnaire & Requirements Affidavit A-2

APPENDIX A2 - QUESTIONNAIRE AND REQUIREMENTS AFFIDAVIT FORM

The purpose of this Proposal Certification, Questionnaire and Requirements Affidavit Form is to inform prospective Proposers of certain solicitation and contractual requirements, and to collect necessary information from Proposers in order that certain portions of responsiveness, responsibility and other determining factors and compliance with requirements may be evaluated. Attach any requested information.

Name of Proposer's Authorized Representative: Andrew Noble	Title of Proposer's Authorized Representative: President
Signature of Proposer's Authorized Representative: 	Date: 6-11-19

1. **Veteran Owned Business.** Is Proposer claiming a veteran owned business status?
 YES NO

SUBMITTAL REQUIREMENT: Proposers claiming veteran owned business status shall submit a documentation proving that firm is certified as a veteran-owned business or a service-disabled veteran owned business by the State of Florida or United States federal government, as required pursuant to ordinance 2011-3748.

2. **Conflict Of Interest.** All Proposers must disclose, in their Proposal, the name(s) of any officer, director, agent, or immediate family member (spouse, parent, sibling, and child) who is also an employee of the City of Miami Beach. Further, all Proposers must disclose the name of any City employee who owns, either directly or indirectly, an interest of ten (10%) percent or more in the Proposer entity or any of its affiliates.

SUBMITTAL REQUIREMENT: Proposers must disclose the name(s) of any officer, director, agent, or immediate family member (spouse, parent, sibling, and child) who is also an employee of the City of Miami Beach. Proposers must also disclose the name of any City employee who owns, either directly or indirectly, an interest of ten (10%) percent or more in the Proposer entity or any of its affiliates

3. **References & Past Performance.** Proposer shall attach at least three (3) references for whom the Proposer has completed work similar in size and nature as the work referenced in solicitation.

SUBMITTAL REQUIREMENT: For each reference submitted, the following information is required: 1) Firm Name, 2) Contact Individual Name & Title, 3) Address, 4) Telephone, 5) Contact's Email and 6) Narrative on Scope of Services Provided.

4. **Suspension, Debarment or Contract Cancellation.** Has Proposer ever been debarred, suspended or other legal violation, or had a contract cancelled due to non-performance by any public sector agency?
 YES NO

SUBMITTAL REQUIREMENT: If answer to above is "YES," Proposer shall submit a statement detailing the reasons that led to action(s).

5. **Vendor Campaign Contributions.** Proposers are expected to be or become familiar with, the City's Campaign Finance Reform laws, as codified in Sections 2-487 through 2-490 of the City Code. Proposers shall be solely responsible for ensuring that all applicable provisions of the City's Campaign Finance Reform laws are complied with, and shall be subject to any and all sanctions, as prescribed therein, including disqualification of their Proposals, in the event of such non-compliance.

SUBMITTAL REQUIREMENT: Submit the names of all individuals or entities (including your sub-consultants) with a controlling financial interest as defined in solicitation. For each individual or entity with a controlling financial interest indicate whether or not each individual or entity has contributed to the campaign either directly or indirectly, of a candidate who has been elected to the office of Mayor or City Commissioner for the City of Miami Beach.

6. **Code of Business Ethics.** Pursuant to City Resolution No.2000-23879, each person or entity that seeks to do business with the City shall adopt a Code of Business Ethics ("Code") and submit that Code to the Procurement Department with its proposal/response or within five (5) days upon receipt of request. The Code shall, at a minimum, require the Proposer, to comply with all applicable governmental rules and regulations including, among others, the conflict of interest, lobbying and ethics provision of the City of Miami Beach and Miami Dade County.

SUBMITTAL REQUIREMENT: Proposer shall attach its Code of Business Ethics. In lieu of submitting Code of Business Ethics, Proposer may submit a statement indicating that it will adopt, as required in the ordinance, the City of Miami Beach Code of Ethics, available at <http://www.miamibeachfl.gov/city-hall/procurement/procurement-related-ordinance-and-procedures/>

7. ~~Living Wage. Pursuant to Section 2-408 of the City of Miami Beach Code, as same may be amended from time to time, covered employees shall be paid the required living wage rates listed below:~~

1. ~~Effective January 1, 2018, covered employees must be paid a living wage rate of no less than \$11.62 per hour with health care benefits of at least \$2.26 per hour, or a living wage rate of no less than \$13.88 per hour without health care benefits.~~
2. ~~Effective January 1, 2019, covered employees must be paid a living wage rate of no less than \$11.70 per hour with health care benefits of at least \$2.74 per hour, or a living wage rate of no less than \$14.44 per hour without health care benefits.~~
3. ~~Effective January 1, 2020, covered employees must be paid a living wage rate of no less than \$11.78 per hour with health care benefits of at least \$3.22 per hour, or a living wage rate of no less than \$15.00 per hour without health care benefits.~~

~~The living wage rate and health care benefits rate may, by Resolution of the City Commission be indexed annually for inflation using the Consumer Price Index for all Urban Consumers (CPI-U) Miami/Ft. Lauderdale, issued by the U.S. Department of Labor's Bureau of Labor Statistics. Notwithstanding the preceding, no annual index shall exceed three percent (3%). The City may also, by resolution, elect not to index the living wage rate in any particular year, if it determines it would not be fiscally sound to implement same (in a particular year).~~

~~Proposers' failure to comply with this provision shall be deemed a material breach under this proposal, under which the City may, at its sole option, immediately deem said Proposer as non-responsive, and may further subject Proposer to additional penalties and fines, as provided in the City's Living Wage Ordinance, as amended. Further information on the Living Wage requirement is available at http://www.miamibeachfl.gov/city_hall/procurement/procurement_related_ordinance_and_procedures/.~~

~~Any payroll request made by the City during the contract term shall be completed electronically via the City's electronic compliance portal, LCP Tracker (LCPTracker.net).~~

SUBMITTAL REQUIREMENT: Indicate below that Proposer agrees to the living wage requirement. Failure to agree shall result in proposal disqualification.

YES NO

8. **Equal Benefits for Employees with Spouses and Employees with Domestic Partners.** When awarding competitively solicited contracts valued at over \$100,000 whose contractors maintain 51 or more full time employees on their payrolls during 20 or more calendar work weeks, the Equal Benefits for Domestic Partners Ordinance 2005-3494 requires certain contractors doing business with the City of Miami Beach, who are awarded a contract pursuant to competitive proposals, to provide "Equal Benefits" to their employees with domestic partners, as they provide to employees with spouses. The Ordinance applies to all employees of a Contractor who work within the City limits of the City of Miami Beach, Florida; and the Contractor's employees located in the United States, but outside of the City of Miami Beach limits, who are directly performing work on the contract within the City of Miami Beach.

N/A -SGG does not maintain 51 full time employees.

- A. Does your company provide or offer access to any benefits to employees with spouses or to spouses of employees?
 YES NO
- B. Does your company provide or offer access to any benefits to employees with (same or opposite sex) domestic partners* or to domestic partners of employees?
 YES NO
- C. Please check all benefits that apply to your answers above and list in the "other" section any additional benefits not already specified. Note: some benefits are provided to employees because they have a spouse or domestic partner, such as bereavement leave; other benefits are provided directly to the spouse or domestic partner, such as medical insurance.

BENEFIT	Firm Provides for Employees with Spouses	Firm Provides for Employees with Domestic Partners	Firm does not Provide Benefit
Health			
Sick Leave			
Family Medical Leave			
Bereavement Leave			

If Proposer cannot offer a benefit to domestic partners because of reasons outside your control, (e.g., there are no insurance providers in your area willing to offer domestic partner coverage) you may be eligible for Reasonable Measures compliance. To comply on this basis, you must agree to pay a cash equivalent and submit a completed Reasonable Measures Application (attached) with all necessary documentation. Your Reasonable Measures Application will be reviewed for consideration by the City

Manager, or his designee. Approval is not guaranteed and the City Manager's decision is final. Further information on the Equal Benefits requirement is available at <http://www.miamibeachfl.gov/city-hall/procurement/procurement-related-ordinance-and-procedures/>

9. **Public Entity Crimes.** Section 287.133(2)(a), Florida Statutes, as currently enacted or as amended from time to time, states that a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a proposal, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit proposals, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. [287.017](#) for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.

SUBMITTAL REQUIREMENT: Proposer agrees to the requirements of Section 287.133, Florida Statutes, and certifies it has not been placed on convicted vendor list. Failure to agree shall result in proposal disqualification.

YES NO

10. **Non-Discrimination.** Pursuant to City Ordinance No.2016-3990, the City shall not enter into a contract with a business unless the business represents that it does not and will not engage in a boycott as defined in Section 2-375(a) of the City Code, including the blacklisting, divesting from, or otherwise refusing to deal with a person or entity when such action is based on race, color, national origin, religion, sex, intersexuality, gender identity, sexual orientation, marital or familial status, age or disability.

SUBMITTAL REQUIREMENT: Proposer agrees it is and shall remain in full compliance with Section 2-375 of the City of Miami Beach City Code. Failure to agree shall result in proposal disqualification.

YES NO

11. **Moratorium on Travel to and the Purchase of Goods or Services from North Carolina and Mississippi.** Pursuant to Resolution 2016-29375, the City of Miami Beach, Florida, prohibits official City travel to the states of North Carolina and Mississippi, as well as the purchase of goods or services sourced in North Carolina and Mississippi. Proposer shall agree that no travel shall occur on behalf of the City to North Carolina or Mississippi, nor shall any product or services it provides to the City be sourced from these states.

SUBMITTAL REQUIREMENT: Proposer agrees it is and shall remain in full compliance with Resolution 2016-29375. Failure to agree shall result in proposal disqualification.

YES NO

12. **Fair Chance Requirement.** Pursuant to Section 2-376 of the City Code, the City shall not enter into any contract resulting from a competitive solicitation, unless the proposer certifies in writing that the business has adopted and employs written policies, practices, and standards that are consistent with the City's Fair Chance Ordinance, set forth in Article V of Chapter 62 of the City Code ("Fair Chance Ordinance"), and which, among other things, (i) prohibits City contractors, as an employer, from inquiring about an applicant's criminal history until the applicant is given a conditional offer of employment; (ii) prohibits advertising of employment positions with a statement that an individual with a criminal record may not apply for the position, and (iii) prohibits placing a statement on an employment application that a person with a criminal record may not apply for the position.

SUBMITTAL REQUIREMENT: Proposer certifies that it has adopted policies, practices and standards consistent with the City's Fair Chance Ordinance. Proposer agrees to provide the City with supporting documentation evidencing its compliance upon request. Proposer further agrees that any breach of the representations made herein shall constitute a material breach of contract, and shall entitle the City to the immediate termination for cause of the agreement, in addition to any damages that may be available at law and in equity. Failure to agree shall result in proposal disqualification.

YES NO

13. **Acknowledgement of Addendum.** After issuance of solicitation, the City may release one or more addendum to the solicitation which may provide additional information to Proposers or alter solicitation requirements. The City will strive to reach every Proposer having received solicitation through the City's e-procurement system, PublicPurchase.com. However, Proposers are solely responsible for assuring they have received any and all addendum issued pursuant to solicitation. This Acknowledgement of Addendum section certifies that the Proposer has received all addendum released by the City pursuant to this solicitation. Failure to obtain and acknowledge receipt of all addenda may result in proposal disqualification.

Initial to Confirm Receipt		Initial to Confirm Receipt		Initial to Confirm Receipt	
JM	Addendum 1		Addendum 6		Addendum 11
JM	Addendum 2		Addendum 7		Addendum 12
JM	Addendum 3		Addendum 8		Addendum 13
JM	Addendum 4		Addendum 9		Addendum 14
	Addendum 5		Addendum 10		Addendum 15

History & Qualifications



Industry Pioneer Since 1958

Sensys Gatso was founded by Maurice Gatsonides, an accomplished innovator and fierce competitor, whose passion for motor sport racing and quest for timekeeping accuracy drove him to develop and design his own "Gatsometer," a highly accurate race timing system. His first commercially available speed-measuring device was ordered by the Velsen, Netherlands Police in 1958. 60 years later, with over 45,000 camera installations in 60 countries, Sensys Gatso supplies nearly 50% of the photo enforcement cameras in operation around the world.

Since 1958

"Sensys Gatso supplies nearly 50% of the photo enforcement cameras in operation around the world"

Our Commitment to You

Sensys Gatso takes pride in its heritage of safety, innovation and integrity. We are - first and foremost - a service company. The greatest technology in the world will not be enough if a truly dedicated service model is not at its foundation. This is an industry that lives and dies on **TRUST** and **PARTNERSHIP**. The public trusts that its decision makers at the local level value integrity and professionalism in its chosen vendors. We have the technology, and we let our service build the trust...

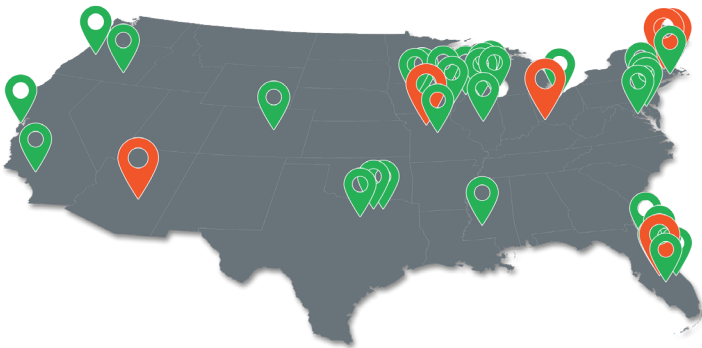
Internationally Recognized

There is no specific US Federal certification of photo enforcement technology, per se. Internationally, however, national governments require extensive certification

History in North America

Doing business in North America through a third party partner until 2007, Gatso USA was established and incorporated in the spring of 2007, and Gatso Canada in 2014. GATSO BV and Sensys AB merged in 2015, creating the Sensys Gatso Group. Our combined companies have the experience, legacy and resourcefulness to deliver a world-class automated photo enforcement program to your municipality.





and recertification of a vendor's technology before any consideration of their use. Additionally, many international jurisdictions will require that a vendor meet these stringent European requirements. Sensys Gatso enjoys the highest level of this international certification in the automated photo enforcement industry.

TURNKEY

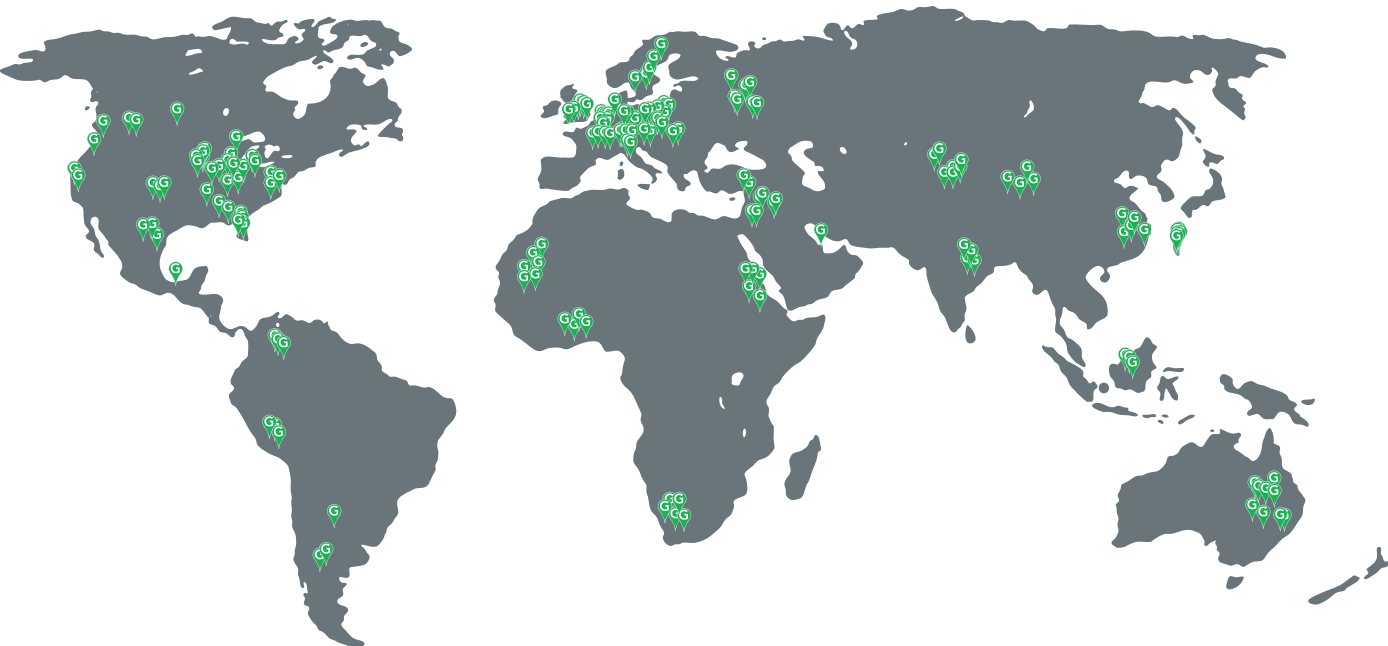
- Cedar Rapids, IA
- Des Moines, IA
- Polk County, IA
- Muscatine, IA
- Waterloo, IA
- Alsip, IL
- Homewood, IL
- Streamwood, IL
- Libertyville, IL
- Oak Forest, IL
- Lake Zurich, IL
- Hanover Park, IL
- Winter Park, FL
- Maitland, FL
- Edgewood, FL
- Tuscaloosa, AL
- Abington, PA
- Orland Park, IL
- South Holland, IL
- Albany, NY
- W. Hollywood, CA
- Forest Hts, MD
- Newburgh Hts, OH
- Linndale, OH
- Walton Hills, OH
- Highland Park, IL
- Pawtucket, RI
- Franklin Township, OH
- New Miami, OH
- State of Oklahoma
- New Richmond, OH

Technological Certifications

- ISO 9001 Certification
- ISO 14001 Certification
- ISO 27001 Certification
- NLETS Strategic Partner Certification
- NLETS Transactional Audit Certification
- Netherlands Metrology Institute T-Series Certification
- FCC Certification for RT4 Radar Antenna
- EMC-R&TTE Directives Certification for Radars
- France National Laboratory of Metrology & Testing Certification
- Spain Metrology Center T-Series Radar Certification
- Netherlands Metrology Institute AS-002-SCM Radar Certificate
- OIML Slovenia T-Series Certification
- Switzerland Federal Institute of Metrology T-Series Certification
- Ecuador T-Series Homologation Certification
- Florida DOT Infraction Detector Certification

Sensys Gatso Group - Global Reach

45,000 SENSYS GATSO SYSTEMS DELIVERED IN 60 COUNTRIES ACROSS THE GLOBE

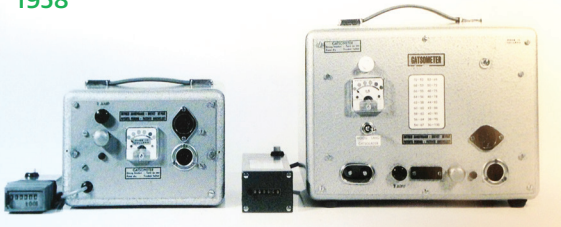


Overview - Innovations

Paradigm shifts of Innovation

Sensys Gatso has been responsible for virtually all major technological breakthroughs in the world of automatic photo enforcement. To follow is a timeline of achievement...

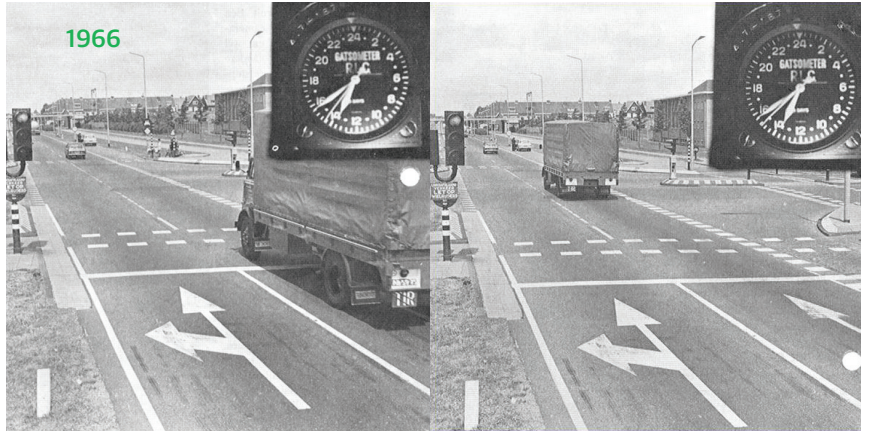
1958



1964



1966



In 1966 Gatsometer introduced the world's first commercially available Red Light Photo Enforcement System. A vacuum-based trigger system initiated film-based photo capture of the event and signal sequence, along with distance/time measurement. These early film-based units could store 27 violations onboard.

1970



The first road speed control system, integrated in the world, introduced in Europe in the 1970s.

1980



1958

Gatsometer invents first speed measuring traffic device - the GM.

1964

Gatsometer introduces the world's first speed enforcement camera.

1966

Gatsometer introduces the world's first commercial RLC Photo Enforcement System.

1970

Gatsometer introduces the earliest all-in-one radar-based speed enforcement system.

1980

Gatsometer designs and deploys the first mobile radar speed enforcement system.

1994

Gatsometer designs and introduces the first section control speed enforcement solution.

2005



Gatsometer introduces the first Loopless Radar (LTR) antenna, fully wireless to the road.

2012



2015



Gatsometer deploys the world's first all-digital system. Previous iterations of the application cameras used "wet film" capture and storage.



The Oklahoma Uninsured Vehicle Enforcement Diversion Program - UVED.

1997

Gatsometer introduces the world's first digital red-light camera.

2005

Gatsometer is first in the industry with non-invasive detection.

2012

Gatsometer introduces the T-Series fully integrated autonomous RLC/Speed platform.

2013

Gatsometer introduces the first "moving" radar control for bi-directional speed enforcement.

2015

Introduction of the next-generation T-Series capable of detecting 32 vehicles simultaneously.

2018

Sensys Gatso USA implements the first ALPR vehicle insurance verification system in the State of Oklahoma.

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Tab 2 - Proposer Qualifications



Florida Experience



Active

Winter Park
Maitland
Edgewood

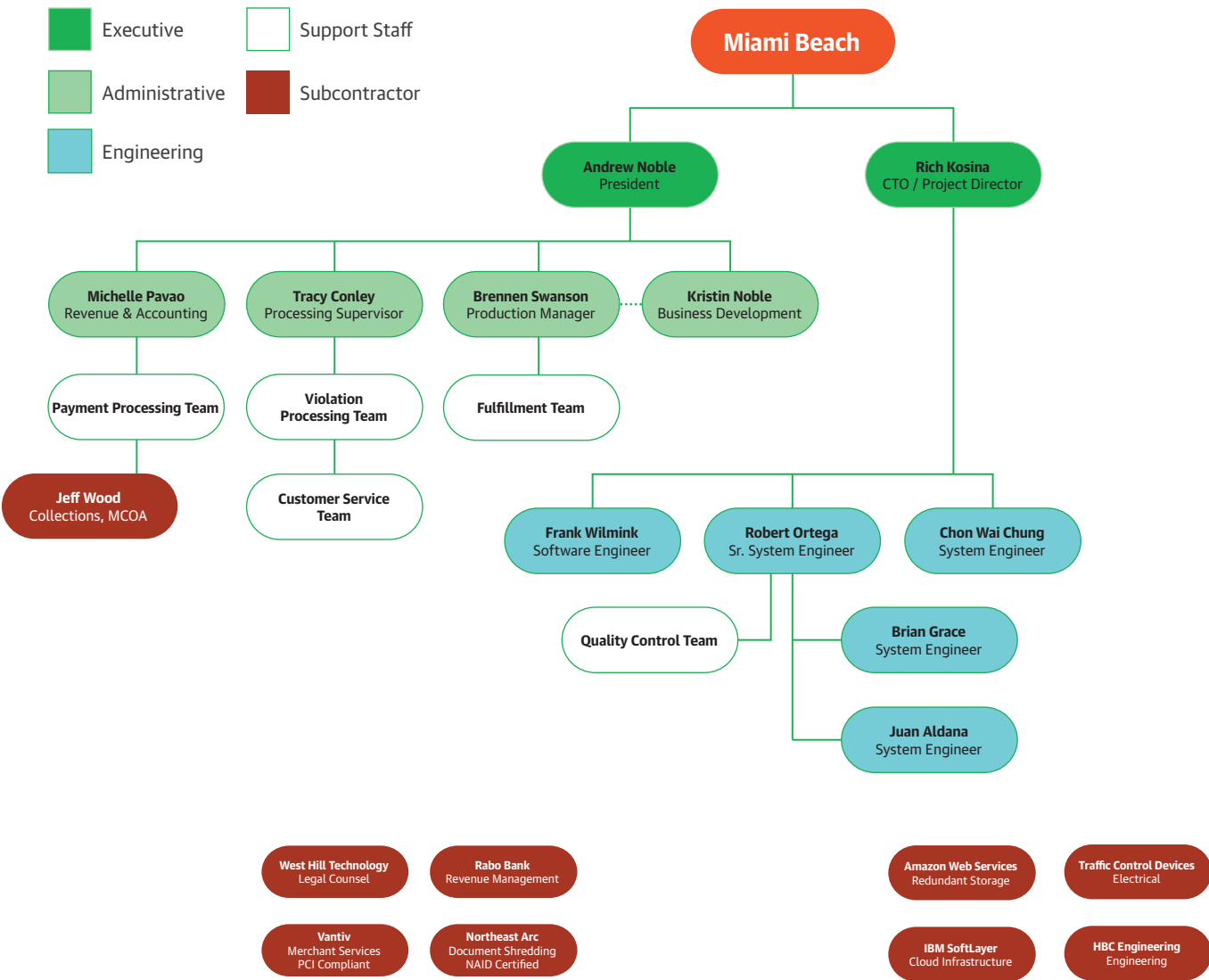
Legacy

Daytona Beach
Holly Hill
Palm Bay

Organization Chart

Your project team

With offices on three continents and over 160 employees, Sensys Gatso has more automated enforcement hardware in use than company in the world, with 45,000 installations in 60 countries. Three dozen engineers and two dozen software developers complement a dedicated manufacturing operations and support staff to deliver the world's most sophisticated photo enforcement solutions.



Key Personnel



Project Leader

Andrew Noble - 17 years experience

Andrew heads our Executive Team, and is the primary contact for all contractual and financial matters pertaining to the program. Andrew will drive all compliance activity and ensure all deliverables and milestones are met. Andrew will liaison with program managers in support of outreach and awareness for the program.



Project Leader

Rich Kosina - 36 years experience

Rich is a 36 year industry veteran and has led the installation and subcontractor management of more than 1300 Sensys Gatso systems domestically. Rich is responsible for all technical aspects of the program. Also serving as an expert witness, Rich will be the highest technical contact for installation through operation of the program.



Processing Lead

Tracy Conley - 9 years experience

Tracy brings 9+ years of customer service operations management and client back-office training experience to the project. She will be the Sensys Gatso point person for business rules compliance, training and program management for the duration of the program.



Development Manager

Kristin Noble - 8 years experience

Leading the development effort for all publicity materials and outreach literature, Kristin will be responsible for customizing the design of Public Awareness materials for program, and supporting all training efforts during the initial implementation process.



Sr Systems Engineer

Robert Ortega - 8 years experience

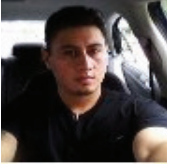
With more than eleven years in networked electronics, Robert Ortega is the senior systems engineers assigned to the project. Robert has been with Sensys Gatso since 2008, and has led many build teams for of internal and subcontracted engineers. Primary responsibilities include engineering supervision, technical liaison and field operations management.



Systems Engineer

Brian Grace - 10 years experience

Brian brings more than ten years of technical experience and installation expertise to the project. Brian will be part of the initial engineering and buildout team. Brian will be responsible for system testing and ongoing system support and maintenance.



Systems Engineer

Juan Aldana - 16 years experience

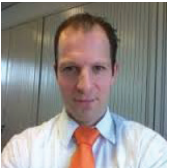
Juan brings more than 16 years of telecommunications and networking experience and expertise to the project. Juan will be part of the initial engineering and buildout team. Juan will be responsible for system testing and ongoing system support and maintenance.



Systems Engineer

Chon Wai Chung - 9 years experience

Chon will be directly involved with the initial Launch Team in all technical and operational aspects of installation and testing as a local engineer. He will support multiple build teams and officials during the initial phases of Go-Live.



Integration Engineer

Frank Wilmink - 11 years experience

Frank will be responsible for installation, testing, communications and software engineering for the initial phases of the project. He will be the primary liaison between the European Software Development Team & local operations.



Revenue Management

Michelle Pavao - 25 years experience

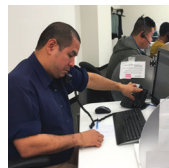
Michelle will ensure that all revenue-based deliverables & revenue sweeps will be coordinated and executed to a degree that meets the requirements of the program. Michelle will be reporting to Andrew Noble for the duration of this project.



Production Manager

Brennen Swanson - 8 years experience

Brennen will lead administrative on-boarding efforts related to initial citation design & processing fulfillment elements. In addition, Brennen will liaison with program officials around the composition and design of public awareness materials for use in the program.



Customer Service

Anthony Escobito - 10 years experience

Anthony is the Group Leader of our Bi-Lingual customer service group. Sensys Gatso currently employs several bi-lingual customer services agents. All customer service staff follow program-approved call scripts, and are cross-trained on all of our various programs.



Sensys Gatso Corporate & Contact Information



Name and Principal Address:

Sensys Gatso Group
900 Cummings Center, Suite 316-U
Beverly, MA 01915

Contact Person's Name and Title:	Andrew Noble, President, Sensys Gatso USA
Telephone Number:	978 922 7294 x 210
Federal Identification Number:	75-3249780 Sensys Gatso is a Corporation
D-U-N-S Number:	948685081
Public Listing:	Nasdaq OMX - SENS
Annual Report:	https://www.sensysgatso.com/investor-relations/financial-reports/interim-reports/2018-year-end-report

Number of years in business:

Gatsometer (now Sensys Gatso Group) started its automated photo enforcement business in April 1958 (61 years ago) and Gatso USA (now Sensys Gatso USA) was incorporated in June 2007.

Corporate officers:

- Andrew Noble President
- Richard Kosina Chief Technical Officer / Company Secretary
- Simon Mulder Chief Financial Officer / Director
- Ivo Monnick Director

Office Locations:



Executive Team



Andrew Noble & Rich Kosina

Ivo Mönnink

Andrew Noble - President

Mr. Noble is President and co-founder of Gatso USA (now part of the Sensys Gatso Group) where he brings more than 16 years of management success in law enforcement technology. Mr. Noble drives the business direction of Sensys Gatso and spearheaded the transition of Sensys Gatsometer B.V in Europe from being a technology supplier to a full service solutions provider in the North American market. Prior to joining Sensys Gatso, Mr. Noble led the Global Sales Development team of General Electric (GE) Infrastructure Security in Wilmington, MA; in the field of narcotics and explosives detection technology. In this role, Mr. Noble delivered technology products that had previously flourished in government security sectors and transitioned them into explosive and narcotics detection techniques for new markets through OEM and partnering relationships. Prior to this, Mr. Noble had been the Director of International Sales for GE Security, responsible for sales operations out of the South American, European and Asian offices of GE Security in the field of narcotics and explosives detection.

Rich Kosina - Chief Technical Officer

Mr. Kosina is CTO and co-founder of Gatso USA, (now part of the Sensys Gatso Group.) He holds degrees in Electronic Engineering and Business Management. Additionally, Mr. Kosina serves as a leading member of the IACP Technical Committee for photo-enforcement and until recently was the long-standing Chairman of IACP RADAR Committee. Mr. Kosina has successfully acted as an Expert Witness throughout the USA and Canada over the last 19 years. Prior to joining Sensys Gatso, Mr. Kosina spent ten years as Director of Engineering with ACS (Xerox/Conduent) and its predecessors Lockheed Martin and USPT. In this role Mr. Kosina led the management effort behind hundreds of photo-enforcement installations. Prior to the entering the automated enforcement field, Mr. Kosina was National Service Manager for Nikon Camera, based in New York and has 36 years of experience in both electronic and photographic service management.

Ivo Mönnink - CEO Sensys Gatso Group

Prior to joining Sensys Gatso, Mr. Monnink had previously worked as CEO of Hitec Power Protection, Ferm Powertools and Besin International (now Smurfit Kappa Hexacomb). He started his international career in commercial roles with Nike and Unilever. He previously served as Chairman of the Board at EasyScan Holding B.V.

References

Cedar Rapids, Iowa

Program	Automated Speed and Red Light Camera Photo Enforcement
Contact	Captain Jeff Hembera
Phone	(319)-286-5480
Email	J.Hembera@cedar-rapids.org
Address:	Cedar Rapids Police Dept. 505 1st Street SW Cedar Rapids, IA 52404
Implementation	December 2009
Project Manager	Rich Kosina r.kosina@sensysgatso.com
Cameras Systems	30
Events Processed	500-700/day @96% success Program Revenue Gross revenue since implementation approximately \$35 million
Population	>128,000
Type	RLC, Speed-on-green, Over-the-road (truss) & mobile speed

The City of Cedar Rapids currently deploys 14 Sensys Gatso Speed & Red Light Camera systems triggered by Doppler Radar Antennas. These intersection safety cameras have been deployed in Cedar Rapids, Iowa since late 2009. Additionally, the City also deploys 16 over-the road Highway Speed Enforcement cameras for enforcement of US Interstate 380. The City also deploys Mobile Speed Enforcement vehicles built by Sensys Gatso. Cedar Rapids is a fully turnkey program operated by Sensys Gatso. Services include full violations processing operations through our XILUUM backoffice platform; traffic data statistical reporting; violation adjudication management; and revenue collections management.

Winter Park, Florida

Contact	Sgt. Bruce Robinson
Phone	407 599-3510
Email	brobinson@cityofwinterpark.org
Implementation	2011
Cameras Installed	8
Citations Approved	500 - 600 per week
Type	Red Light Camera

Winter Park is a Red Light Camera program with AMBER Alert functionality. The Winter Park contract was awarded to Sensys Gatso in January, 2011. The award called for the installation of 8 cameras triggered by Loopless Trigger Radar Antennas (LTR). Winter Park is fully operated program by Sensys Gatso including back-office violations processing operations. Year-to-year event rejections based on controllable circumstances are <2%; for uncontrollable circumstances event rejections are <5%. System uptime averages 98%. Contested violations rates are typically <3%, with an associated 80% uphold rate resulting in <1% lost revenue / program value.

Maitland, Florida

Contact	Captain Dawn D'Ambrosio
Phone	407 539-6261
Email	ddambrosio@maitlandpd.org
Implementation	2010
Cameras Installed	9
Citations Approved	120 - 250 per week
Type	Red Light Camera

Maitland is a Red Light Camera program with AMBER Alert functionality. The Maitland contract was awarded to Sensys Gatso in January, 2010. The award called for the installation of 9 cameras triggered by Loopless Trigger Radar Antennas (LTR). Maitland is a fully operated program by Sensys Gatso including back-office violations processing operations.

Homewood, Illinois

Contact	Police Chief William Alcott
Phone	(708) 206-3430
Email	walcott@village.homewood.il.us
Implementation	2009
Cameras Installed	5
Citations Approved	17,500+
Population	>19,300
Type	Red Light Camera

The award called for cameras at five approaches initially, followed by further evaluations of other intersections soon after the village went live with the initial cameras. Homewood is a fully operated program by Sensys Gatso USA including back-office violation processing, call center operations, client training, and citation fulfillment.

Abington, Pennsylvania

Contact	Chris Posey
Title	Traffic Safety Officer
Phone	(267) 536-1076
Email	cposey@abington.org
FAX	267-536-1100
Address	1166 Old York Road Abington, PA 19001
Implementation	2014
Cameras Installed	10
Citations Approved	21,251+
Population	>55,310
Type	Red Light Camera

The Abington contract was awarded to Sensys Gatso USA in July, 2014. The award called for cameras at up to three intersections initially, followed by further evaluations of other intersections soon after the city went live with the initial cameras. Abington Township is a fully operated program by Sensys Gatso USA including back-office violation processing operations.

Albany, New York

Contact	Lt. Paul Kirwan
Phone	518-462-8016
Email	pkirwan@albany-ny.gov
Implementation	2015
Cameras Installed	36 + ongoing
Citations Approved	~100,000
Type	Red Light Camera

Installation Contact:

William E. Trudeau Jr.
Traffic Coordinator
Phone: 518-434-5791
wtrudeau@albany-ny.org

This is a large scale program of Red light cameras and at designated intersections throughout the City of Albany. The City estimates that 40 intersections will eventually be enforced. The delivery and installation schedules were and are aggressive. This is a turnkey solution managed and operated by Sensys Gatso.

Tuscaloosa, Alabama

Contact	Brian Oswalt
Title	Sergeant
Phone	205-248-4650
Email	boswalt@tuscaloosa.com
FAX	205-349-0174
Address	Tuscaloosa Police Department 3801 Trevor S Phillips Avenue Tuscaloosa, AL 35401
Implementation	2013
Cameras Installed	14
Citations Approved	20,500+
Population	95,000
Type	Red Light Camera

The Tuscaloosa RLC program went live in August of 2013. The City program enforces 14 intersection approaches, and does not enforce right-hand turns. Sensys Gatso provides the full array of services to the City including event pre-processing, training, fulfillment and revenue management.

Subcontractors

Engineering Services

PARTNERING WITH: HBC Engineering



Company Overview

We are a Florida Registered Engineering Consulting Firm Specializing in planning, design, and construction inspection services for civil, structural and transportation-related engineering projects. We provide service to both government and the private sector and are able to perform high-quality service in an expedited manner to meet rigorous schedules driven by regulatory agencies, funding cycles or other project constraints.

About Us

We are a leading South Florida registered engineering company established more than 10 years ago. With broad field experience, we specialize in planning, design, and construction inspection services for civil, structural and transportation-related engineering projects. We provide service to both government and the private sector. We are able to provide high-quality service in an expedited manner to meet rigorous schedules driven by regulatory agencies, funding cycles or other project constraints.

HBC understands the engineering consulting business. We undertake every project with the determination to exceed the requirements and expectations of our clients. Our job is not finished until your project is successfully completed and delivered. Our goal is to build meaningful relationships that transcend traditional business communication. HBC was founded with a commitment to the following principles:

Reliability: HBC works closely with the client to ensure a successful project completion and timely project delivery.

Expertise: We have the technical expertise and construction know-how to take a project from concept to completion.

Innovative Solutions: HBC provides innovative consulting solutions tailored to the unique needs of our clients.

COMPANY	CONTACT	ADDRESS
HBC Engineering	Phone: +1(305) 232-7932 Fax: +1(305) 232-7933	13155 SW 134th Street, Suite 207 Miami, Florida 33186

Construction / Electrical



PARTNERING WITH: Traffic Control Devices, Inc.

Traffic Control Devices (TCD) has been providing installation and maintenance work for GATSO since 2010, and is fully trained and experienced on all aspects of our equipment. They provide a fast, local, professional response to any service needs.

GATSO Installations: Maitland, Winter Park, Edgewood, Holly Hill, and Daytona Beach.

ABOUT TCD

Traffic Control Devices, Inc. (TCD) is a privately owned corporation established in 1978 by a team of highly qualified and experienced individuals. TCD has achieved financial stability through the performance of quality work and customer satisfaction. TCD has the resources (equipment, technical, and staffing) and financial base, to support the respective tasks for simultaneous projects throughout multiple jurisdictions and states. TCD has earned a reputation of quality in the contracting field and engineering industry. We specialize in the design, construction, implementation, and maintenance of Intelligent Transportation Systems (ITS) projects and their appurtenant communications and control equipment, including advanced computer systems and display hardware. TCD has established a leadership role in ITS design, installation, and maintenance for Traffic Signal and Freeway Management Systems. These include Central Traffic Control Systems, Closed Loop Systems, and Surveillance and Motorist Information Systems, inclusive of their respective communications networks.

TCD integrates and maintains network communications systems employing dial-up/leased line, hardwire, twisted pair cable, fiber optic cable, and wireless data links. By maintaining strong professional relationships throughout the ITS industry while keeping current with telecommunications/ systems technology and the disciplines to effectively apply this technology, Traffic Control Devices endeavors to continue to provide quality installation and maintenance services and enhanced system performance for our clients.

Licenses held: Hs-s Signs, Hs-s Traffic Control And Safety, Hs-s Traffic Signals

License #: 48392

COMPANY	CONTACT	ADDRESS
Traffic Control Devices, Inc.	Norm Wright Phone: 443-557-0025	242 North Westmonte Drive Altamonte Springs, FL 32714



Tab 3 - Scope of Services

T-Series Red Light Camera System Overview



INTEGRATED COMPONENTS - A SINGLE SHARED PLATFORM



SENSYS GATSO T-SERIES RED LIGHT ENFORCEMENT SYSTEM

6
Lanes of Coverage

20
Megapixel Imaging



level of performance in the world's most demanding environments, 24/7, 365 days a year. Over 2,000 fixed and mobile T-Series systems have been put into production over the last several years. This is a cross-platform solution. The same components and form factor comprise the fixed, mobile and portable solution. The same components comprise the red light enforcement system and the speed enforcement system.

IP65 Rated Cabinet



Isolated Traffic Signal Connection



30
FPS HD Video



Simultaneous RLC & Speed on Green



The Sensys Gatso T-Series is a single self-contained unit requiring only a power source, and its total weight is just 29kg. In fixed deployment the T-Series can be mounted to existing street furniture or stock poles, greatly reducing installation costs. This also provides unique flexibility as the system can be moved to an alternate location once desired results are achieved, at a much lower cost than traditional systems. The cabinet of the T-Series system is designed for easy installation and low maintenance. All functional modules of the system are kept safe from weather and intrusion in one IP65 system box, which is easily detached in one piece and is never opened roadside, preventing debris and water from entering the system. Operational uptime is maximized by this full-system swap out functionality. Every module of the T-Series was purpose-built for traffic enforcement. No compromise was made with regard to image quality, detection accuracy and reliability.

Vehicle Classification

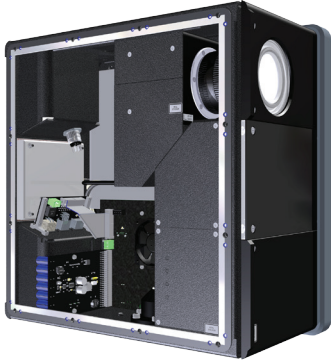


32
Vehicle Tracking Radar

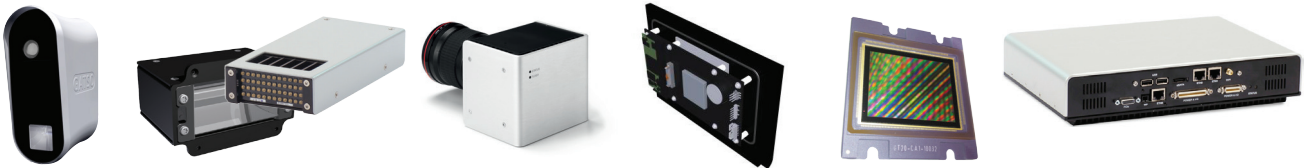


The T-Series Automated Red Light Photo Enforcement System is our latest generation intersection imaging and detection unit. It is designed, engineered and built by Sensys Gatso. The system was designed with carefully selected industrial components to deliver the highest

Component Overview



The T-Series is an integrated Red Light/Speed Enforcement platform. It's advanced technology allows it to enforce the widest intersections and the largest speed zones with extreme accuracy. It is engineered to perform autonomously from traffic signal controllers, inductive in-ground loops and data lines - fully wireless to the roadway and to the signal box. It requires only a single pole per system with power. Its components are ruggedized and robust - built for maximum uptime in the harshest environments.



Platform - The advanced T-Series photo enforcement system provides unrivaled deployment flexibility, with the ability to be used in fixed, mobile and portable enforcement applications. Every aspect of the design has been focused on reducing the total cost of ownership of the system while maintaining high levels of quality and performance.

Flash Units - Xenon white and infrared flash units are utilized. Each system continually monitors ambient lighting conditions at the roadway installation using advanced Through-the-Lens (TTL) technology. Programmed to deliver minimal intensity while providing the precise level of non-distracting illumination of the enforcement zone.

Radar - The RT4 Detection System an advanced, fully wireless tracking radar. The tracking feature of our radar unit ensures unsurpassed lane-specific detection, information, and accuracy. With a massive 450 feet of coverage area, it can detect, measure and track up to 32 different vehicles simultaneously in 6 lanes of bi-directional traffic.

Decision Unit - The DT2 decision unit is the logical heart of the system. It compares the output from the radar with programmed business rules to determine whether a passing vehicle is in violation. The unit utilizes 4 Intel Atom processors to provide the processing power to manage the evidence and traffic data generated by the internal systems.

Image Sensor - The ultra-efficient full 12-bit CMOS pixel sensor is 16 times more powerful than a typical 8-bit sensor. The dynamic range of the 12-bit camera is significantly better, with huge light-gathering capability, resulting in reduced motion blur and improved license plate recognition even under the poorest lighting and weather conditions.

Camera - The imaging system is a single-camera, commercial-grade 20 mega-pixel still/30 frames-per-second HD video integrated unit. The unit provides extremely dense images critical for zoom-in capabilities required to capture license plate crops. The unit is purpose-built for 24/7/365 automated photo enforcement applications.

Imaging System



Sensys Gatso GT20 Imager

The Sensys Gatso GT20, is a SINGLE camera system utilizing full-time 12-bit imaging and a 20MP (5120 x 3840) ultra-sensitive CMOS sensor. The unit strikes a perfect balance of pixel density and quality with high-sensitivity and conditional flexibility. Variables such as aperture type, shutter speed, ISO, depth-of-field, focal length, Bayer filter mosaic and moiré patterns are tuned specifically for 24/7 image capture under extreme conditions. The GT20's processing power of 4 Intel Atom CPUs and full-frame video capture rate of 30fps enables the system to capture up to 10 full resolution still images in a single second. Supplemented by an efficient Xenon white flash unit and two infrared flash units, the imager will provide image and video capture across six lanes of traffic under all lighting conditions.

Commercial-Grade Design

"Purpose-built for automated enforcement"

Imager Features

- Virtual "Through-the-Lens" signal phase recognition
- Huge imaging sensors - 5120x3840
- Transparent Bayer Pattern pixel array
- Fully electronic - non-mechanical shutter
- 12-bit ADC resolution
- Extremely low flash requirement - always <70 watts



Low-Light Sensitivity

Sensys Gatso system engineers designed our custom-built CMOS sensors specifically for photo enforcement under harsh and variable lighting conditions. The standard "Bayer Pattern" pixel architecture was reconfigured and refined, with more transparency, a larger surface area and clearer, larger square pixels.



Competitor Method

Standard Bayer Pattern - smaller, darker, denser pixels = less light to sensor.



Sensys Gatso method

Transparent Bayer Pattern - more light to our larger sensor.

Pixel Density

The photo enforcement system must strike a perfect balance between light-gathering ability, sharpness, sensitivity and processing power. Jamming more pixels onto a sensor than is required for a particular application will actually DEGRADE the output of an imaging system. Unrealistically high and unnecessary megapixel counts produce noisy photos - especially in weak-light situations common to a photo-enforcement environment, where there simply is not enough light (photons) landing on minuscule sensor pixels.

Lens & Global Shutter

Lenses utilized by the GT20 are the highest quality, sharp from edge to edge, and extremely fast. Lenses from 35mm to 85mm are available. A fully electronic global shutter is utilized in place of a mechanical rolling shutter. This technology leads to minimal deformation of the image. The electronic shutter in combination with the extremely light-sensitive sensor also reduces the motion blur.

The Sensys Gatso GT20 electronic shutter speed is programmed $>.001$ second, which easily freezes motion of the fastest speeding vehicle. Most other vendor cameras use outdated mechanical shutters not designed for the high volume, high stress work of 24/7 photo enforcement. Over time, mechanical shutters begin to wear and the unit will become prone to missing violations.

Lens/Imager Features

- "Focused-flashing"
- Concentrated field-of-view
- Minimal image compression
- Custom "Polarizer" lens filter
- HDR - Dual-exposure imaging
- Low in-line angling of focus

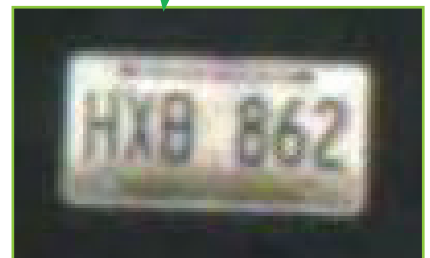
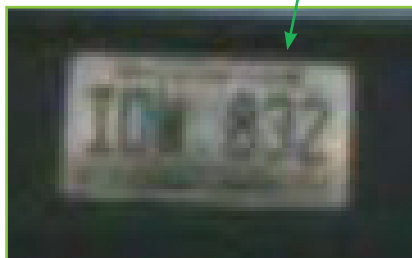
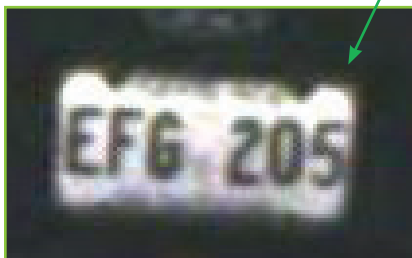
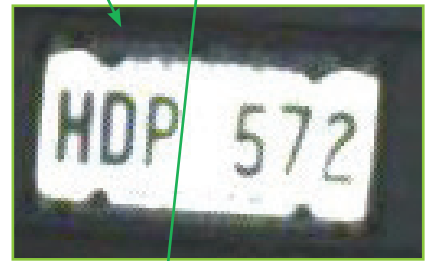
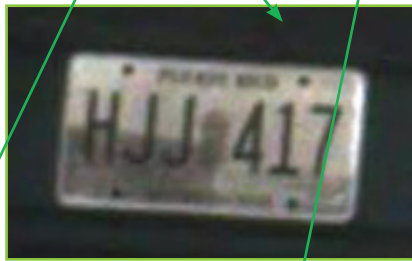
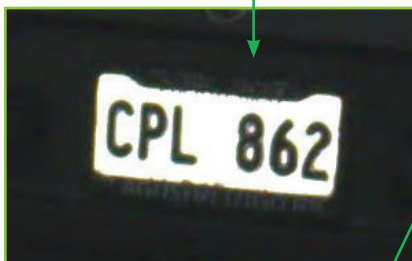
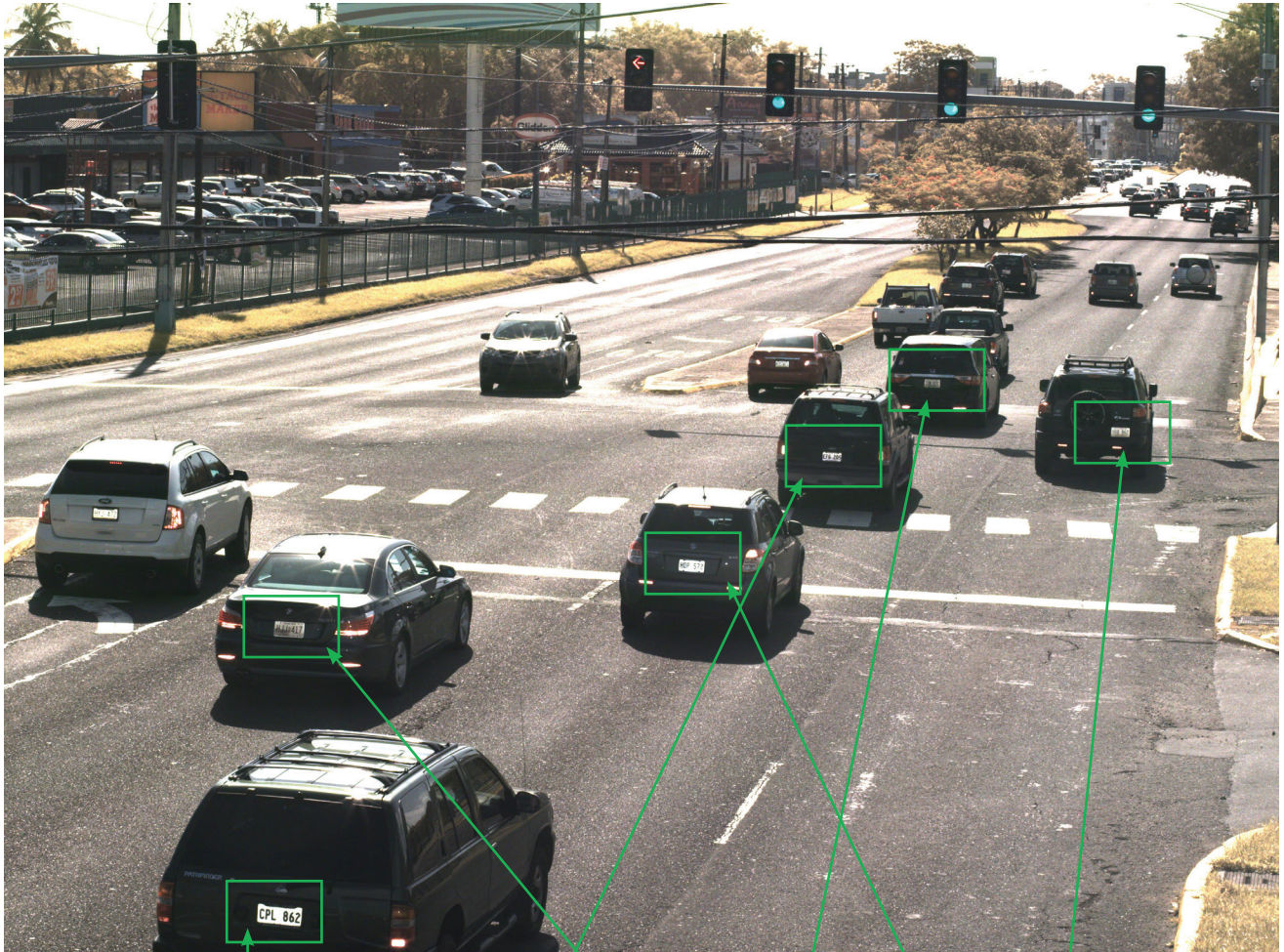
Technically Speaking

The purpose built image sensor features a 20 Megapixel (5120x3840) resolution with 6.4 μ m sized square pixels resulting in an active sensor area of 32.8x24.6mm. Peak quantum efficiency $>45\%$ resulting in a superb responsivity of 8.29 V/lux.s in combination with an excellent dynamic range of 66dB. By means of correlated double sampling in global shutter mode, the patented 8-transistor pixel cell architecture reduces any dark noise and FPN non-uniformity of the sensor matrix. The sensor also offers excellent shutter efficiency. At full 20MP resolution and with a 12-bit ADC resolution the GT20 delivers full 30fps. This is achieved by using 16 LVDS outputs running at 480 Mbit/s each. Lower frame rates can be supported by multiplexing to 8 output channels only. Partial read out, windowing and subsamples modes can be programmed to support higher frame rates. At full resolution and frame rate, the power dissipation is 1.1W. This power consumption can be dynamically controlled when lower frame rates are used. Driving and programming the on-chip features such as HDR modes, offset and gain programming and power dissipation control is done over a 3-wire read-write SPI control.

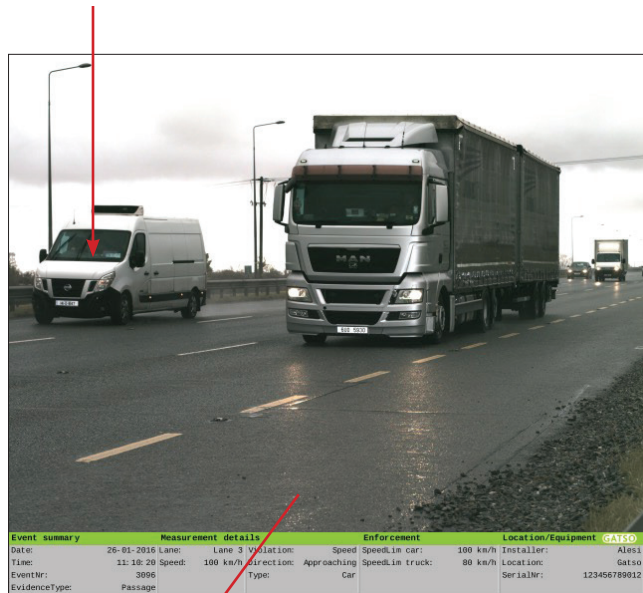


LOW-LIGHT IMAGE CAPTURE

Image Quality Examples



Example of extreme capture ability of our imaging system



Event summary	Measurement details	Enforcement	Location/Equipment	GATSO
Date:	26-01-2016	Lane: Lane 1 Violation: Speed	SpeedLim car: 100 km/h	Installer: Ales1
Time:	11:18:20	Speed: 86 km/h Direction: Approaching	SpeedLim truck: 80 km/h	Location: Gatso
EventNr:	3095	Type: Truck	SerialNr: 123456789012	
EvidenceType:	Passage			

Event summary	Measurement details	Enforcement	Location/Equipment	GATSO
Date:	26-01-2016	Lane: Lane 3 Violation: Speed	SpeedLim car: 100 km/h	Installer: Ales1
Time:	11:18:20	Speed: 100 km/h Direction: Approaching	SpeedLim truck: 80 km/h	Location: Gatso
EventNr:	3096	Type: Car	SerialNr: 123456789012	
EvidenceType:	Passage			

Vehicle Classification

The images above demonstrate the RT4 radar unit's vehicle classification / concurrent capture ability. The left image displays a truck exceeding the lower preset speed limit for over-size vehicles. Simultaneously, the van is also independently tracked and its speed checked against the higher preset speed limit for "cars." Both vehicle classifications are individually monitored for independent speed limits simultaneously, and two distinct violations are captured.

Event summary	Measurement details	Enforcement	Location/Equipment	GATSO
Date:	06-02-2016	Lane: 6 Violation: Speed	SpeedLimit car: 20 km/h	Installer: ChrISP
Time:	14:12:30	Speed: 43 km/h Direction: A	SpeedLimit truck: 20 km/h	Location: Nicholson Test
EventNr:	29032	Type: Car	Speed sign: 21 km/h	SerialNr: 14-01-030-139
EvidenceType:	Passage			

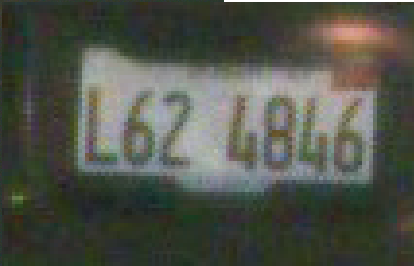


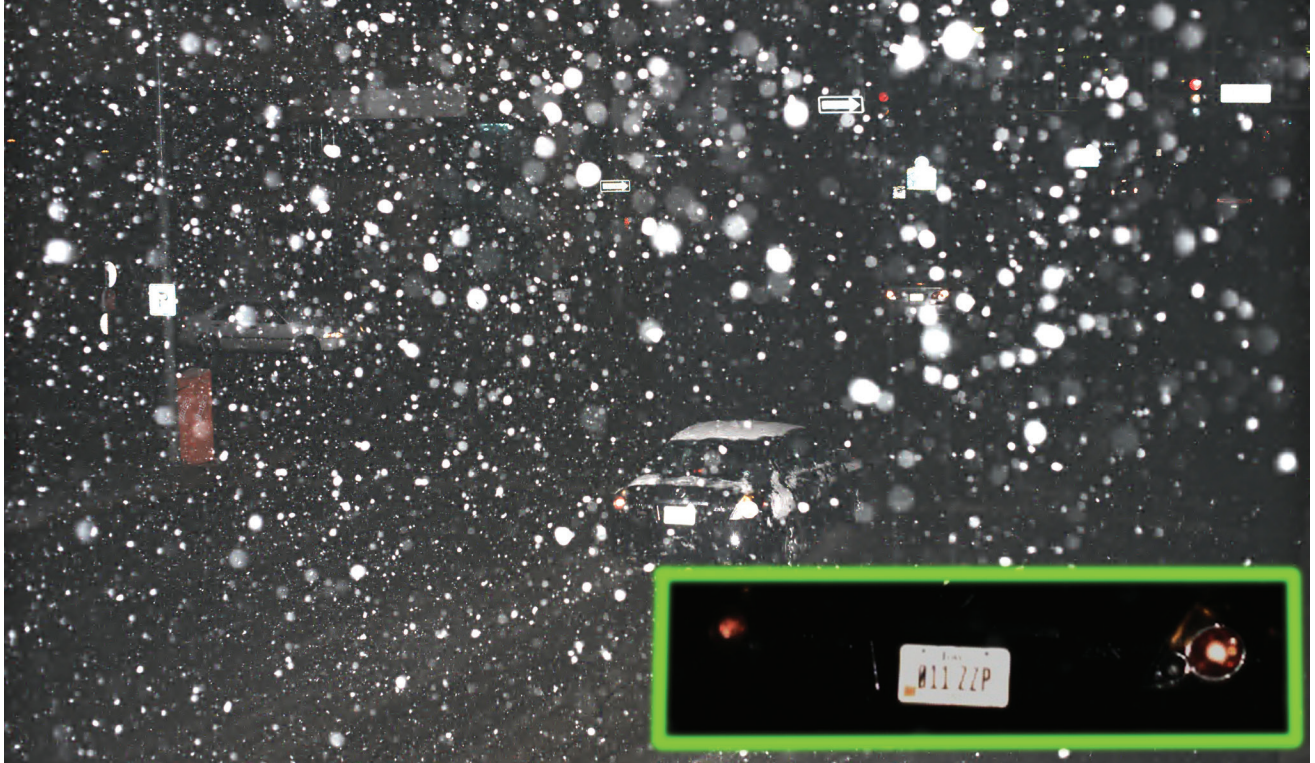
Six Lane Capture

The violation image on the left displays the GT20 imager's ability to clearly capture a speeding vehicle in the 6th lane of the enforcement zone.









Night time - Blizzard



Daytime - Bright Sun



Daytime - Overcast



Night time - Snow



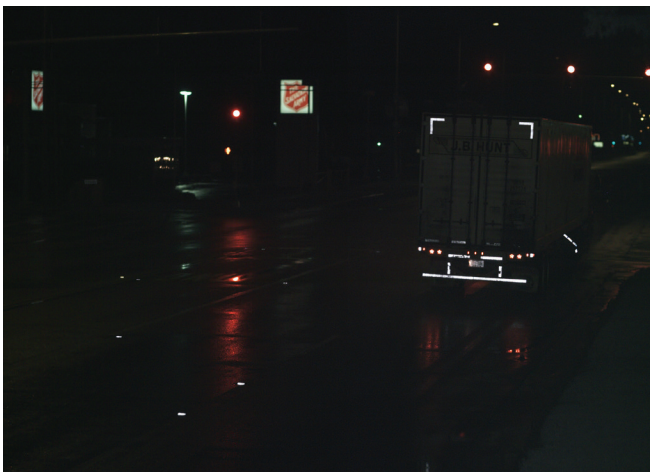
Daytime - Cloudy



DAYTIME - FAIR CONDITIONS

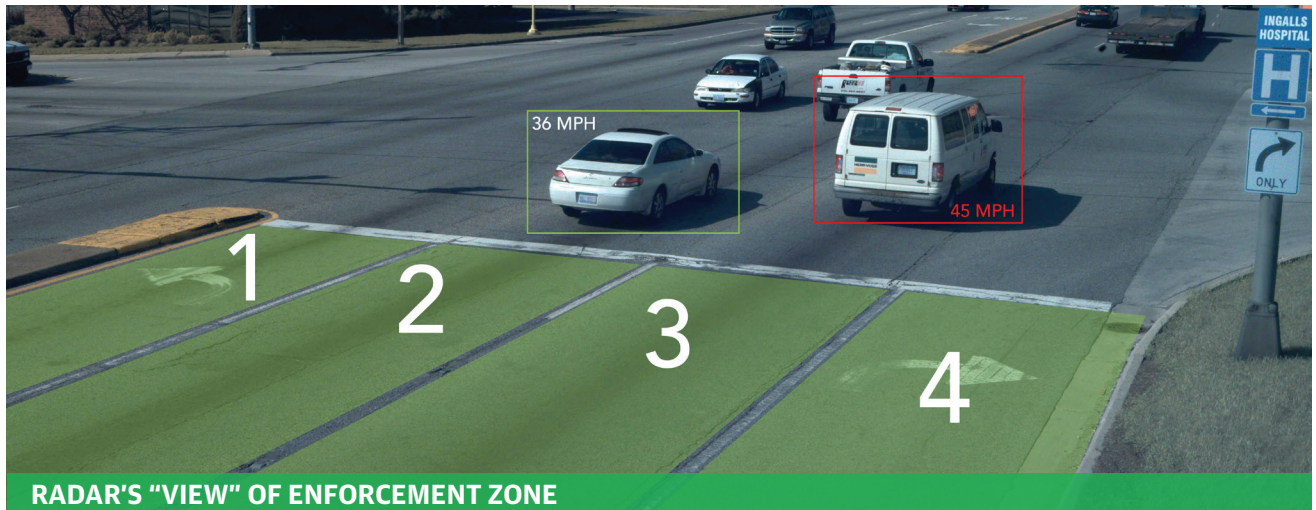


DAYTIME - RAIN



NIGHTTIME - RAIN

Vehicle Detection

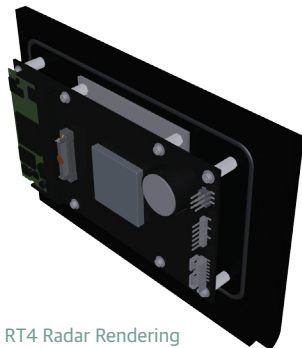


Radar Standard

The International standard for R91 radar devices was established by Sensys Gatso over 20 years ago. In 2013 under the direction of the US National Institute for Standards and Testing, Sensys Gatso was asked once again to take the lead in modernizing the R91 specification.

Features

- OIML R91 measurement accuracy
- Advanced "Speed-Averaging"
- No reset or recoil
- Narrow-field police K-band radar
- Unaffected by weather
- No ground-level vandalism
- Minimal occlusions
- Extreme accuracy: IACP - Approved



RT4 Radar Rendering

Vehicle Detection

Our RT4 Radar System is a wireless, tracking radar. It can detect and track up to 32 different vehicles simultaneously as they travel toward and through the enforcement zone. The RT4 radar was developed and manufactured in-house by Sensys Gatso, allowing engineers full control over the measurement and tracking logic. This has enabled Sensys Gatso to develop "smart tracking" algorithms, filtering out any unwanted reflections caused by stationary objects or other disturbances in the beam. The RT4 radar has more processing power and a higher resolution than traditional speed enforcement radars. It has the capability to distinguish individual vehicles in dense flowing traffic. Several hundred speed and length measurements are taken of the violating vehicle before the unit actuates the camera, virtually eliminating a false trigger. The RT4 radar, has been type-approved for speed measurement in compliance with the accuracy requirements of OIML R91. This means that the measured speed accuracy is within 1 km/h for speeds under 100 km/h and within 1% for speeds above 100 km/h.

Technical features

- Narrow-field police K-band ISM
- No rest / no recoil
- Lane/distance-to-vehicle indication
- ZERO false triggering
- Vehicle Targeting & Classification

Fixed deployment features

- 18' + height minimizes occlusions
- Fully wireless, loop-free installation
- Massive 450' coverage range
- 32-vehicles simultaneous tracking

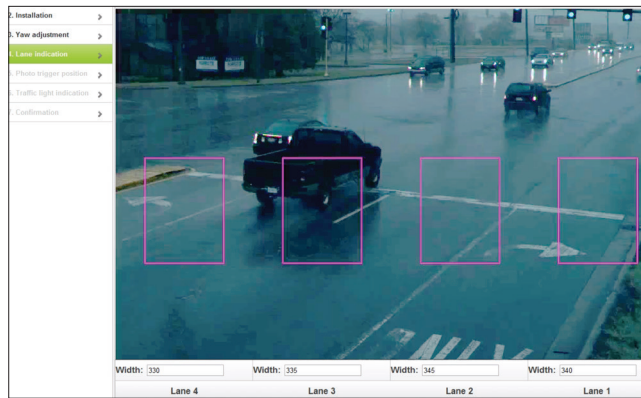
Intersection Enforcement

A single RLC enforcement system can handle multiple distinct light signal phases. Turn arrows for the LHT, RHT, as well as the through lanes are all monitored independently, providing unmatched flexibility. The unit is designed

to simultaneously detect and track up to 32 vehicles for location and speed at an enforced intersection. By configuring the system to create a unique detection zone for each lane, the Sensys Gatso technology has no trouble detecting simultaneous violations in up to 6 lanes of traffic. Our solution is a fixed position detection system. It does not have to reset or recoil in order to detect the next violation. Reset time is a real challenge that plagues most other tracking video detection and capture systems.

Auto-Alignment Wizard

Sensys Gatso employs an intuitive set-up screen to demark the enforced lanes within an intersection approach. In addition, over time the system's CPU will "learn" the



lane coordinates based on an analysis of traffic flow and patterns, further diminishing the number of tall-vehicle lane incursions and occlusions that plague other vendor's detection systems.

Vehicle Targeting

To ensure that the targeted vehicle is accurately identified, a symbol or "target" can be overlaid on the image. The shape of the cross-hair can be configured by program



officials. This targeting provides a crucial, unambiguous indication of which vehicle is the subject vehicle in a captured event.

Vehicle Classification

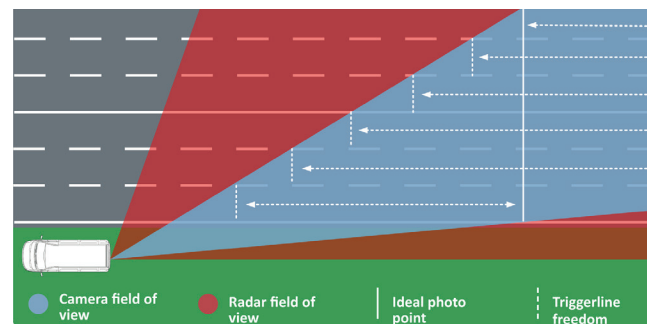
To differentiate between vehicle types, the RT4 radar measures the length and width of the detected vehicles. When the tracked vehicle reaches the trigger point,



the system evaluates the measured speed value to the configured speed limit threshold for that specific vehicle category. Each individual vehicle is tracked and monitored, with different detection thresholds available for different vehicle types.

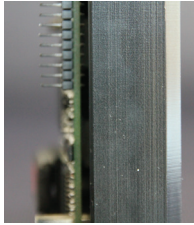
Trigger Line Freedom

Laser based systems and other traditional "across the road" radar systems do not offer trigger-line flexibility, forcing those system to capture images of the vehicle



at sub-optimal positions. This results in a wide spread in vehicle positions leading to out-of-focus images and a greater chance of vehicle obscuration. The T-Series RT4 radar resolves this problem and captures event Images of all vehicles at equal distance from the camera, always at the focal point. The Sensys Gatso databar is customizable, and can include this delta value for time between images 1 and 2, and/or the distance interval (delta of the configured trigger points) between images 1 and 2.

Comparison of Detection Technology



Sensys Gatso RT4 Advantages

While the vehicle is within the "detection zone," its speed and position are measured by the radar. The evaluation of speed threshold compliance is performed when the

vehicle crosses a virtual trigger line. This trigger line can be freely configured within the detection zone, making it possible to capture the evidence images in the **exact focal point** of the camera when monitoring up to 6 lanes of traffic. Laser based systems and other traditional "across the road" radar systems do not offer this flexibility, forcing the system to capture images of the vehicle at sub-optimal positions. This results in a wide spread in vehicle positions leading to out-of-focus images and a greater chance of vehicle obscuration or improper imaging before and after the stop bar. **The T-Series trigger-line freedom resolves this problem & captures images of all vehicles at equal distance from the camera, always at the focal point.**

Other Detection Method Limitations

Ground Loops & Piezos Limitations

- Cutting of the road surface required
- Regular replacement of sensors required
- Expensive maintenance
- Installation flexibility

Scanning Laser Limitations

- Poor performance in adverse weather conditions
- Sensitive to occlusion due to low installation height
- Prone to vandalism
- Prone to soiling
- Separation measurement and trigger point issues

Ranging Radar Limitations

- Limited court acceptance
- Quality issues

Standard Non-3D Radar Limitations

- Older product, older technology
- Can only detect approaching vehicles
- Limited horizontal beam width

Capture Rates

CITATIONS

Issued Citations

Issued Citations By Approach

Successful Dispositions

Capture rates are variable across each program. The nature of the enforcement zone, the frequency of large trucks or buses that cause occlusions, the angle of sunlight relative to the camera positions, certain business rules of the specific program - many factors will go into an assessment of capture rates. With our Sensys Gatso technology, capture rates are typically over 90%. Here are the rates for two of our reference accounts that deploy fixed RLC, fixed speed, mobile speed and fixed speed-on-green:

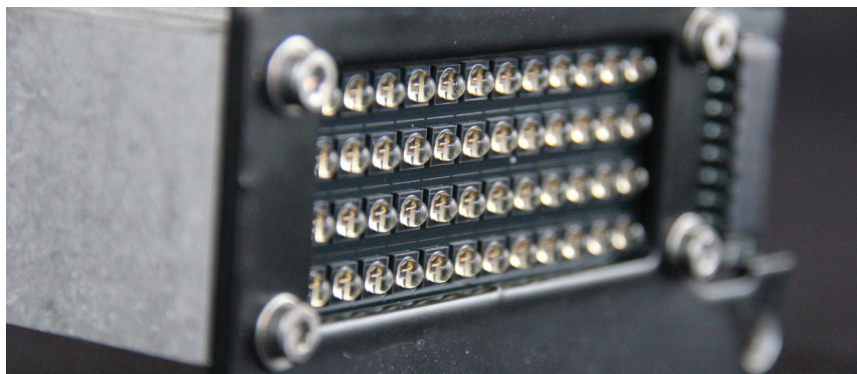
Cedar Rapids, Iowa:

Over 92% capture rate excluding uncontrollable events.
Approximately 15% are returned as "undeliverable."
Approximately 65% paid-in-full within 39 days of mailing.
Approximately 30% presented for collections activity.
Approximately 5% dismissed or adjudicated through court.
Approximately 20% of collections are paid 180 days.

Des Moines, Iowa:

Over 90% capture rate excluding uncontrollable events.
Approximately 10% are returned as "undeliverable."
Approximately 70% paid-in-full within 39 days of mailing.
Approximately 25% presented for collections activity.
Approximately 5% dismissed or adjudicated through court.
Approximately 25% of collections are paid 180 days.

Illumination System



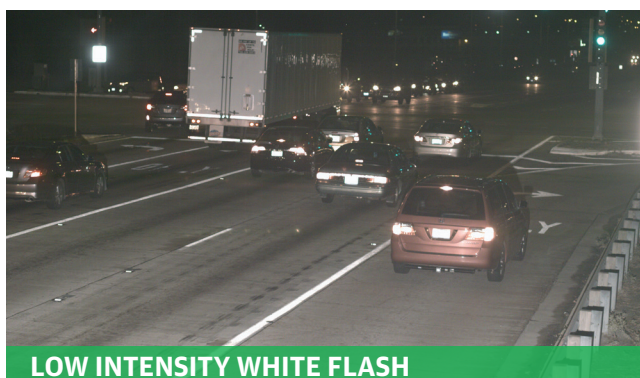
INTERNAL IR FLASH UNIT

Intersection Illumination

A photo enforcement system must discretely capture images of multiple violators, at all speeds, under all lighting and weather conditions. The captured images must clearly display an identifiable vehicle and license plate. Vendors **cannot** deploy overly bright illumination to gather event evidence. The extreme sensitivity of the Sensys Gatso imaging system allows our flash units to be as discrete as possible, preventing driver and pedestrian distraction at the intersection. To ensure exceptionally good image quality under all circumstances, the T-Series system incorporates fully automatic lighting control. The imaging system continually monitors light at the roadway installation using Through-the-Lens (TTL) technology. When the system senses a violation event, the camera sends a distinct electronic frequency to trigger the flash

Infrared Flash (IR)

IR units produce illumination that is invisible to the human eye.



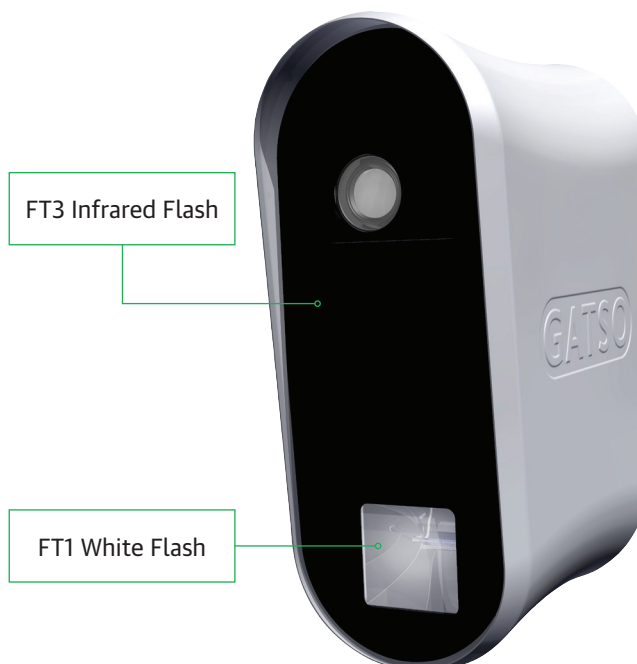
LOW INTENSITY WHITE FLASH

unit. The flash unit then outputs the precise amount of light to properly illuminate the violating vehicle - typically 40 watts or less. In all cases, the illumination is never greater than 70 watts, due to the low light capability of the 12-bit camera. 40-70 watts is extremely small when compared to most other suppliers of consumer grade off-the-shelf flash units which often output an unacceptable level of illumination.

Sensys Gatso employs White Xenon and Infrared flash units inside the T-Series and a White Xenon external flash unit when required. These are purpose built by Sensys Gatso for photo enforcement - designed to recharge rapidly, always providing the correct amount of light. The IR unit output is invisible, and runs constantly to illuminate video frames at 250µs. When IR is selected to illuminate evidence images, the system triggers a 1000µs signal.

Features

- Dual units - FT1 White Light & FT3 Infrared
- Purpose-built by Sensys Gatso engineers
- Always <= 70 watts; < 40 watts on average
- "Ambiance Sensing" technology



T-Series Enclosure



Pole Mounted Cabinet

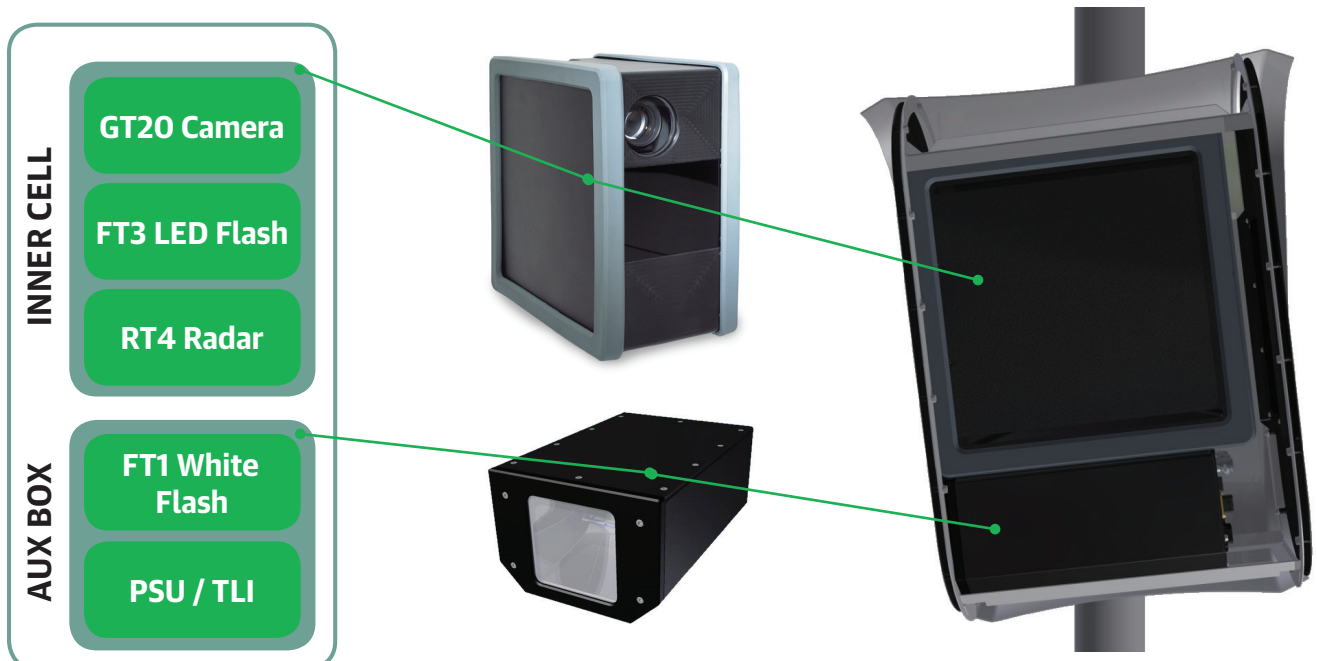
The fixed T-Series pole-mounted cabinets are designed for easy-of installation and low maintenance. The functional modules of the internal system are kept safe from weather and dust in the IP65 inner cell, which is protected from impact and vandalism by the locked outer shell. Unlike other vendor systems which start with a outer cabinet and then install multiple components and wiring within, the T-Series system is housed

in a single cabinet. All internal components are installed, connected, wired and tested before leaving the factory. The inner cell can easily be taken out in one piece and never needs to be opened roadside, preventing dirt and water from entering the system. The outer shell can be mounted to existing street furniture or stock poles, reducing installation cost and time. The compact design blends well with most street environments and aesthetics. The pole housing provides basic ballistic protection and can be equipped with an air-conditioning unit for effective climate control, even under harsh conditions.

Ruggedized

"The pole housing provides basic ballistic protection and can be equipped with an air-conditioning unit for effective climate control, even under harsh conditions."

The inner cell holds the radar, imager, flash unit, the system controller, communications and 12V DC power supply. The IP65 rated T-Series inner cell - designed for maximum portability, swappability and performance.



Cabinet Specifications

OUTER CABINET

TECHNICAL SPECIFICATIONS

- » Outer shell 1.5 mm stainless steel
- » Anti-bump, drill and pick-proof locking mechanism
- » Standard mounting = round poles, \varnothing 3.9 - 9.8 in
- » Inner Cell
- » Auxiliary Box

PHYSICAL SPECIFICATIONS

- » Height 518 mm
- » Width 248 mm
- » Depth 570 mm
- » Total weight 39.6 kg



INNER CELL

ENVIRONMENTAL SPECIFICATIONS

- » Ingress protection IP65
- » Dust tight
- » Water-jet resistant
- » Operating range -25C to 55C
- » Self-regulating for temperature
- » 95% non-condensed

PHYSICAL SPECIFICATIONS

- » Height 375 mm.
- » Width 210 mm.
- » Depth 375 mm
- » Cell weight 14.6 kg.
- » Power supply 12 - 30 VDC
- » Power consumptions 70Watts
- » RJ-45 Ethernet
- » CAN, RS485, RS232, dry contact



Installation Features



SENSYS GATSO ENGINEER PERFORMING AN INSTALL

Fixed-system Installation

A full installation deliverable overseen by Sensys Gatso engineers and project managers includes site preparation, permitting, engineering drawings, utilities coordination, police detail procurement, subcontractor management, signage and striping preparation, communications connectivity, and intensive testing of the enforcement build-out. The single-pole/single power supply design and wireless technology tend to minimize both the time and construction required at an enforced zone, compressing the Notice-to-Proceed through Go-Live cycle. All installations will leave the area as-is or better.

Buildout

“A single pole set at a wide functional range of 130 to 180 feet from the center of the intersection will constitute the physical buildout.”

Fixed System Portability

The nature of our fixed solution will allow program officials to consider redeployment of Sensys Gatso resources to other zones. Wireless to both the roadway and intersection signal box, sunk installation costs for deployed of Sensys Gatso enforcement assets tend to be much less than sunk installation costs of other vendors. They may be less inclined to redeploy their enforcement assets to other appropriate enforcement zones due to that additional associated cost and workload. A typical intersection approach will enjoy a 60% increase in the rate

of compliance within six months. Our solution will allow program officials to order redeployment of Sensys Gatso resources to permitted, unenforced troubled intersections - often within hours when existing street furniture is available.

Mode Flexibility

The concept of technical flexibility is central to the Sensys Gatso solution. Fixed systems are both red light and speed enforcement systems. The desired enforcement mode simply requires the flip of a switch. This

functionality allows for supplemental speed-on-green enforcement with no additional build-out.

Mounting Height

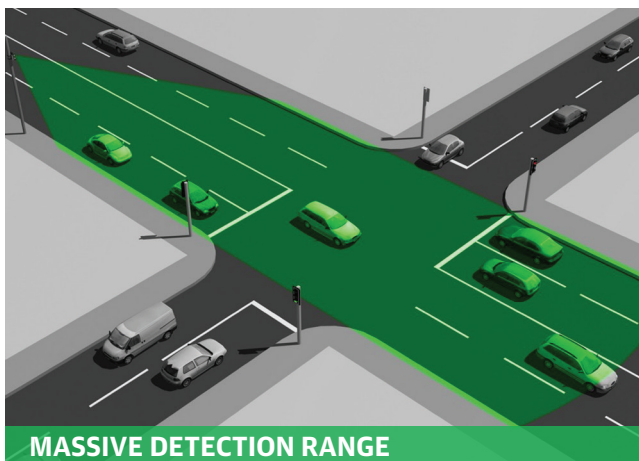
The fixed unit is mounted 5+ meters (16+ feet) off the ground. This height is unique in the industry. Advantages include reduced risk of vandalism as well as reduced detection occlusion and image blocking. The increased mount height helps to ensure that the radar “tracks” vehicles distinctly due to the differentiation of the vehicles



within the radar zone. Additionally, the wider viewing angle offered by the increased mounting height of the unit ensures that the plate capture ability of the video and imaging system will not be impeded or blocked by other vehicles across multiple lanes of traffic.

Effective Range

A wide and variable functional range of 130' to 180' from the enforcement intersection is typical. A large detection area needs to be supplemented by powerful imaging capability. The 20MP imager ensures that all intersection enforcement details (signals, stop bar, vehicle, license plate) are captured with the accuracy and clarity required to generate evidence of infraction. Additionally, the wide functional range allows program officials and installation teams flexibility to select the most appropriate pole location relative to access and power, and where possible to utilize existing intersection furniture assets.



MASSIVE DETECTION RANGE



Communications

Each fixed system is installed with a combination of fully secure Ethernet capability, 3/4G cellular capability, and WiFi capability. Evidence/event data, system health data, traffic statistics, archive video, live intersection video, and SNMP warnings can offload via whichever method is required. Units are IP address-assigned, allowing

technicians 24/7 on-line access to each live system.

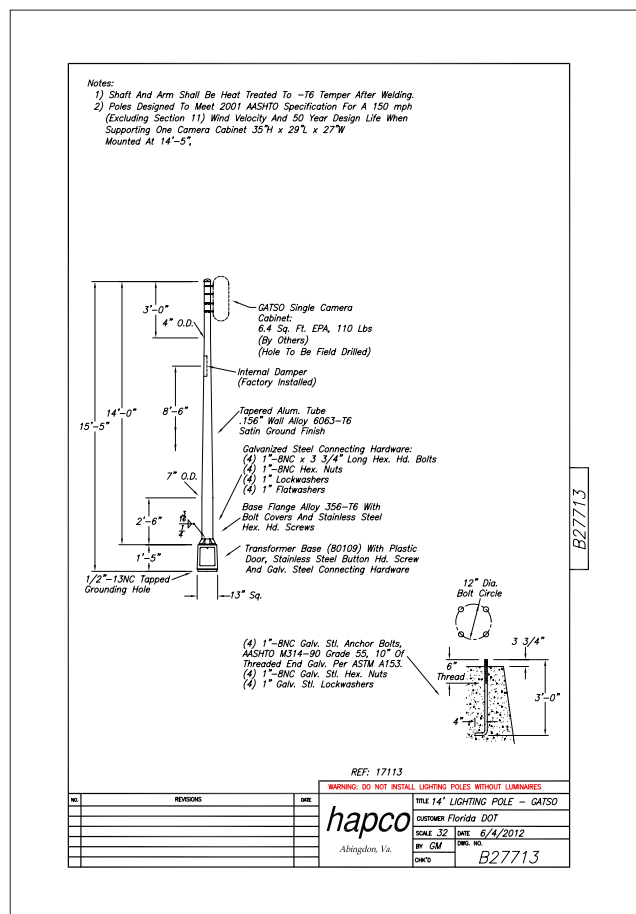
Mounting Poles

Sensys Gatso breakaway poles meet the AASHTO

specification for crash and wind. Poles can be customized for both design and color according to the functional and aesthetic requirements of the program.

Alignment to Roadway

Initial alignment of the physical cabinet to the roadway is achieved utilizing variable brackets and an alignment utility. The unit is designed to align for two to six lanes of traffic coverage and multiple signal heads. Adjustments for vertical and horizontal sighting are built into the side of the cabinet.



Web-Based User Interface Overview



Web-Based Interface

Our custom-built, web-based configuration utility controls all system functions. This secure, powerful system allows 24/7 oversight of the entire program.

System setup

Initialization and configuration of the intersection enforcement zone is performed through our custom-built set-up utility, known as the T-Series Web-Based Interface (WBI.) Our engineers and authorized personnel use this powerful, "wizard" based tool to register critical setup parameters; make authorized adjustments and updates to those parameters; access key system settings and monitor system performance in real time.

Operator Setup

- Web-based, device and OS independent
- Intuitive controls & user navigation
- Local or remote control via wired or 3/4/5G/WiFi
- Fully automated system-diagnostic routines
- 24/7 access to operational parameters & data

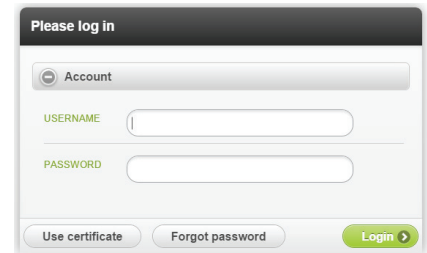
Advanced Features

- Exclusive "Through the Lens" enforcement zone setup
- Fully wireless to traffic signal and roadway
- Programmable lane-specific speed enforcement
- Multi-phase lane designation utility

Secure Login

The T-Series WBI can be securely accessed remotely by authorized users from any browser-based device for

24/7 configuration monitoring. Secure access is strictly controlled through the use of predetermined administrator privileges and dual-authentication. Our Project Manager will control access and authorizations based on stated business rules.



Initial Alignment

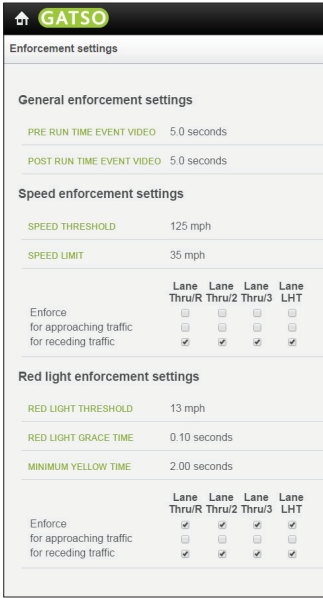
Enforcing a red light zone wirelessly requires the detection and imaging systems to "see" the characteristics of the intersection, and the Decision Unit (Controller) to designate functions and monitor conditions. The alignment wizard guides Sensys Gatso engineers through the initial installation procedure by aligning the radar with the specific location parameters, including lane and distance-to-camera measurements. Specific alignment settings established during the initial setup phase include:

- Lane Designation
- Yaw Adjustment
- Photo Trigger Position
- Traffic Light Settings
- Enforcement Settings

Enforcement Settings

The Enforcement Settings screen gives an overview of

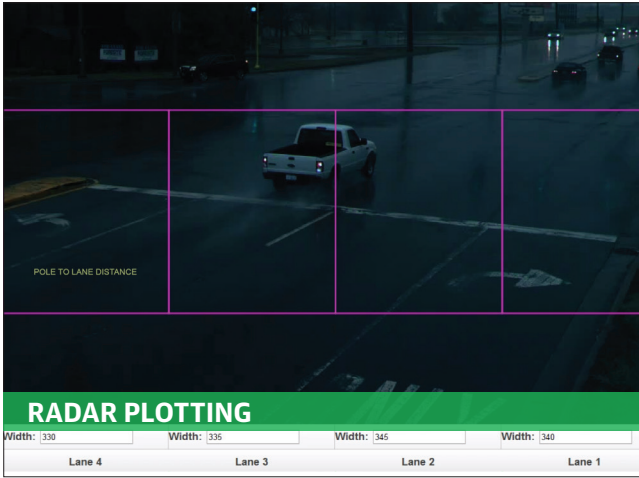




the actual enforcement settings for each individual lane. Settings for video length (the included video clip before and after the violation); lane-specific speed threshold & speed limit; and lane-specific red light threshold, red light grace time and minimum yellow time settings are all input per the business rules of the program.

Intersection Configuration
Our unique lane-plotting

wizard demarks specific lanes with specific speed thresholds and signal phases. This negates the need for physical disturbance of the roadway with wired sensors, and will expedite setup and ongoing reconfigurations.



Traffic Signal Interface

The Web Interface (remote or direct connection to the system) will display the intersection setup and configuration wizard on the operator computer.

A/C Current Switch

The Web Interface (remote or direct connection to the system) will display the intersection setup and configuration wizard on the operator computer.

A current switch is a semiconductor device that allows signals to be transferred between circuits or systems, while keeping those circuits or systems electrically isolated from

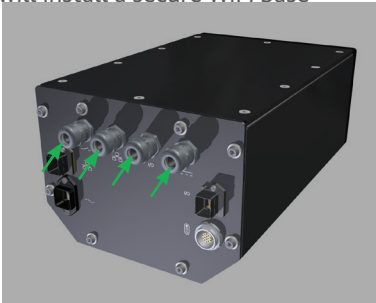


each other. They are used in a wide variety of communications, control, and monitoring systems. Certainly the safest indirect connection possible in the signal box, these

switches will eliminate the direct wire-to-wire connection which can leave a controller vulnerable to damage should the red light camera incur an electrical failure. By using these devices, Sensys Gatso can guarantee both the efficacy of the connection to the camera AND the 'firewall' between the camera and signal controller operations. This connection would be made (if preferred by program officials) to the outbound electronic data-line.

Wireless Signal Set-up

When running new cable, or existing cable is not feasible, Sensys Gatso engineers will install a secure WiFi base



Traffic Signal controller inputs

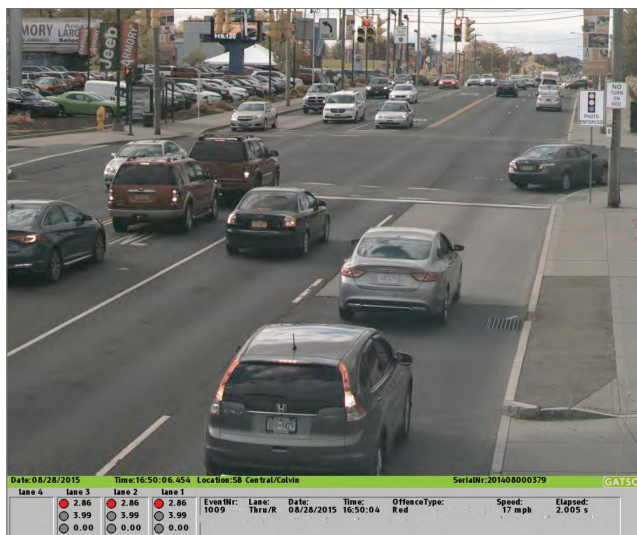
transmitter inside the traffic controller coupled to a secure wireless receiver inside the system cabinet.



WIRELESS SIGNAL RADIO

Evidence Set

Each Red Light violation event captured at an intersection by a Sensys Gatso enforcement system will provide multiple digital images, video, and event metrics. The exact composition of the evidence set is flexible, per the business rules of the program. The first image (below top) is a wide-angle shot of the enforced lane (RHT) showing the subject vehicle just prior to the stop bar. The second image is also a wide-angle shot showing the same vehicle beyond the stop bar - passing through the intersection. Note the signal head visible in both images. Also note the fused databar included on each image. The third image is a crop of the violating vehicle's plate. A six to twelve second video stream of the violation event is included. A dynamic databar is included on the video stream evidence as well.



Violation Data	
Status	Processed Violation
Type	Red Light
Warning	Yes
License Plate	DST73
Name	CHENMO
Second Owner Name	
Address	57 RD
Zip Code	12065
City	CLIFTON PARK
State	NY
Country	US
Vehicle Make	SUBARU
Vehicle Model	FORRESTER
Vehicle Year	2013
Vehicle Color	GRAY
Registered State	NY
Event 59999	
Warning	Yes
Device Type	T-Series
Lane Number	1
Violation Type	Red Light
Site Code	CHJEB
Site Description	EB Central/HenryJohnson
Vehicle Speed	25
Red Time	0.64
Yellow Time	4.14
Pardon Time	0.1
Violation Time	2/8/16 11:25 AM

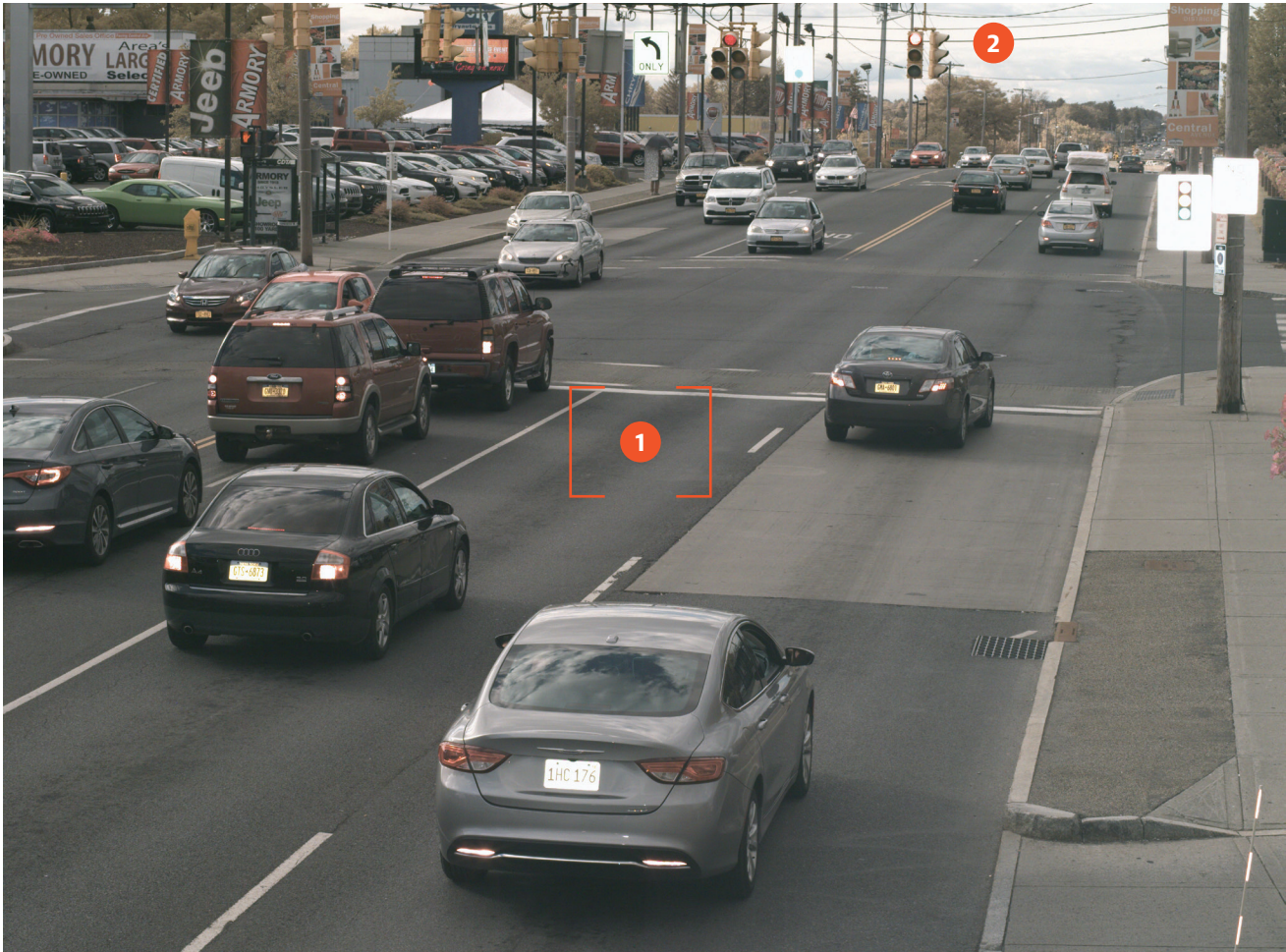
Violation Data within the Xilium record

Violation Data

Multiple sensors collect valuable traffic data event metrics including vehicle counts, vehicle speed, time, lane, location and signal data - whether in enforcement mode or idle. Program-required data is displayed in the databar attached to the bottom of each image and video; within an internal tag file as record metadata; and within the event record for the violation processing team. The table above illustrates data element examples; the image(s) upon which is displayed, and a brief explanation of the item.

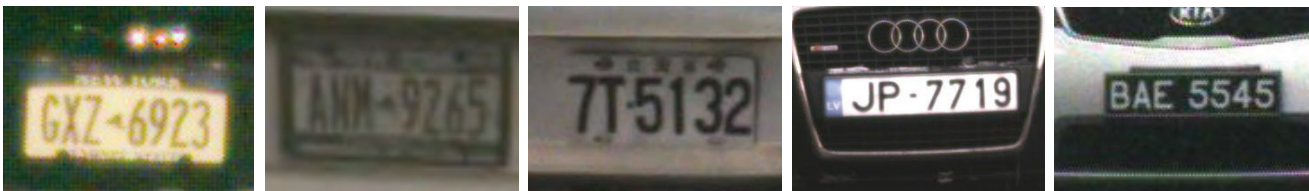
Image Capture

- 1. The Sensys Gatso T-Series will take rear facing photographs.
- 2. Signal heads will be clearly visible at top of image.
- 3. T-Series can easily identify reflective and non-reflective plates.
- 4. A databar containing event specific information is fused to the bottom of each photograph.



Event summary	Measurement details	Enforcement	Location/Equipment	GATSO
4 Date: 08/28/2015 Time: 16:50:04 EventNr: 1009 EvidenceType: Passage	Lane: Thru/R Speed: 17 mph Red on: 0.86 s Yellow on: 3.99 s	Offence: Red Direction: Receding ImageNr: 1	RoadSign: 30 mph RedGrace: 0.1 s	Installer: Gatso USA Location: SB Central/Colvin SerialNr: 201408000379

3 Non-Reflective Plate Capture examples



Databars

Event summary		Measurement details		Enforcement		Location/Equipment	
Date:	02/03/2019	Lane:	02/03/2019	Red	SpeedLim car:	Installer:	GATSO
Time:	13:26:23	Speed:	17 mph	Receding	SpeedLim truck:	Location:	Gatso USA
EventNr:	20627	Red lit:	0.68 s	Car	RedGrace:	SerialNr:	EB Susqueha/York
EvidenceType:	Passage	Yellow lit:	3.96 s		ImageNr:		201605000530
Date: 03-02-2019		Time: 13:26:25.4		Location: EB Susqueha/York		SerialNr: 201605000530	
lane 4	lane 3	lane 2	lane 1	EventNr:	Date:	Lane:	Violation:
		2.25	2.32	20627	02/03/2019	Thru/R	Red
		4.03	3.96				Speed:
		31.06	31.06				17 mph
							Elapsed:
							1.640 s

RLC Image Databar RLC Video Databar

RLC DATABARS

When an intersection signal violation event is captured, a databar containing logged evidential data conforming to program requirements will be created in real-time and immediately added to each evidential element.

Mechanism

Upon trigger command of the decision unit, a unique ID which corresponds to the ID of a small data package is subsequently created. The system uses this data to "draw" the databar and immediately append (fuse) it to the evidential elements. The speed enforcement databar is appended to the evidence elements rather than overlaid to ensure that evidential data is not obscured.

Benefits

Vendors that rely on manual reconciliation during violation processing can associate the wrong metadata tag file with the photo and video, opening their chain-of-evidence to the possibility of abuse and subsequent contamination. The real-time fusion of the violation data to the violation event elements ensures an inviolate chain of evidence, and eliminates any possibility of incorrect, tainted, or manipulated evidence. This exclusive, customizable functionality helps build true Prima Facie evidence to supplement the still images, video and detection metrics with the event record.

IMAGE DATABAR

Event summary

- Date: dd-mm-yyyy
- Time: hh:mm:ss
- EventNr: violation sequence number
- EvidenceType: Test or [Live]

Measurement details

- Lane: lane label
- Speed: measured speed in k/mph
- Red On: elapsed red-light time
- Yellow On: elapsed yellow time
- Violation Type: Red, or R+S
- Direction: approaching or receding
- Type: Vehicle type Car or Truck

Enforcement

- Speed limit car: posted speed limit
- Speed limit truck: posted speed limit
- RedGrace: grace period per program

Location/Equipment

- Installer: Engineer/Technician name
- Location: location description
- SerialNr: camera serial number

VIDEO DATABAR

Captured Details

- Event number
- Lane
- Time
- Evidence Type
- Speed
- Traffic light times / lane
- Elapsed Time

Backoffice Software



XILUM

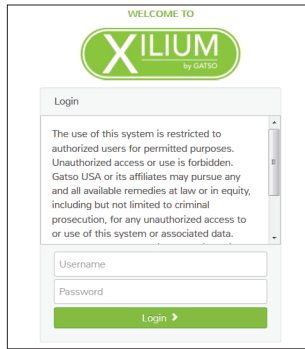
XILUM is a modern, web based, back-office solution that is currently in use in the USA, Europe, the Middle-East and Asia. It is designed to automate the entire enforcement process chain - from evidence capture to payment to archive & reporting. XILUM back office software is vendor agnostic, its architecture excels in scalability and flexibility. Sensys Gatso has extensive experience in tailoring XILUM to interface with the relevant local "legacy" information systems, such as vehicle registration databases, payment systems and court systems. In Hong Kong for example, XILUM has recently been customized and implemented to accept written tickets and to interface with local systems in just 6 weeks time. For a customer in the Middle East, an Arabic version of XILUM has been implemented, including right-to-left writing and interfacing with local systems in just 3 months time. Programs can utilize and adapt XILUM software to support their specific requirements. Sensys Gatso will fully support the XILUM back-office software throughout the term of the Miami Beach program. The software has never had a system breach, been hacked or otherwise experienced a successful unauthorized access.

XILUM Dashboard

The image to the left an example of the 'Dashboard' that processors and supervisors using the XILUM solution view when they log on. Data 'widgets' in histogram form display program-specific event and violation metrics for a particular program segment. This data is used to determine current event volume, event aging and program trends, and serves as a valuable resource allocation tool within the processing center. Managers can utilize processor-specific widgets to assess the performance of individual staff members. Managers will have real-time, on-line access to this program-critical data and overview of processing operations.



Comprehensive Backoffice Features



Internet Enabled

XILIUUM was designed to be a web based application. Authorization levels determined by program officials will dictate access levels for all users - from basic view capability to extensive reporting and management functions.

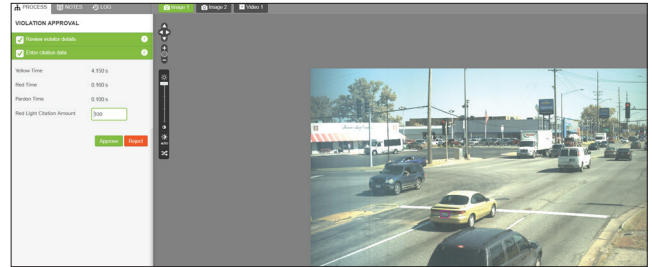
Authorized users can securely access XILIUUM from any device with a browser, 24/7.

Secure User Log-In

Access to any and all systems will require pre-authority, and access to any and all systems will be audited per the requirements of the City.



Optional Two-Factor Authentication VPN



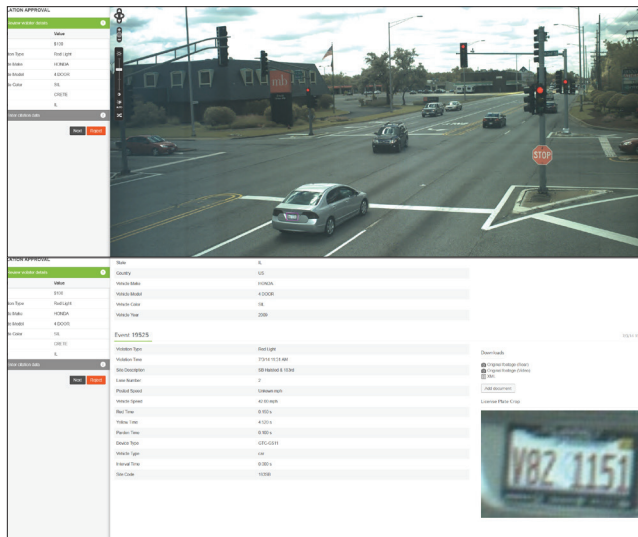
Violations & Notifications

Trained and certified Sensys Gatso Event Reviewers assess violation events in the XILIUUM Violations Module. Viewable violation images and mailing history can be accessed by authorized personnel. All violation event documents are scanned into the system and viewable/retrievable via violation number.

Approval Screen

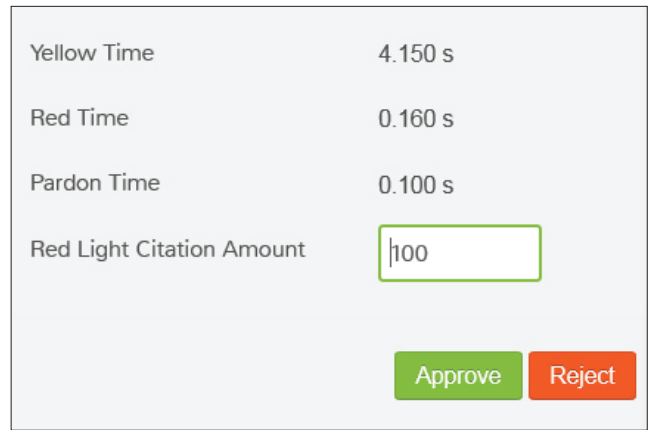
In this screen, the approving officer can elect to approve the event to violation. Once the Submit button is selected, the printed color notice will be mailed to the registered owner within 24 hours of this action.

EVENTS



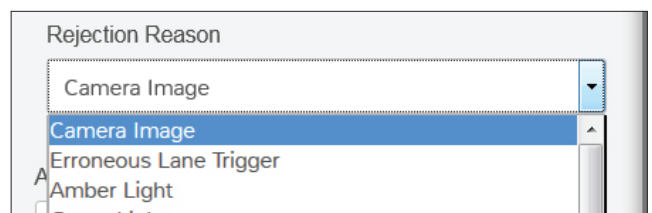
Event Processing

Within the XILIUUM Event Workload module event data is compiled and presented clearly for pre-approval, approval or dismissal. Event metrics and data elements are presented along with video, images and zoom/enhance/crop tools. Registered owner information is interfaced from Nlets to complete the event record.



Reject Violation Screen

In this screen, the Sensys Gatso staff & approving officer can elect to reject the violation and prevent it from entering into Violation. As part of this process, a rejection box opens up inside the primary screen and the attending officer selects a rejection reason. Rejection reasons can be added by program officials upon request.



Event: 2328 (Status: New Event)

PROCESS NOTES 0 LOG

Event Viewed
Brennen Swanson on 8/21/15 2:52 PM
Event status: New Event

Added to Workload
Brennen Swanson on 8/21/15 2:52 PM
Event status: New Event

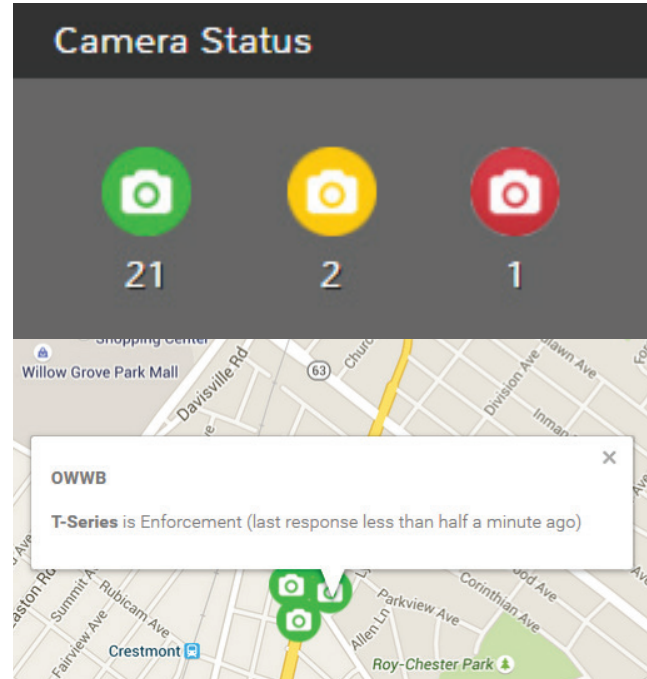
Added to Workload
Carlos Marroquin on 8/21/15 2:45 PM
Event status: New Event

Event Viewed
Chris Mercedes on 8/21/15 1:51 PM

Event Processing Log
Sensys Gatso staff and program managers can access the log file of any event. The log displays all event activity, time-stamped with description of activity.

System Health & Status

The dashboard can be equipped to indicate camera system deployment status. Clicking the status widget will bring authorized users to a Google maps status overlay, providing the exact location of the down RLC camera.



SYSTEMS

Stats & Reports

The XILIUM Report Module enables authorized users to access a wealth of violations, citations, management and financial data. Standard and custom filters, queries and reports can be generated according to program requirements.

Download Excel Download PDF

Reports

FINANCIAL
Collections Report
Daily Transactions
Paid Citation Transactions

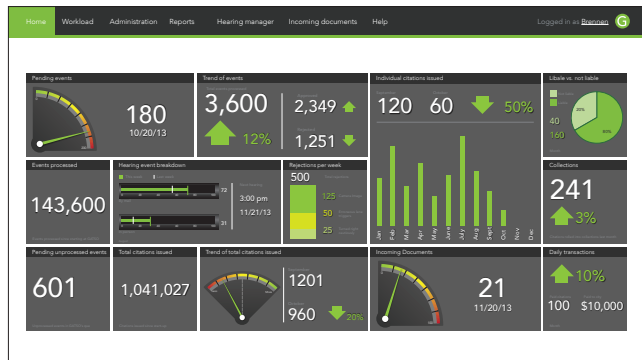
VIOLATIONS
Citations From Captured Violations By Approach
Citations From Captured Violations
All Violation Events Detail
All Violation Events Summary
All Violation Statistics By Date
Rejected Violations
Rejection Reasons
Rejection Summary
Repeat Offenders
Violation Events To In Citation Chart (Daily)
Violation Statistics Workflow (Back Office)
Violation Statistics Workflow (Law Enforcement)

CITATIONS
Issued Citations

Paid Citation Transactions
Parameter Selection
Start Date: 08/04/2014
End Date: 08/04/2014

XILIUM Dashboard

The XILIUM dashboard was designed to provide users with a complete overview of the program. Dashboard widgets can be turned on and off through the user profile editor. Widgets will arrange themselves to the page based on screen size.



Amber Light Deviation

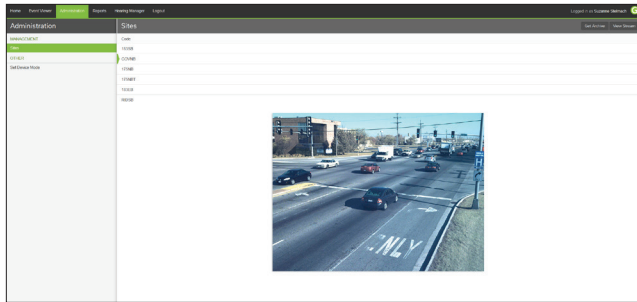
A XILIUM sub-routine will check the Amber (Yellow) time reported by the T-Series against a manually set constant time. Should the reported yellow time vary from the constant beyond the set limits, a notification will be set the project manager and program officials.

Event 19525	
Violation Type	Red Light
Violation Time	7/3/14 11:31 AM
Site Description	SB Halsted & 183rd
Lane Number	2
Posted Speed	Unkown mph
Vehicle Speed	42.00 mph
Red Time	0.150 s
Yellow Time	4.520 s
Pardon Time	0.100 s

SERVICES

Live Video

All program video is available to authorized personnel in the XILIUM Administration Module. Authorized users can access real-time video feeds from any deployed camera within their program through a secure connection. Sensys Gatso recommends downloading "VLC" media player for optimum video performance.



Archive Video Access

Video access and storage length is flexible per the request of program officials. All archived video access and delivery is free-of-charge. Users specify a date, time & site for look-up of stored video and a link to download the video is emailed to the address specified.

Administration	Sites
MANAGEMENT	Archive
Sites	Email Address(s)
OTHER	Date
Set Device Mode	Time

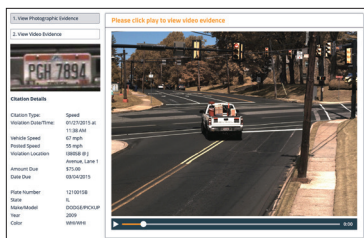
Video download

technicalsupport@gatso.com
 Sent: Thu 6/16/2016 2:47 PM
 To: b.swanson@gatso.com

The video you requested can be downloaded from:
https://tx1.gatso-usa.net/videos/n1oDPfjq1d3BdPP_NY0010100_EVENB_20160616_164502_14-50-019-134.mp4
 Gatso USA

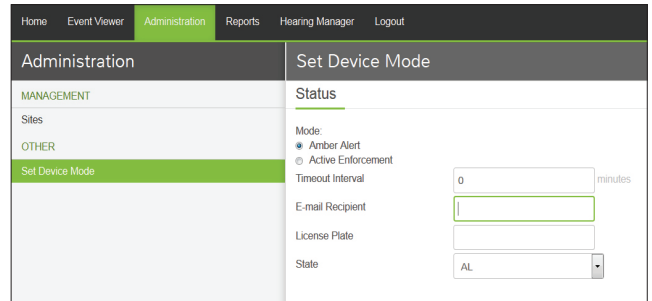
Public View & Payment

Through the web enabled citizen viewing portal, the cited owner can review event images, video and data, and choose to enter a payment option or enter a 'contest' against the violation.



Amber/Silver/Blue Alerts

The AMBER/SILVER/BLUE ALERT features are no-cost embedded options within our XILIUM platform. The notification systems reside within our existing architecture, and unlike most vendor solutions, there is absolutely no need for additional hardware or secondary camera systems.



Hearings Administration

Authorized Users will be able to employ the Hearings Management Module – a robust scheduler and information dashboard, built to organize all evidence data in clear, presentable form.

HEARING EVENTS				Citation number	Citation Type	Citation Amount	Email
8/5/14	2:00 PM	30	5	106481	Red Light	\$100.00	Jane.D@gmail.com
				191411	Red Light	\$100.00	Phil.Smith@gmail.com
				180111	Red Light	\$100.00	K.Swanson@aol.com
				191931	Red Light	\$100.00	Andrew.D@hotmail.com
				185821	Red Light	\$100.00	JeffFranklin@hotmail.com

Event: 37976 (Status: New Event)

PROCESS NOTES

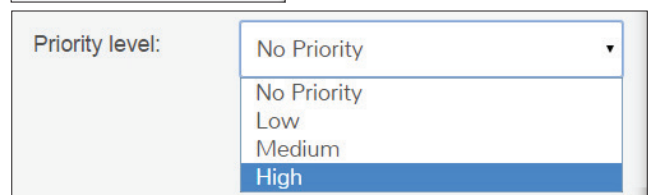
- Gatso User on 3/18/15 12:20 PM: Test Note High Priority ✓
- Gatso User on 3/18/15 12:20 PM: Test Note Medium Priority ✓
- Gatso User on 3/18/15 12:20 PM: Test Note Low Priority ✓
- Gatso User on 3/18/15 12:20 PM: Test Note No Priority

Add a note (optional):

Priority level: No Priority, No Priority, Low, Medium, High

Priority Notes

Notes can now be flagged with an individual priority level indicating "high," "medium," or "low" priority. These levels will be reflected by color, with the "high" flags taking precedence. Notes and priority levels will display in both the Notice account and within the Hearing Manager.



PAYMENTS & DEBTS

Payment Flexibility

Administrative users utilizing this feature will have the ability to post more than one payment to an account. While partial payments will not close an account, these payments may be accepted per business rule. XILIUM will automatically calculate the remaining balance and display.

ENTER PAYMENT		Citation Data	
Amount	15	Citation Number	379751
Payment method	Check	Date Issued	3/18/15 12:15 PM
Note		Status	Ruled liable
		Fine	\$65
		Amount Due	\$15
<input type="button" value="Cancel"/> <input type="button" value="Paid"/>			

Payment Types

Administrative users utilizing this feature will have the ability to select "Check" or "Other." This will allow clients who accept payments internally to "mark" a payment prior to the processing center receiving the funds.

ENTER PAYMENT	
Amount	65
Payment method	<div style="border: 1px solid #ccc; padding: 2px;"> Check <ul style="list-style-type: none"> <li style="background-color: #2196F3; color: white; padding: 2px;">Check <li style="padding: 2px;">Other </div>
Note	
<input type="button" value="Cancel"/> <input type="button" value="Paid"/>	

"Bad Debt" Visibility

For administrative users utilizing this feature, notice accounts will only roll into "bad debt" on the first of each month, when the account is sent to the collections agency. This creates a 'pending bad debt' status allowing the user to render a payment.

2/9/15 6:48 AM	Bad Debt	Red Light	SB Cicero @ 127th St
3/2/15 9:03 AM	Bad Debt	Red Light	SB Cicero @ 127th St
3/2/15 10:05 AM	Bad Debt	Red Light	NB Old York/Old Welsh
3/2/15 9:13 AM	Bad Debt	Speed	I380 NB @ J Avenue, Lane 2
3/2/15 10:11 AM	Bad Debt	Red Light	WB Susquhanna/OldYork
2/9/15 7:43 AM	Citation Paid	Red Light	SB OldYork/Susquehanna
2/11/15 7:58 AM	Citation Paid	Red Light	SB Cicero @ 127th St

ADDITIONAL FEATURES

Advanced "Find" feature

Searching for notices by name will provide the user with all notices that fit the requested criteria (name and/or city.) Searches will yield both Notice details and registered owner details.

Violation	Site Description	Name
Speed	1600 block Guthrie Easbound	John K. Smith
Speed	1600 block Guthrie Easbound	John K. Smith
Speed	1600 block Guthrie Easbound	John K. Smith
Red Light	NB Cicero @ 123rd St	John K. Smith
Speed	I380 NB @ J Avenue, Lane 2	JOHN SMITH
Red Light	WB Susquhanna/OldYork	John K. Smith

118841
4/21/14 10:17 AM
New Citation
\$100
\$100

Timestamps

Timestamps will display in the customers local time, regardless of where the account is accessed.

Dispositions

During initial business rules discussions, disposition reason tags will be determined. Reason tags will be completely customizable. Should the Hearing Officer determine that amplification of the disposition is required, choosing "Other" will prompt the opening of a free text field. This free text entry will appear on the mailed hearing disposition letters.

LIABILITY		<input type="button" value="Submit Verdict"/>
Verdict	<input checked="" type="radio"/> Liable <input type="radio"/> Not Liable <input type="radio"/> Reschedule <input type="radio"/> Transfer	
Date	March 18, 2015	
Due date	04/18/2015	
Reason	Other	
	Reason Text Goes Here	

CITY OF [CITY NAME], [STATE] MONTH DD, YYYY ADMINISTRATIVE HEARING			
Citation Number: 118841 Date Issued: 4/21/14 10:17 AM Status: New Citation Amount Due: \$100		City of [City Name], [State] [City Name] Police [City Name] Sheriff's Office [City Name] Fire Department Liability for Payment	
This matter coming for hearing, notice having been given and the authorized body being fully advised in the premises, hearing open and the parties, evidence and arguments presented. IT IS ORDERED that the administrative body find as follows:			
Category	Code of Ordinance	Sign of Violation	Due Date
Other	XXXXXX	XXXXX	XXXXXX
Disposition Reason: Other: Reason Text Goes Here			
JUDGMENT TOTAL: \$XXXXXX			
Failure to pay the total amount specified by 140202(1) will result in the possible imposition of further fees, citation arrears and legal action. This citation remains in the administrative decision by the City Hearing Officer.			
If you have any questions please call 1-800-375-4200.			

Processing Workflow



SENSYS GATSO PROCESSING STAFF

Evidence Processing

The Violation Processors at our multiple offices are certified and skilled. As the operational front line for Sensys Gatso, these workers will appraise the evidence output first, and provide a key assessment function in addition to their processing responsibilities.

Clearly established and documented business rules - as established by the program managers - will dictate event approval or rejection standards for potential violations. These business rules manifest from governing statute and law, and will be defined by program officials. In regard to business rule compliance, at least three levels of operational and management oversight exist within our internal processing system. Group leaders report

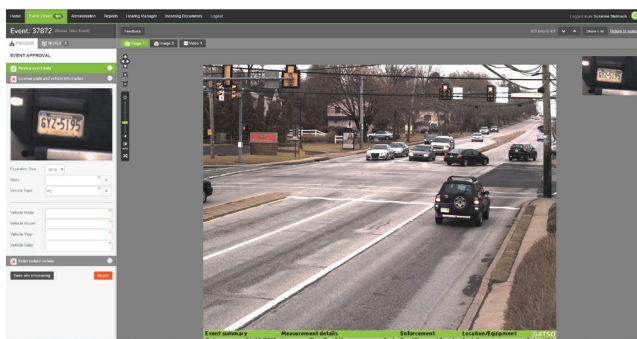
to program managers who report to the Processing Supervisor. The Processing Supervisor reports directly to the President of Sensys Gatso on a daily basis. Processing turnaround compliance is strictly adhered to. We do not miss deadlines - ever.

Processing Staff

Sensys Gatso currently employs dozens of Violations Processing staff and Group Leaders in two shifts working seven days per week. This effort supports the processing of over one million violation events per year for our domestic programs. Processing staff are cross-trained to handle customer service issues and provide production support at our Beverly, MA and Scottsdale, AZ facilities.

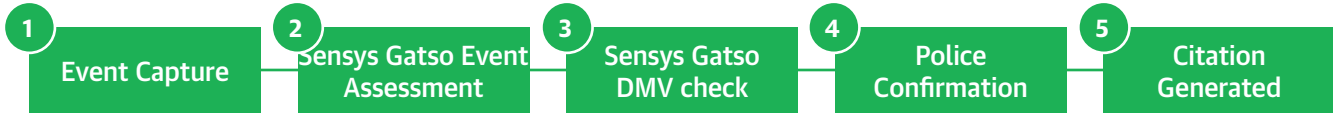
Event Processing

"Sensys Gatso does not approve violations. Sensys Gatso prepares events for Police approval or rejection"



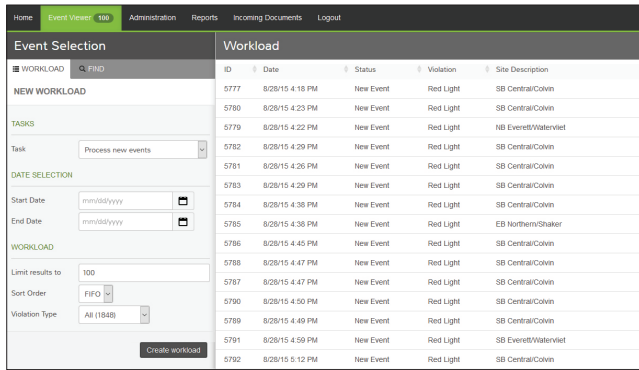
Processing Flow

The following 5-step process overview is typical for all current Sensys Gatso clients. This process can be customized or modified to meet the demands of your program.



1. Event Capture

Images and event data downloaded from enforcement cameras are classified as "New Events" and appear in the XILIUM "workload" awaiting initial processing.



2. Sensys Gatso Event Assessment

Processors perform an initial review of the event data, observing program business rules.

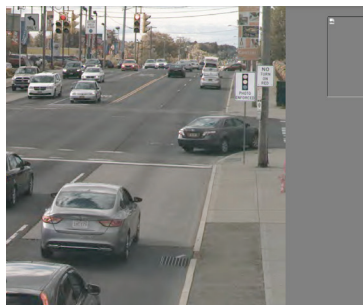
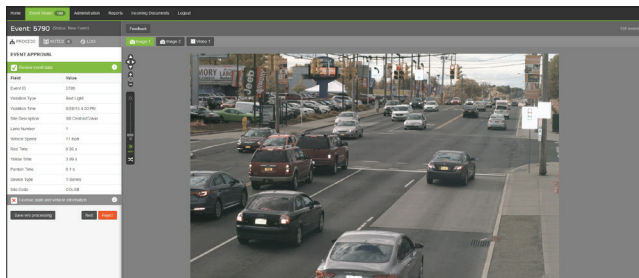
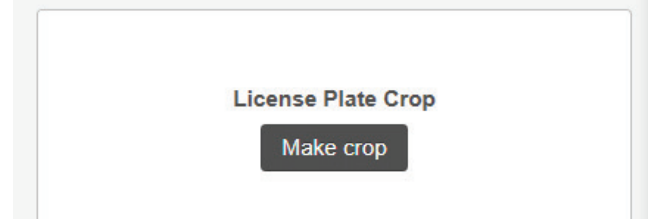
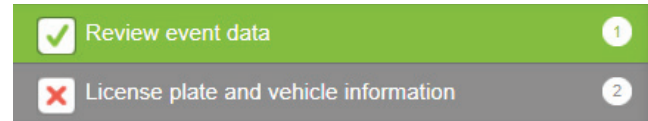
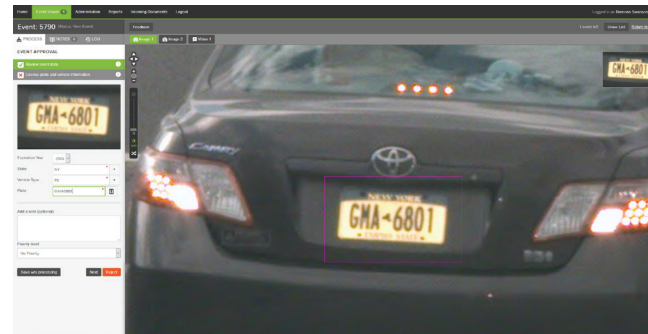


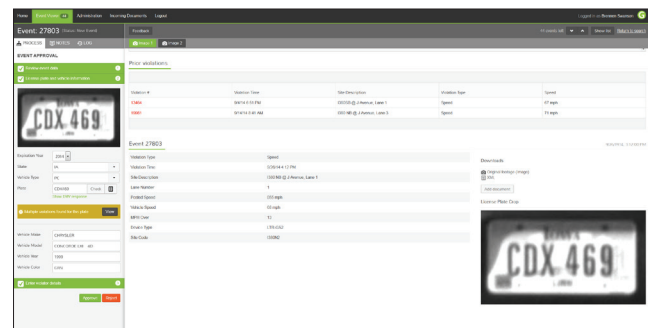
Image 2 on the left clearly shows vehicle proceeding through the intersection against a red light.

Zoom and Crop tools allow the processor to isolate and highlight the license plate to the event record, and eventually to the violation notice.



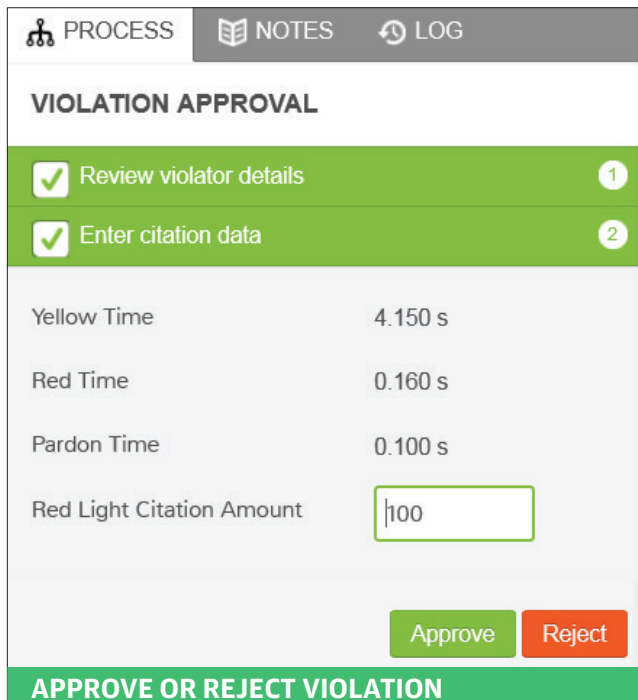
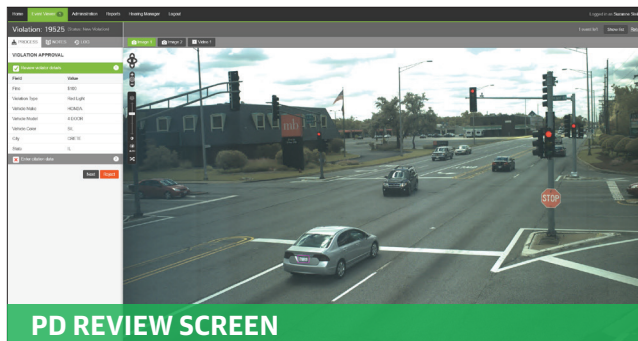
3. Sensys Gatso Registration check

Processors enter plate information and click "Check" to run the plate information against Registration records. XILIUM "parses" the registration return into the event record. In the screenshot below, XILIUM shows plate repeat offender. Processors can forward the event to police for review.



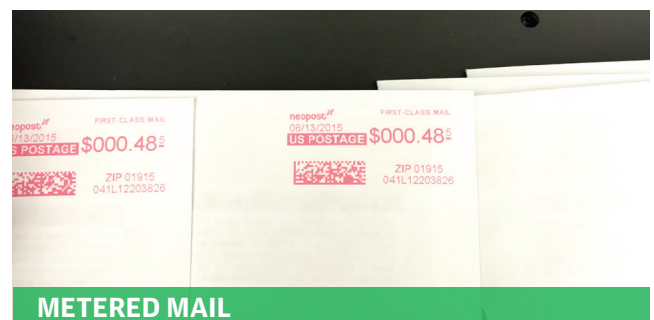
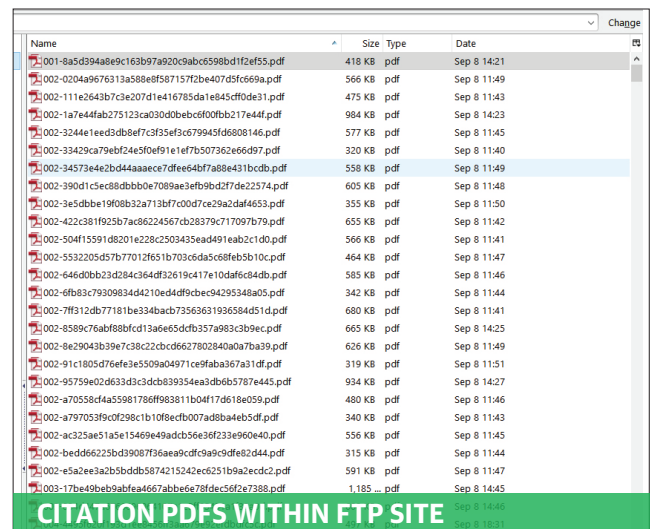
4. Police Confirmation

Police personnel review ALL events pre-processed by Sensys Gatso reviewers before a citation can be printed. The PD review events in the same environment as the Sensys Gatso reviewers. Police reviewers apply local business rules by checking photographic and video evidence. Police reviewers can make lighting and plate crop adjustments if needed. If a Police reviewer deems a violation did occur, they can approve the violation into a citation. The citation fine amount can also be adjusted during final approval.



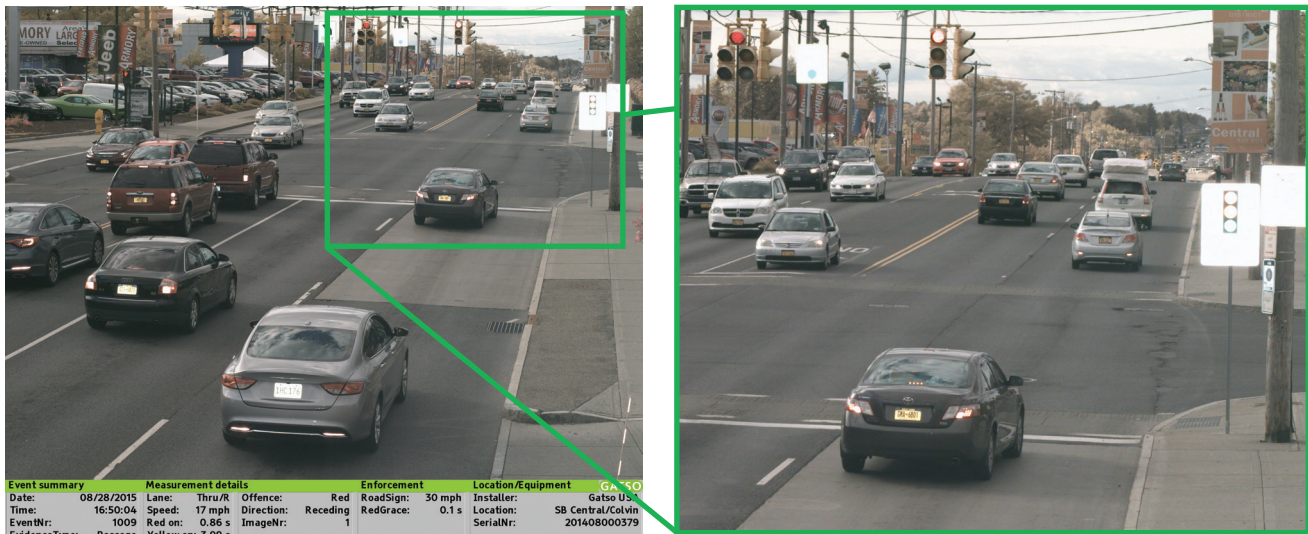
5. Citation Generated

XILIUM will instantly and automatically generate a PDF version of the citation. A copy of the PDF is stored locally within the violation account and a copy is sent to our fulfillment FTP site to await printing. Sensys Gatso fulfills all citations in-house for maximum security and quality control.

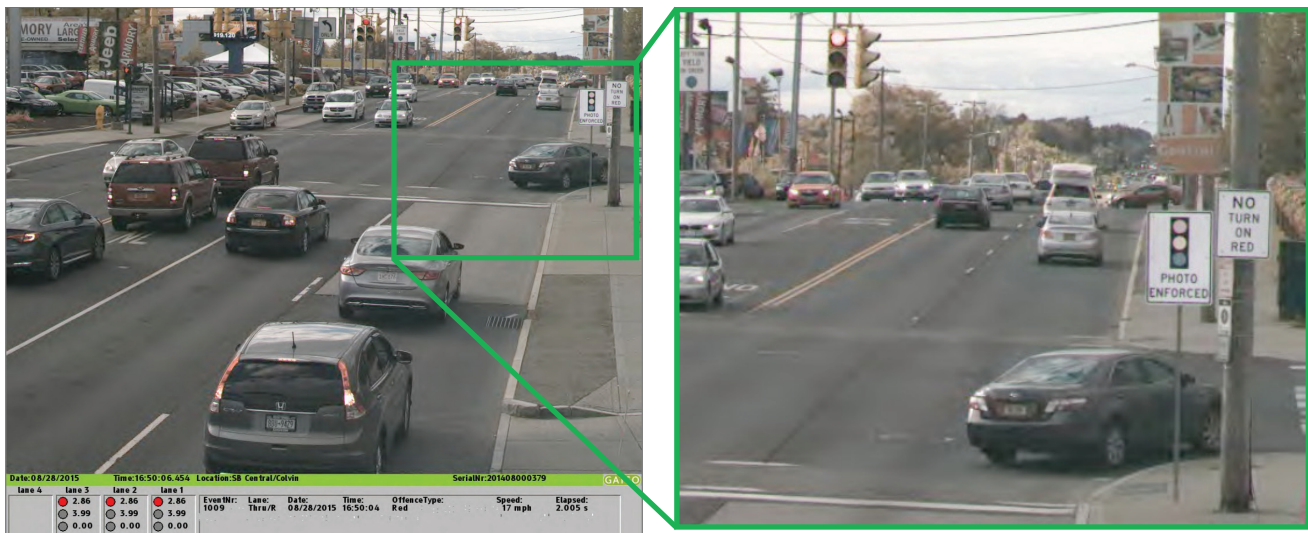


Violation Determination

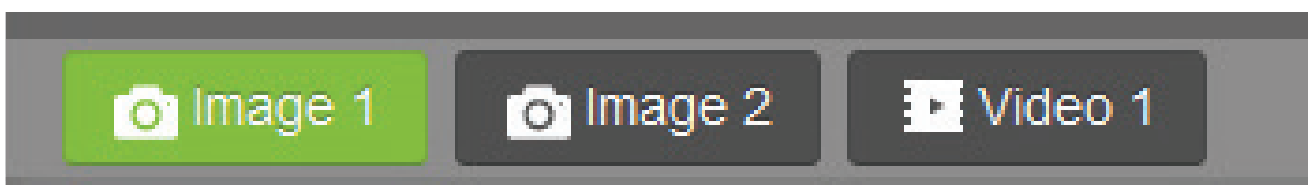
The RT4 radar calculates, via speed measurement of each individual vehicle, the ideal "trigger point" to capture an offending vehicle just prior to the approach stop bar. As a vehicle approaches the trigger point against a red light, if the vehicle speed meets a certain threshold, the T-Series will capture a HD image of the vehicle. Note subject vehicle below in the RHT lane just prior to the stop bar with red signal visible in the image.



A second image is captured as the vehicle proceeds through the intersection against the red light. Signal head is visible in both images. Time interval between image capture 1 and image capture 2 is recorded on the databar.



In addition to the still images and metric data, Sensys Gatso also provides a 6 to 12 second HD video of the event. All photographic and video evidence is accessible through XILIUM, Sensys Gatso's proprietary backoffice processing software.



Registration Acquisition

DMV response

The response of the DMV is displayed below.

```
<n:NLETS xmlns:n="http://www.nlets.org" xmlns:j="http://www.
<n:NLETSResponseMessage>
  <n:NLETSResponseHeader>
    <j:DocumentSource.Organization>
      <j:OrganizationORIID>
        </j:OrganizationORIID>
      </j:DocumentSource.Organization>
    </n:NLETSResponseHeader>
  </n:NLETSResponseMessage>
</n:NLETS>
```

Car ownership records for in-state and out-of-state drivers are retrieved and processed by our direct connection to the The International Justice and Public Safety Network *aka* the National Law Enforcement Telecommunication System (NLETS). NLETS is a network communication center that connects over 55,000 law enforcement and judicial agencies in North America (all 50 states & territories, Mexico and Canada). The connection to NLETS is a secure point to point connection (dedicated Frame Relay connection) to the operations center in Phoenix AZ as well as its redundant facility in Lexington KY.

Not only do we utilize NLETS for our registered owner information, but they also host our system servers within the secure facility at NLETS. Sensys Gatso is the only photo enforcement company utilizing this high level of security. You can be assured the safe-keeping of it propriety violation data.

Owner/Company	<input type="text"/>
Second Owner	<input type="text"/>
Address	<input type="text" value="GEORGE RD"/>
City	<input type="text" value="MEADOWBROOK"/>
Zip Code	<input type="text" value="19046"/>
State	<input type="text" value="PA"/>

Response times for vehicle owner inquiries are typically two seconds or less, resulting in the immediate availability of information in support

of our processes. Not all red light enforcement vendors are Strategic Partners with NLETS. Many vendors require more cumbersome interactions with local DMVs and local law enforcement, resulting in excess workloads for a department or extensive customization of DMV interfaces. Response times are typically shorter due to the priority that NLETS has been assigned. We believe the NLETS availability is crucial to the success of any enforcement program.

Hearing Manager

Hearings on date: 8/5/14 at 2:00 PM

Citation number	Citation Type	Citation Amount	Email
186481	Red Light	\$100.00	Jane.D@gmail.com
191411	Red Light	\$100.00	Phill Smith@gmail.com
180111	Red Light	\$100.00	K.Swanson@aol.com
191931	Red Light	\$100.00	Andrew.D@hotmail.com
185921	Red Light	\$100.00	JeffFranklin@hotmail.com

PROCESS NOTES LOG

LIABILITY Submit Verdict

Verdict

- Liable
- Not Liable
- Reschedule
- Transfer

Date: March 19, 2014

Due date:

Reason:

To present that evidence in an administrative hearing or court of law, Sensys Gatso has designed a comprehensive and easy-to-use hearing manager within XILIUM. A Hearings Scheduler delivers case-specific information to

program officials, Police, and Hearings & Court personnel, with drill-down capability to review and display violation and Notice data, notification history and site-specific hardware calibration history. Our module gives program officials FULL disposition control - no emails, no phone calls to update the status of violation. These features are fully supported by a dedicated training program and administrative support point-person from Sensys Gatso.

Hearings can be scheduled through the Sensys Gatso payment portal (as shown below) or by calling Sensys Gatso's customer service number.

Contest in person [Schedule a hearing](#)

In-Person Administrative Hearing request

Please choose a date and enter your contact information so we may reach you if the hearing schedule changes. Failure to appear at this hearing will result in an automatic final determination of liability. You may be subject to applicable administrative court fees and/or costs. Please expect to be at your hearing at least 1 hour beforehand.

Available Time Slots | Choose a date

Thursday 07/12/2018 04:00 PM	Thursday 08/23/2018 04:00 PM	Thursday 09/27/2018 04:00 PM
------------------------------------	------------------------------------	------------------------------------

Please enter your contact information so we may reach you if the hearing schedule changes. * Phone Number or Email Address is required

Phone Number

and/or

Email Address

I have reviewed both the Violation Evidence and the City Ordinance and wish to contest this violation. [City Ordinance \(PDF\)](#)

CONTEST VIOLATION

LIST OF AVAILABLE HEARING DATES

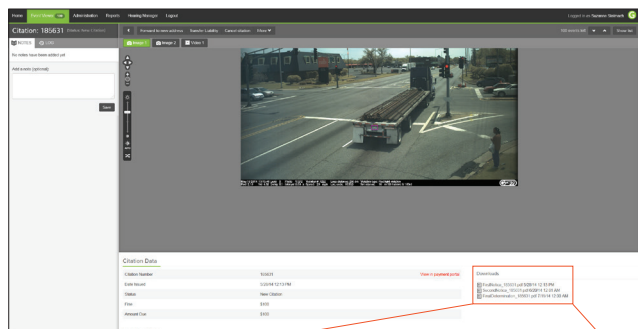
Chain of Evidence/Audit

Audited history of each user who viewed and modified the event is stored in the "log" tab.

PROCESS	NOTES 0	LOG
Event Viewed Brennen Swanson on 8/21/15 2:52 PM Event status: New Event		
Added to Workload Brennen Swanson on 8/21/15 2:52 PM Event status: New Event		
Added to Workload Carlos Marroquin on 8/21/15 2:45 PM Event status: New Event		
Event Viewed Chris Mercedes on 8/21/15 1:51 PM Event status: New Event		
Added to Workload Chris Mercedes on 8/21/15 1:47 PM Event status: New Event		
Added to Workload Carlos Marroquin on 8/21/15 12:09 PM Event status: New Event		
Added to Workload		

Downloadable evidence (evidence tree)

Data uploaded & available on XILIUM for download instantly. The example below show all three notices available for download and review.



Downloads	
	FirstNotice_185631.pdf 5/28/14 12:13 PM
	SecondNotice_185631.pdf 6/20/14 12:01 AM
	FinalDetermination_185631.pdf 7/11/14 12:00 AM

Rejection Reasons

XILIUM comes preloaded with a number of common rejection reasons. Additional codes and reasons can be added at any time by program managers and/or Sensys Gatso officials by access the "rejection reasons" from the administration tab.

Administration	Rejection Reasons
MANAGEMENT	10 Name
Users	3 Amber Light
Sites	20 Bicycle
OTHER	21 Blinking Red Light
Rejection Reasons	1 Camera Image
Set Device Mode	17 Concurrent Event
	11 DMV - Dealer Plate
	12 DMV - Out of Country Plate
	14 DMV - Owner/Address Info Missing
	16 DMV - Returned Invalid
	15 DMV - Vehicle Information Missing
	13 DMV - Vehicle Mismatch
	5 Emergency Vehicle
	2 Erroneous Lane Trigger
	18 Funeral/Procession Line
	4 Green Light
	24 Other
	8 Plate Not Readable - Blocked/Missing/Government
	9 Plate Not Readable - Make/Model Unclear
	10 Plate Not Readable - State Unclear
	19 Police Action
	23 Test Event
	6 Turned Right Cautiously
	7 Vehicle Stopped
	22 Weather

- Camera Image
- Erroneous Lane Trigger
- Amber Light
- Green Light
- Emergency Vehicle
- Turned Right Cautiously
- Vehicle Stopped
- Plate Not Readable - Blocked/Missing/Government
- Plate Not Readable - Make/Model Unclear
- Plate Not Readable - State Unclear
- DMV - Dealer Plate
- DMV - Out of Country Plate
- DMV - Vehicle Mismatch
- DMV - Owner/Address Info Missing
- DMV - Vehicle Information Missing
- DMV - Returned Invalid
- Concurrent Event
- Funeral/Procession Line
- Police Action
- Bicycle
- Blinking Red Light
- Weather
- Test Event
- Other

Florida-Specific Fulfillment



Execution

Sensys Gatso is prepared to offer an EXACTING, customized citation and document processing system for the program. Our fully automated enforcement citation process will involve all notices, supplemental forms and declarations, multiple subsequent notice follow-ups and multiple payment options including kiosks, customer service phone payments and pay-by-web. All notification processes will be managed by our XILIUM Back Office software solution. Sensys Gatso will work closely with program officials to compose and execute this fully turn-key citations process.

Visibility

The administration and mailing of second, final and default notifications (subsequent notifications) will be carried out by Sensys Gatso in accordance with local and state law and program requirements. Layout, formatting and content of all notification documentation will be subject to approval by program officials. Documents and audit history relevant to the citation process are logged into the XILIUM citation record and available for viewing by authorized program staff throughout every stage of the transaction cycle.

Exceptions

Business rules outlined by program officials and Sensys Gatso accounting personnel will dictate policies and procedures regarding "exceptions" within the notifications and remittance cycles. Our processing routines within our back-office solution employs automated "Incoming Documents" and "Unmatched Documents" queues, which are monitored and disposed on a defined basis. Manual account reconciliations, re-mailings, reapplied payments

and check resubmittals are performed daily.

Form Letters

1. Notice of Violation - First Notice, can be followed by a second notice if desired.
2. UTC - Uniform Traffic Citation
3. Contest Letters - Informs citizen of court date and if they are required to attend in person.

4. Liab / Not liab Letters - Citations ruled liable or not liable, the corresponding notice is mailed.
5. Mailing envelope - All citations are mailed using this custom double window #10 envelope.
6. Return envelope - First notices get a complimentary business reply envelope.

Sample notice & UTC

UTC Review

UTCs are physically sent to our Florida partners are made available for final review and approval/rejection by authorized program officials.

Citation Fulfillment

Full front-to-back citation-to-disposition processing - based on defined business rules - is included as a deliverable in our turn-key offering. Sensys Gatso anticipates hundreds of pieces of weekly correspondence volume for the City's program. Our Fulfillment Center, currently processing thousands of pieces of correspondence daily, enjoys the same level of Nlets security and certification as our in-house Processing Center. Format, preparation and mailing of initial and subsequent notices will be in full compliance with state law and program business rules.

File Transfer Protocol

Citation PDFs are accessed by logging into Sensys Gatso's secure FTP site. Once downloaded, PDF's can be sorted into the necessary print queues dictated by program business rules.

Printing

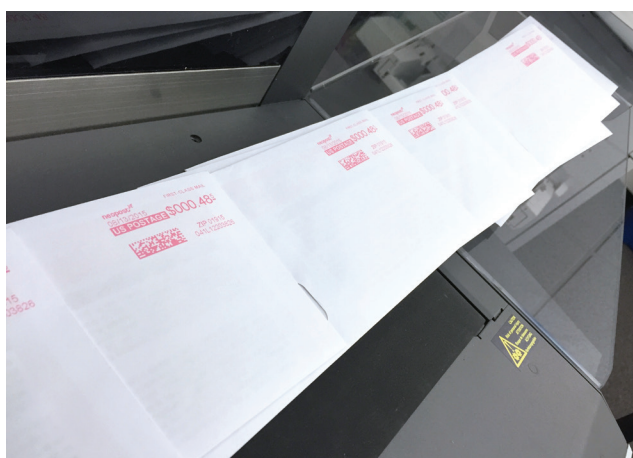
The Fiery Server is required to "rip" (the process the printer must do to turn the PDF into a printable file) the thousands of PDF's that will be uploaded at a single time.

Folding / Inserting

Envelopes and printed correspondence are fed into the inserter / folder by an operator. Other correspondence as directed by the City can be added to each individual letter. Finished sealed envelopes are expelled from the machine with perfectly nested correspondence.

Metering

Finished envelopes are stacked into a production-quality postage metering machine. Scanners and software tools reconcile the volume of metered mail with the initial batch count to ensure quality control.



Online Payment Portal



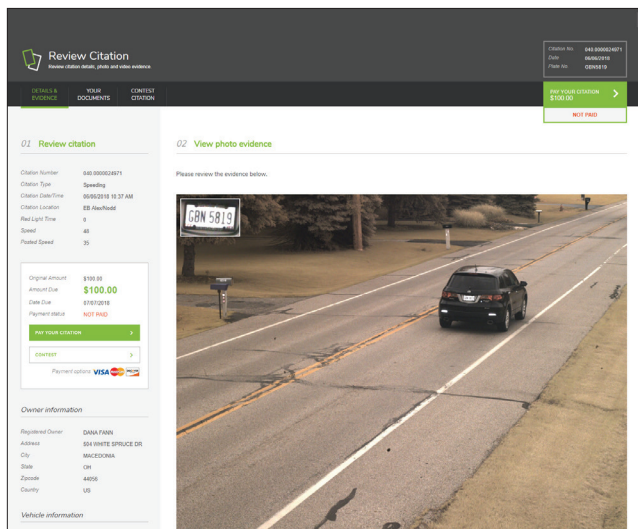
all fine amounts received into a dedicated bank account set up for the program.

Accessing the Portal

Sensys Gatso's payment portal is available 24 hours a day 365 days a year. In the rare occasions the website is down for scheduled maintenance, a message will inform citizens of the downtime and direct them call the customer service number for assistance.

There are no technical barriers for the public on our viewcitation.com portal. By simply entering the unique

citation ID and PIN conspicuously located on the right side of each citation, users are presented with an easy-to-navigate range of options to create a one-stop disposition experience.



Online Citizen Access

Sensys Gatso employs a web-based viewing and payment portal designed from the ground up to offer more features and an improved customer service experience. The violations, as noted, contain a unique identifier and PIN, allowing the recipient to use a dedicated, program-specific payment and evidence viewing portal.

This portal will allow the violator view evidence information and securely pay the fine via credit or debit card. When payment is made, a receipt can be printed directly. Daily, our chosen merchant partner will deposit

Website Features...

- View local ordinances
- View event evidence
- Pay citation
- Transfer liability
- Schedule a Contest
- Download documents

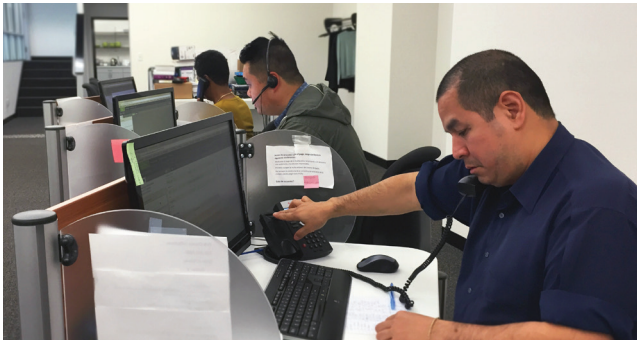
Violation Review

Users can review their photographic and video (if applicable) on the home page as well as view citation details such as citation type, date, speed, and vehicle type information. Users will also have the ability to download evidence files.

Contesting a Citation

Should a citizen feel that a contest of the citation is in order, they will be required to follow six steps. Navigating the steps is achieved by a simple "Next" button located at the bottom left of the window. Users will not be allowed to skip steps.

Customer Service



Call Center

Sensys Gatso maintains a program-specific dedicated telephone support lines with bi-lingual services for all of its active programs. Full Policies and Procedures documentation will be submitted with input from program officials to ensure specific requirements are met.

Operating Hours

Live customer service call center are available Monday through Friday, 8AM to 5PM local time (“Call Center Hours”). Call center will be staffed and able to respond to customers not less than 45 hours per week (with a minimum of 9 hours per day), excluding legal federal holidays to accept payments, provide general program information and Respond to inquiries.

Response Time

Under normal operating conditions, telephone answer time by a customer representative, including wait time, shall not exceed 45 seconds. Under normal operating conditions, callers shall receive a busy signal less than three percent of the time.

Service Standards

Each caller will receive excellent customer service at all times. All customer service representatives and supervisors will maintain any required training and certifications required to perform their duties.

Service Compliance

Sensys Gatso shall measure its compliance with Responsiveness Standards no less frequently than once per calendar quarter, or as required by program business rules. Such measurements shall be made available by Sensys Gatso to the City upon written request.

Revenue Distribution

Questions about this Citation? Contact the Citations Processing Center at: 1-855-370-4229 8am - 6pm EST.
Details here and below

[CITY NAME] POLICE DEPARTMENT Citations Processing Center, [City Name], [ST] [Address Line 1] [Address Line 2]	Citation Number XXXX XXXXXXXX Plate Number XXX XXXX AMOUNT DUE _____ \$XXXX DATE DUE _____ MM/DD/YYYY
--	--

Make check or money order payable to:
[City Name]

Mail payment to:
Citations Processing Center, [City Name], [ST]
[Address Line 1]
[Address Line 2]

Delivery Address
Line 2
Line 3

0014201304220001100001366354432

PAYMENTS PROCESSING

In addition to our PCI compliant web portal, Sensys Gatso utilizes high speed scanners from OPEX and ultra fast check and remittance verification tool to accept check payments. Sensys Gatso mails out over 70,000 traffic violations per month, of which half are typically paid by check, with the balance received through the on-line payment portal. Checks and accompanying remittances are received with other program correspondence and processed to the Check 21 system along with I9 image files. All correspondence is securely saved to the event record.

Call Center payments by phone, on-line payments, are managed through our secure XILUIM Payment Portal, and posted to the same City-controlled account.

- Deposit Summary Report
- Daily Deposit Extract Report
- Daily Deposit Detail Report
- Item Search Report

PAYMENT EXCEPTIONS

Unsigned or incomplete checks, partial payments, and payments without remittance are managed internally as actionable exceptions by Sensys Gatso personnel. All incoming remittance documents are scanned to the violator record. Updated dispositions and re-notice processes are automated and fully compliant with established business rules.

GATSOUSA

900 Cummings Center
Suite 321 U
Beverly, MA 01915

Bill To
City of Cedar Rapids
Finance Dept - Accts Payable
101 First St SE
PO Box 2148
Cedar Rapids, IA 52406-2148

Contract Date
September 2012

Quantity of Citations	Description
6,742	Provision of Red Light Camera Program - September 2012 - Paid Citations

ACH Payment Instructions:
Account Name: GATSO USA, Inc.
DFA Account Number: 4121-1793000
Branch Name: WCBank (Cedar Rapids)

INVOICING

The enclosed monthly invoice is indicative of the standard documentation used by Sensys Gatso USA for its North American enforcement programs.

Reporting



REAL PROGRAM DATA

Lack of real-time, program-compliant data reporting plagues many automated enforcement programs. When an information system is off-the-shelf - not specifically built for the equipment and sole purpose of photo enforcement - key data points and rich program information will be buried within mountains of numbers, or not captured at all. Our XILIUM BackOffice Solution was built concurrently with our latest generation enforcement platform. Knowing what program managers wanted from the data generated by the system hardware guided us to build-in reliable event and violation reporting capabilities to our backoffice system. Program officials can use this information - in clear, histogram form - to inform the public; make reliable budget projections; maximize the value of deployments; recognize trends and realize the true quantitative value of the program. These reports have proven invaluable to our safety partners.

Reporting Options

In addition to its extensive out-of-the box reporting and querying capabilities, Sensys Gatso programmers are able to customize and deliver program-specific and program-specific reporting as needed upon request. Any item of data recorded as well as violations disposition history can and will be presented in report form for program and administrative hearings officials. Additionally, our software team can integrate all program reporting data with any existing legacy system the City may be currently utilizing.

Reports

CITATIONS

- Issued Citations
- Issued Citations By Approach
- Undeliverable Citations Report

MANAGEMENT

- Trial Docket
- Operator Violation Activity (Summary)
- Hearing Result
- Contested Citations
- Operator performance
- Printed Items
- Cancelled citations

FINANCIAL

- Collections Report
- All Citations
- Daily Transactions
- Paid Citation Transactions
- Paid Citations
- Convenience Fee Paid

VIOLATIONS

- Citations From Captured Violations By Approach
- Citations From Captured Violations
- All Events
- All Violation Events Detail
- All Violation Events Summary
- All Violation Statistics By Date
- Rejected Violations
- Rejection Reasons
- Rejection Summary
- Repeat Offenders
- Violation Events To In Citation Chart (Daily)
- Violation Statistics Workflow (Back Office)
- Violation Statistics Workflow (Law Enforcement)

Logged in as Suzanne Stelmach



Download Excel

Download PDF

Camera Statistics

For each vehicle that passes the violation line a logline is generated that specifies:

- Timestamp (format YYYY-MM-DDTHH:MM:SS+hhmm)
- Lane number
- Lane label
- Vehicle speed
- Duration DoNotPass condition (if valid at timestamp and redlight enforcement is active for this lane, otherwise zero)
- Duration Crosswarning condition (if valid just before DoNotPass and redlight enforcement is active for this lane, otherwise zero)
- Automatic test image (0 or 1)
- Triggered test image (0 or 1)
- Instant test image (0 or 1)
- Red-light violation (0 or 1)
- Speed violation (0 or 1)
- Classification Car / Truck (0 or 1)

The downloaded statistic file has a CSV format so it can be opened with Excel. Headers and formulas (i.e. to make totals, to calculate percent's) can be added using a template. See example statistics file below.

```

2016-04-11T08:50:22-05:00;2;Thru2;8;0.00;0.00;0;0;0;0;0
2016-04-11T08:50:32-05:00;1;Thru1;6;0.00;0.00;0;0;0;0;0
2016-04-11T08:50:57-05:00;3;Thru3;8;0.00;0.00;0;0;0;0;0
2016-04-11T08:50:57-05:00;3;Thru3;8;0.00;0.00;0;0;0;0;0
2016-04-11T08:51:01-05:00;3;Thru3;2;0.00;0.00;0;0;0;0;0
2016-04-11T08:51:01-05:00;3;Thru3;2;0.00;0.00;0;0;0;0;0
2016-04-11T08:51:20-05:00;1;Thru1;12;0.00;0.00;0;0;0;0;0
2016-04-11T08:51:20-05:00;1;Thru1;13;0.00;0.00;0;0;0;0;0
2016-04-11T08:51:25-05:00;1;Thru1;26;0.00;0.00;0;0;0;0;1
2016-04-11T08:51:35-05:00;1;Thru1;7;2.62;4.45;0;0;0;0;1
2016-04-11T08:53:04-05:00;1;Thru1;9;0.00;0.00;0;0;0;0;1
2016-04-11T08:53:05-05:00;1;Thru1;10;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:05-05:00;1;Thru1;10;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:05-05:00;1;Thru1;10;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:05-05:00;1;Thru1;10;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:06-05:00;2;Thru2;13;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:08-05:00;1;Thru1;13;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:09-05:00;2;Thru2;14;0.00;0.00;0;0;0;0;0
2016-04-11T08:53:13-05:00;1;Thru1;10;0.00;0.00;0;0;0;0;1
2016-04-11T08:54:01-05:00;1;Thru1;25;0.00;2.64;0;0;0;0;1
2016-04-11T08:54:10-05:00;1;Thru1;8;6.92;4.46;0;0;0;0;0
2016-04-11T08:54:55-05:00;2;Thru2;17;52.63;4.46;0;0;0;0;0
2016-04-11T08:55:09-05:00;1;Thru1;19;66.00;4.46;0;0;0;0;1
2016-04-11T08:55:24-05:00;1;Thru1;7;0.00;0.00;0;0;0;0;1
2016-04-11T08:55:27-05:00;1;Thru1;8;0.00;0.00;0;0;0;0;0
2016-04-11T08:55:27-05:00;1;Thru1;7;0.00;0.00;0;0;0;0;0
    
```

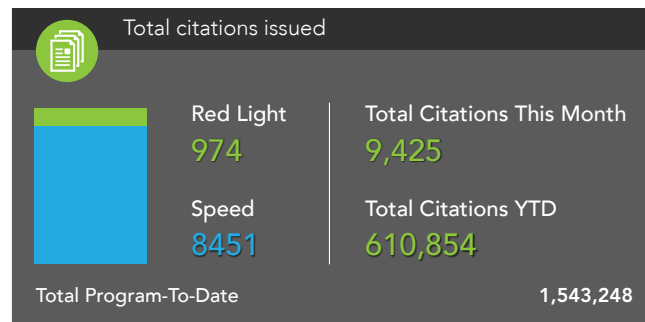
Monthly Reporting



As an option, Sensys Gatso can provide its customers with a customizable monthly activity report similar to the example above.

Customizable Options

Individual reporting modules and reports can be customized by adding or modifying report modules like the one below, per program requirements.



Data Transmission & Security



Secure storage facility in NLETS

Sensys Gatso processes and systems are designed according to the ISO27001 standard regarding Information Security Management, which incorporates these main elements: **Confidentiality**: information is not made available or disclosed to unauthorized individuals, entities, or processes **Integrity**: accuracy and completeness **Availability**: data is accessible and usable upon demand by an authorized entity **Non-repudiation**: ability to prove the occurrence of an event or action and its originating entities

For evidence data specifically, the non-repudiation of the information is a very important property that requires special consideration. Information security is achieved through the implementation of an applicable set of controls, selected through the chosen risk management process and managed using an ISMS, including policies, processes, procedures, organizational structures, and software & hardware to protect the identified information assets. These controls need to be specified, implemented, monitored, reviewed and improved where necessary, to ensure that the specific information security needs are met.

Security Features

- ISO 15444-1 File Format Standard
- RFC 5652 Cryptographic Message Syntax
- SSD Private Key Storage
- 256-Bit AES Encryption Algorithm
- IP Security For Sensys Gatso VPN
- IPSec VPN tunnels with TLS Protocol
- MAC Verification & 2 Factor Logon
- SSAE-16 System Segregation

Cryptography

The T-Series camera system produces evidence files containing both images and data in a single file. Using this method there can be no doubt which data (e.g. date/time and sensor data from a vehicle detection sensor, or other sensor device) belongs to which image. Sensys Gatso software engineers are using fully secure, maintained open standards as a base format for files. It incorporates the most accepted and advanced encryption standard and enables the usage of standard tools and libraries. The base file format is a standard J2K file containing one or more JPEG2000 code-streams and accompanying XML. This format conforms to the ISO15444-1 standard. The entire file is enveloped according to the Cryptographic Message Syntax (RFC5652) standard for protecting the data. Standard public key cryptography algorithms are used. For all algorithms the chosen keylengths provide adequate protection according to current standards (RSA2048, AES-256 and SHA-256), and the cameras have a special "Secure Memory Device" (SMD) that holds the private keys. If an attempt is made to tamper with the camera, the keys are immediately destroyed by the SSD even if the device is unpowered. In addition to stringent application security, multiple layers of system security and redundancy provide better protection of information and data assets. Sensys Gatso implements multiple types of security technologies that create layers of security, protecting the information in the citation database. Sensys Gatso uses industrial routers that combine antivirus, firewall, intrusion prevention, and VPN technologies to protect the in-field networked camera equipment from unauthorized access and attack.

Transport Layer Security

Through the use of preventative network access controls such as stateful inspection firewalls; intrusion detection and prevention; access control lists and route tables; public key infrastructure (PKI); and data encryption Sensys Gatso provides an in-depth defense necessary to protect confidential information from unauthorized access or manipulation. All data transfers between camera equipment and back office systems use Transport Layer Security (TLS) at the transport layer. The TLS connections between the server systems and camera systems use the 256 bit AES encryption algorithm. Another layer of security is provided by the Virtual Private Network that Sensys Gatso uses between its server systems and camera systems. The VPN uses IPSec

(IP security) at the network layer. Additionally, for the VPN, robust and up-to-date versions of cryptographic algorithms are used (RSA and AES).

CJIS Standard

In addition to enabling fast data uploads to the Sensys Gatso processing center, the proposed system conforms to the functional and operational data protection requirements for a secure law enforcement traffic violation capture tool. A successful enforcement system must be secure and must maintain an unaltered data chain-of-custody throughout the citation lifecycle. Sensys Gatso's overlapping security components, procedures, and enterprise infrastructure ensure that only authorized users gain access to the violations database and guarantee data integrity. Through centralized controls, accountability and security all data is identifiable as original and unaltered. For example, for internal application security, Sensys Gatso uses the Transport Layer Security (TLS) Port 443 HTTPS protocol for all data transmissions to and from the violation processing applications. TLS uses an authenticated 2048-bit certificate for the encryption algorithm, which is considered a more-than-appropriate degree of encryption for commercial and sensitive data exchanges.

Web Services

The Web Services are architected to deny https connections unless the server administrator has created a public key certificate for the Web server and is digitally signed by a certificate authority that certifies that the certificate holder is indeed the entity it claims to be. This robust application architecture, along with MAC address verification and two-factor logon authentication guards against data falsification, tampering, and viewing. For sensitive data traveling over network segments, we employ the latest government-approved data encryption and PKI to protect violation data. The security of data is accomplished by enforcing non-repudiation of data and ensuring that all sensitive data is protected against interception through the use of strong encryption.

AES Algorithm

Sensys Gatso employs the Advanced Encryption Standard (AES) adopted by U.S. federal government National Institute of Standards and Technology (NIST), and uses the 256-bit encryption key, far surpassing the cipher strength of the 168-bit key used by Triple-DES. The use of AES



ensures the ability to defend violation evidence against any evidence tampering challenge brought through legal review or the adjudication process. Its use ensures the highest level of prosecutable evidence possible. Sensys Gatso employs SAS-70-approved systems segregation practices; development processes; systems maintenance; and backup and recovery processes. This includes the offsite, secure storage of backup media. Each captured violation image and accompanying data are encrypted using AES before being stored to the hard drive or external storage drive. AES ensures high-level security by attaching a US Government-approved electronic signature - sometimes called a watermark - to every image. The AES algorithm is a symmetric block cipher that can encrypt (encipher) and decrypt (decipher) information. Encryption converts data to an unintelligible form called cipher text: decrypting the cipher text converts the data back into its original form called plaintext.

Evidential Integrity

Each camera system creates a single complete file of the evidential images, their associated event metadata and relevant other data (in XML format). This file is digitally signed within seconds after the image is taken, with a maximum delay of 10 seconds. As soon as files on the camera systems are completed and signed they will be uploaded to the server systems automatically. In case the connection to the server systems is lost, for example due to a disturbance in the cellular network, the data will reside safely inside the camera system and will be uploaded as soon as the connection to the server systems is restored. The server systems will receive the evidence files and immediately verify the integrity of the received files. After ensuring the integrity of the files they are written to permanent storage systems. Once all data is safely written to permanent storage the server will acknowledge the receipt of the file to the camera system. This dramatically reduces the time window where the information may be lost because of equipment failures or human error. The receipt of evidence files and acknowledgment to the System is logged in an audit log that can be inspected by program officials.

Data Retention

Sensys Gatso uses two suppliers of data center services: Nlets and SoftLayer (IBM). Both have highly secured facilities with all backup systems for power, HVAC, Internet links and have multiple independent data centers. The servers that interact with Nlets systems and store sensitive Personal Identifiable Information details are co-located within the secure Nlets facility in Arizona, with redundancy in Lexington KY. Scheduled, continuous backups are made to our secure processing facility in Beverly, MA. The servers that store images and video are located in two different data centers in Dallas, TX operated by SoftLayer (IBM). Sensys Gatso has a separate testing environment and all software releases are tested before deployment to the production environment. Sensys Gatso does not use Virtualized servers, a Hypervisor, or a multi-tenant server. All servers are either owned by Sensys Gatso or "Bare metal" servers at SoftLayer (IBM). There is a strict separation of testing and production environments. Our use of anti-virus software detects unintended configuration changes (Tripwire.) Regular audits include penetration testing and searching for software vulnerabilities. The penetration testing is performed using Nessus with full PCI DSS 3.0 profile and the WebReaver vulnerability scanner. The software is designed using OWASP guidelines and does not contain the OWASP top ten most critical web application vulnerabilities. Data retention term will be compliant with Regina specifications of five years from date of program cessation.



SOFTLAYER®



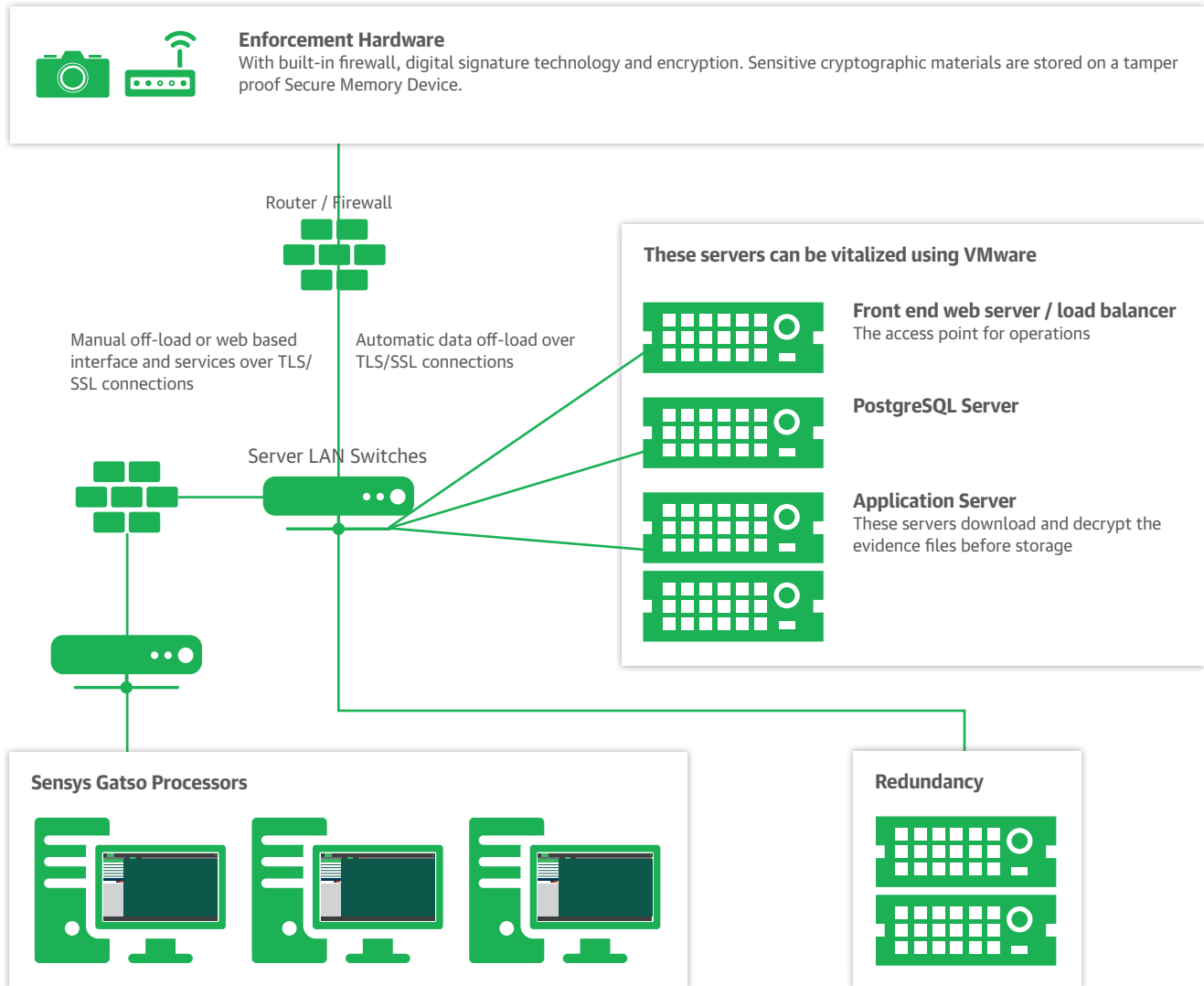
Connectivity

Each camera system creates a single complete file of the evidential images, their associated event metadata and relevant other data (in XML format). This file is digitally signed within seconds after the image is taken, with a maximum delay of 10 seconds. As soon as files on the camera systems are completed and signed they will be uploaded to the server systems automatically. In case the connection to the server systems is lost, for example due to a disturbance in the cellular network, the data will reside safely inside the camera system and will be uploaded as soon as the connection to the server systems is restored.

The server systems will receive the evidence files and immediately verify the integrity of the received files. After ensuring the integrity of the files they are written to permanent storage systems. Once all data is safely written to permanent storage the server will acknowledge the receipt of the file to the camera system. This dramatically reduces the time window where the information may be lost because of equipment failures or human error. The receipt of evidence files and acknowledgment to the Safety Camera Systems is logged in an audit log that can be inspected by program officials.



Data Offload



The above graphic represents a standard data management process architecture for many of our full-service clients. tttdata, and traffic statistics. The physical transmission of required data from the camera systems will be directed by Sensys Gatso. On-board archive requirements, will be provided by Sensys Gatso locally in each system utilizing appropriate SSD storage.

Florida Statutory Requirements

Any and all video and image data created by the program will be maintained by Sensys Gatso for a period in accordance with the State of Florida Government Record Retention Schedule as determined by the City.

Sensys Gatso evidence file contains:

- High resolution images in JPEG2000 format
- High resolution video in JPEG2000 format
- Event metadata in XML format
- A preset type or code of the violation
- Date and time of the violation
- A preset speed limit
- The designated lane of the violating vehicle
- The camera and system ID
- A preset location of the camera system
- The direction of travel of the violating vehicle
- Log data in Text format

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Tab 4 - Approach & Methodology

Maintenance of Deployed Technology

System status: Enforcement	
List	
DECISION UNIT	● Enforcement
RADAR	● Acquisition on
CAMERA	● Operational
TRAFFICLIGHT WIRED INTERFACE	● Operational
TRAFFICLIGHT VISION INTERFACE	● Operational
FLASH	● Operational
BUSPROXY	● Operational



Design Philosophy

The Sensys Gatso T-Series enforcement system has a high Mean Time Between Failures (MTBF) and has reliability designed in. It is engineered to perform autonomously from traffic signal controllers, inductive in-ground loops and data lines - fully wireless. All internal components are installed, connected, wired and tested before leaving the factory. The inner cell can easily be taken out in one piece and never needs to be opened roadside, preventing dirt and water from entering the system. Servicing of the equipment is simple and straightforward. To maximize system uptime, a malfunctioning unit will be swapped out for a new unit. Replace/repair disposition takes a matter of hours, not days.

SNMP

"The SNMP communication protocol is utilized for all deployed enforcement units."

Our systems meet or exceed a wide -40°C to 40°C temperature range due to the internal heating and cooling technology built into the units. In case of an accident or loss of power at the enforcement zone, retention of events is not affected. Any violation events that occurred prior to the loss of power will be retained for weeks on the enforcement system without need for a redundant power source. Voltage is monitored extensively in the system with exit interrupts to prevent system damage.

System Uptime

Sensys Gatso employs both an automated and manual system of controls to maximize the operational uptime of each deployed enforcement unit. Real-time "In-Enforcement" status tools combine with a daily remote visual inspection of each individual system allow Sensys Gatso personnel to assess operability well beyond the requirements of the program. Weather can be very harsh on electronic equipment, particularly

photo enforcement equipment that is expected to perform 24/7/365. Having ALL enforcement components in a single weather-tight IP65 internal cabinet, with the ability to store thousands of violations on-board when communication is down, makes a Sensys Gatso solution IDEAL for all climate challenges. Deployed enforcement systems are remotely accessible 24/7. System health and condition are being constantly assessed by internal systems and Sensys Gatso QA technicians. Periodic visual examinations of the system will occur at intervals specified by program officials. The ability to access live views of our deployed systems enable quality checks for system readiness and performance in real-time.

Issue Response Time

Initial response to and disposition of any equipment malfunctions will occur within a 24-hour period. Typically, any required corrections can be made remotely. Should a failure occur which is not correctable remotely, a local Sensys Gatso technician or subcontractor will be dispatched to the enforcement site immediately. If the technician determines the cause of the failure resides in the hardware, the entire unit will be replaced directly, ensuring maximum equipment up-time and violation acquisition at



the particular enforcement site. The defective unit would then be transported to a Sensys Gatso facility for repair.

Visual QA

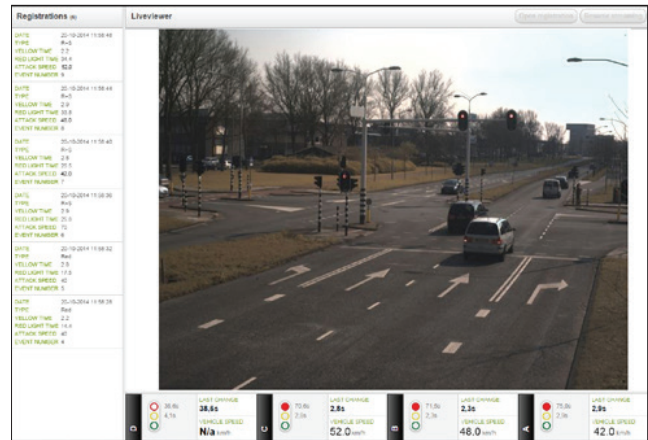
Daily, our team of internal quality assurance personnel performs a visual check of each deployed camera system “through-the-lens” to ensure that video and still imaging standards are being met. This real-time visual check can quickly identify debris, out-of-focus issues, data field integrity, and various occlusions that may compromise evidence collection. Issues are reported directly to group leaders for notification to Sensys Gatso engineers for remediation.

Live View

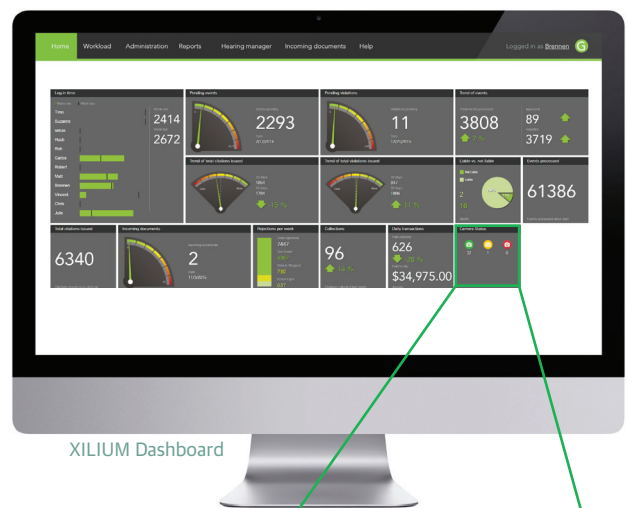
“Live Status” screens show the live camera view at the selected enforcement zone. This view is available to program officials and Sensys Gatso Quality Assurance personnel to monitor system conditions and to make adjustments to settings and configurations where necessary.

Google Map Enforcement Status Tool

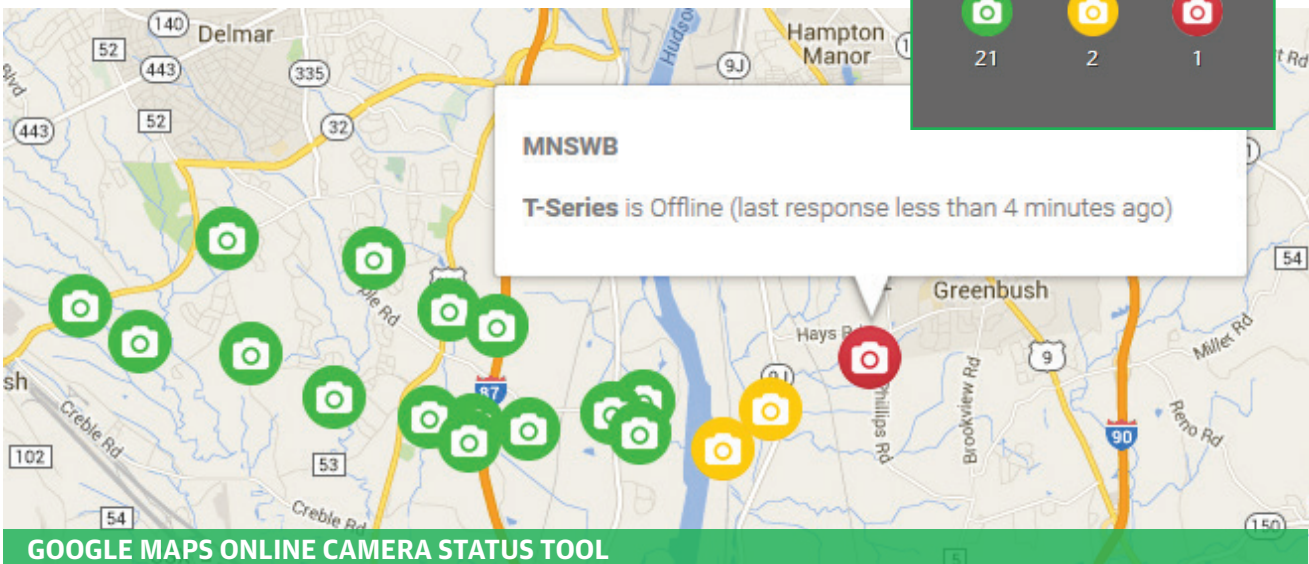
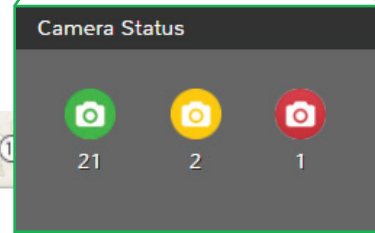
Each individual deployed system displays its enforcement status on our enforcement status tool driven by Google Maps. This is a tool that is available to any authorized program official. This tool provides an enforcement status condition in real time to our Quality Assurance personnel, with descriptive text and up to the minute guidance on system downtime.



“Live View” screen



XILIUM Dashboard



Training



Training for Compliance

The importance of effective training in the operational elements of an enforcement program cannot be overstated. Often, specific program procedures regarding business rules application, event approvals, technical calibrations, technical certifications and program maintenance will be called into question by violator attorneys. Training needs to be effective, and training needs to be valid. Sensys Gatso will ensure that requisite staff training is given top priority.

Training

"All training will be delivered by Sensys Gatso to program staff at their convenience - onsite or at a Sensys Gatso facility - as an included deliverable."

All training will be delivered by Sensys Gatso to program staff at their convenience - onsite or at a Sensys Gatso facility - as an included deliverable. Standard classroom training on the various modules of our XILIUM Back Office software has been structured to be conducted in one to three days, resulting in minimal interruption to staff operations. Presentations are delivered using a combination of Power Point slides and a projected view of Sensys Gatso's XILIUM Back Office software. Course-ware and training guides are presented to each individual trainee for ongoing reference. As new features to our backoffice solution, and new program personnel are brought onboard

to the program, additional training will be provided.

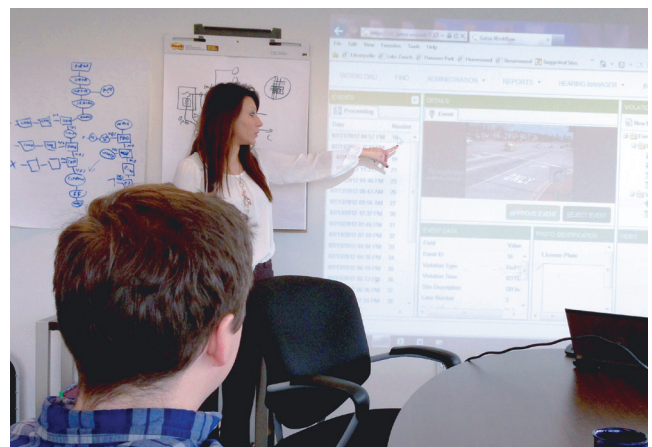
BackOffice Software Overview

1 to 3 days

A comprehensive presentation of our XILIUM administrative back-office solution centered around familiarity with the system software, general navigation and window control, workload management, simple querying and filtering, violations assessment, image enhancements, report generation, scheduling and violations business rules compliance. Tailored for police review personnel and appropriate program administrators and managers.

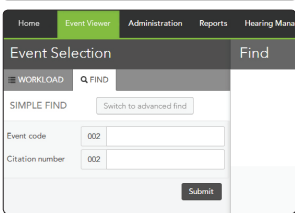
Subject: Event Processing

- Interface overview
- System Navigation
- "Workload" organization



XILIUM training session

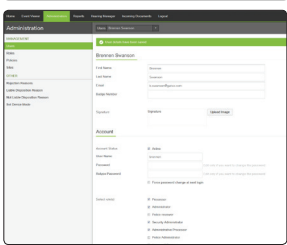
SIMPLE FIND FUNCTION



The "FIND" function is accessed through the "Event Viewer" tab.


Users can also utilize the 'Simple Find' function to search for specific events by code or citation number.

USER PROFILES



Other administrative functions include setting up and editing user profiles.

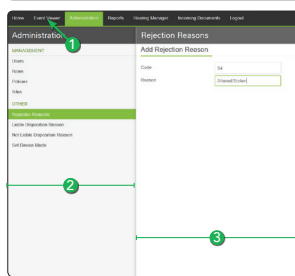
Click >Users; from the left hand navigation panel to access these features.



OFFICER REVIEW

Violations Processing Software Quickstart Guide

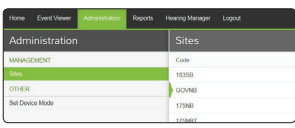
NAVIGATION



All interaction with XILUM takes place inside these three (3) work areas.

- 1 - Main menu bar
- 2 - Left hand navigation panel
- 3 - Main work window

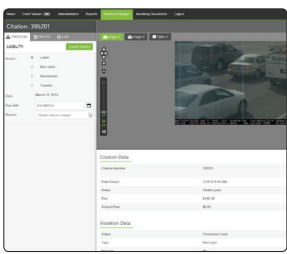
SET DEVICE MODE



Xilium also includes additional administrative features, based on user profiles, including device modes such as; Amber alert and Active (live) enforcement.

Click >Administration >Set device mode; from the top menu bar to access these features.


HEARING MANAGER



Xilium also includes a "HEARING MANAGER" component which maintains all contests.

Click >Hearing Manager; from the top menu bar to access these features.

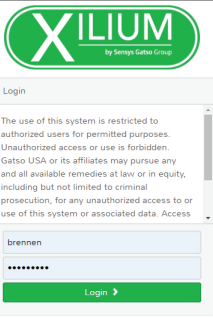
VIDEO ARCHIVE & LIVE STREAM



This function allows you to access a camera (by site code) and view archived video (1) or live stream video(2).

Click >Administration; from the top menu bar for access.


SECURE ACCESS LOGINS



The use of this system is restricted to authorized users for permitted purposes. Unauthorized access or use is forbidden. Gatsco USA or its affiliates may pursue any and all available remedies at law or in equity, including but not limited to criminal prosecution, for any unauthorized access to or use of this system or associated data. Access

Additional software may be required to view downloaded content.

HOME SCREEN & DASHBOARD



The home screen displays both a menu bar with various selections (individualized to each user) as well as the XILUM dashboard, also individualized to each user.

The XILUM dashboard was designed to provide users with a complete overview of the program. Dashboard widgets are determined by what rolls are enabled. Widgets will arrange themselves to the page based on screen size.

XILUM "QUICKSTART GUIDE" HANDBOOK

- Event assessment
- Event classification
- Data inputs
- Approval/Rejection guidelines
- Notes & attachments

Subject: Hearings Manager Module

- Module navigation
- Scheduler
- Sorting data
- "Dashboard" overview
- Evidence presentation
- Links & Attachments
- Dispositions

Subject: Program & Revenue Management

- Terminology & requirements
- Managing financial reports
- Creating ad hoc reports
- Queries and filters
- Compliance documentation

Photo Enforcement Operations

1 to 3 days

Hands-on instruction for ongoing hardware functionality, assessment and documentation. Program officials and officers who may be asked to testify on the procedural workings of the program will be provided a comprehensive overview of system components, set-up interfaces and required certifications and calibrations.

Subject: Enforcement Hardware & Technology

- Program standards and compliance
- Component overview & functionality
- Imaging & Detection overview
- Installation and Power
- Communications & Troubleshooting
- Logs & documentation preparation
- Mobile-specific set-up
- Intersection-specific set-up
- Maintenance & operation

Program Launch & Operations



T-SERIES CABINETS AWAITING FINAL ASSEMBLY

Early Program Overview

Upon award, Sensys Gatso will launch its technical and operational teams to begin program activities in Miami Beach. The executive team from Sensys Gatso will meet with program officials and managers to finalize the project plan and framework of downstream deliverables. Local subcontractor relationships will be coordinated. Existing and prospective intersection sites will be confirmed and Sensys Gatso will work with program officials to begin site analysis, procure permitting and begin fitting hardware. Project timelines will be established. Sensys Gatso engineers and build teams along with local contractors will begin the process of installing, calibrating and testing camera systems in the field. Reporting and tracking timetables will be established to support system readiness reduce system downtime and monitor the operational health of our enforcement hardware.

Our Factory - Our Inventory

We designed it and we build it. No other major automated enforcement company can make that claim.

Collaboration & Integration

Our software engineers in Europe and the US, along with our local development team, will work closely with program officials to customize specific software and interface elements per program requirements. XILUUM enhancements and WebDoc integration will be built into our online systems, allowing program officials to access and view camera system calibration reports and data in

support of back-office operations and adjudication efforts. Staff training programs will be coordinated and executed prior to program rollout. A Service Ticket system will be established and procedures will be developed to support information flow and increase efficiencies in the areas of problem resolution and program deliverables. "On-Call" service schedules will be coordinated, and Quick-Response protocols will be established to meet the challenge of every conceivable program exigency or complication.

Implementation

Sensys Gatso will ensure that all new and existing approach sites deemed appropriate by Miami Beach officials will be fully redrawn and tested within a very expedient time range. Our solutions typically are minimalistic, and locatable within a wide range of distance from the intersection enforcement zone. We anticipate that given the nature of our solution, additional enforcement sites could be fully assessed and analyzed during the proposed timeframes should the City concur.



TECHNICIAN ASSEMBLING A WIRE-HARNESS

Variables

Analysis, permitting, pole installation, configuration, testing, retesting and certification are all variables in any build-out equation. Those variables notwithstanding, the uniqueness of the Sensys Gatso system is the speed in which it can be installed and the minimal disturbance to daily traffic during the installation. Our systems were designed and built with every implementation variable in mind.

Change Orders

Relative to the implementation and installation phases of an automated enforcement program, Sensys Gatso has never submitted a change-order to one of its safety partners. We present our pricing as a true turn-key solution, not a bait-and-switch opportunity. Our references will bear out this fact.

Timelines

Any drawing review and permit issuance time-lines would naturally depend on the City's then-current workload. Based on extensive experience, however, with the typical delays and variables, the timeline for a drawing-through-construction Sensys Gatso-directed fixed installation is typically eight weeks - or much quicker with existing or expedited processes.

Subcontractors

Our Scottsdale, AZ-based Project Manager Rich Kosina has led dozens of subcontracting teams for hundreds of build-outs. It is his intention to utilize local resources, as noted in the Subcontractors section of this submittal, to supplement his existing crew. Ongoing, both Sensys Gatso technicians and local subcontractor personnel will be available and on-call for scheduled and emergency response.

Permitting & applications

Sensys Gatso will work with program officials to ensure all required documentation is composed and submitted to the appropriate parties. If existing assets are not available for camera attachment, or if the City chooses not to allow attachment, street furniture and foundations will require engineering drawings, permits and site build-out. Further, since our solution will not require disturbance of the road surface, we've greatly reduced the review time for program officials, resulting in a quicker approval and permit.



T-SERIES REAR PLATE

Warranty

Sensys Gatso USA warrants all Sensys Gatso-owned hardware for the length of the original contract and any contract extensions. Optional extended warranties are available. Any required repairs and maintenance will be performed by Sensys Gatso USA at no charge to the City. The camera software will be upgraded at no cost to the City for the length of original contract and any contract extensions. The processing software will be upgraded at no cost to the City for the length of original contract and any contract extensions.

As-built Drawings

Any approved as-built design drawings produced for this program will be deposited in a repository as well as City offices for the life of the contract. Further, any changes which may occur to a RLC system whether to new or existing installations will be added to the repository. The repository will remain active for the life of the contract.

Signage

Sensys Gatso will ensure that the Miami Beach enforcement program is current and compliant with Florida requirements for signage. Sensys Gatso understands that courts will rule against programs that do not adhere to the strict requirements for clear, unobstructed public alerts mandated by oversight agencies. Our Program Manager has extensive experience in a number of Florida municipalities regarding the requirements for proper signage.

Miami Beach Program Launch Timeline

EXECUTIVE	<ul style="list-style-type: none"> »» Finalize contract negotiations »» Approve deliverables framework for early design phases of project <ul style="list-style-type: none"> »» Establish business rules for revenue control and invoicing »» Establish notifications and process service business rules pursuant to legislative guidance <ul style="list-style-type: none"> »» Establish meeting schedules between Sensys Gatso and Miami Beach officials »» Finalize system security protocols between Sensys Gatso and project IT officials
SITE & FACILITIES	<ul style="list-style-type: none"> »» Establish local facility for equipment repository »» Ensure Nlets and project compliance regarding local program operations <ul style="list-style-type: none"> »» Procure equipment for system repair & warehousing »» Coordinate subcontractor and local technician participation
SOFTWARE & INTERFACE	<ul style="list-style-type: none"> »» Customize XILIUM SDKs and SFTPs to meet City, PD and Court requirements »» Develop and program social media; Embed Opt-In functionality within sites <ul style="list-style-type: none"> »» Build calibration report access into online systems »» Customize and test online viewing and access systems »» Develop Service Ticket procedures in association with Miami Beach issue reporting requirements
INSTALLATION & TESTING	<ul style="list-style-type: none"> »» Finalize initial site analysis and re-analysis protocols with project leaders »» Initialize site analysis procedures for preliminary enforcement approaches »» Coordinate installation procedures with program officials and build team »» Configure enforcement parameters per program requirements; synchronize reporting & maintenance systems <ul style="list-style-type: none"> »» Initiate site buildout activities and site testing protocols <ul style="list-style-type: none"> »» Configure and test communications and access »» Create installation drawings repository per program requirements <ul style="list-style-type: none"> »» Coordinate inspections and procure permits »» Update signage and striping per program requirements
STAFFING	<ul style="list-style-type: none"> »» Finalize background check procedures per Miami Beach requirements for local techs <ul style="list-style-type: none"> »» Coordinate selection and hiring process with local resources »» Train Sensys Gatso processing and administrative staff on City-specific requirements
REPORTING	<ul style="list-style-type: none"> »» Identify departmental reporting requirements »» Set up camera/radar calibration procedures and required documentation <ul style="list-style-type: none"> »» Develop protocols for timely issue notifications to City »» Customize inspection and service reports per Miami Beach Program requirements »» Structure delivery method, monitoring and logging of daily remote status checks
MAINTENANCE & QC	<ul style="list-style-type: none"> »» Finalize QC and QA plans per program requirements »» Background-qualify service subcontractors per Miami Beach requirements <ul style="list-style-type: none"> »» Design inspection and maintenance framework and protocols »» Identify key program officials for system status "porting" notifications <ul style="list-style-type: none"> »» Design inventory tracking procedures and documentation
TRAINING & SUPPORT	<ul style="list-style-type: none"> »» Customize course material for all departments requiring program-specific training »» Develop documentation in support of Administrative Hearings / Court requirements <ul style="list-style-type: none"> »» Design City-approved technical calibration training program »» Compose back-office process documentation
PUBLIC AWARENESS	<ul style="list-style-type: none"> »» Perform outreach with media consultants »» Generate required public awareness materials and resources <ul style="list-style-type: none"> »» Compose and construct awareness signage

8/1 8/8 8/15 8/22 8/29 9/5 9/12 9/19 9/26 10/2 10/3 10/10



Key

- Sensys Gatso deliverable
- Sensys Gatso/MB collaborative
- Sensys Gatso/Sub collaborative

- ▶ All anticipated deliverables can be modified per the wishes of the City, including all collaborative elements.
- ▶ For illustration we have presumed a 8/1/19 Notice to Proceed. Launch and timeline flexible per City requirements.

Public Awareness

Our Philosophy

Citizens have almost certainly developed their particular opinions about photo enforcement programs. At Sensys Gatso, we have always felt that the key to the public's acceptance if not appreciation of automated enforcement is the manner in which the service is delivered, and the manner in which the vendor goes about its business. If the perception of the winning vendor is negative, no public awareness campaign can change that attitude.

Sensys Gatso's Public Awareness Program can include the following tools:

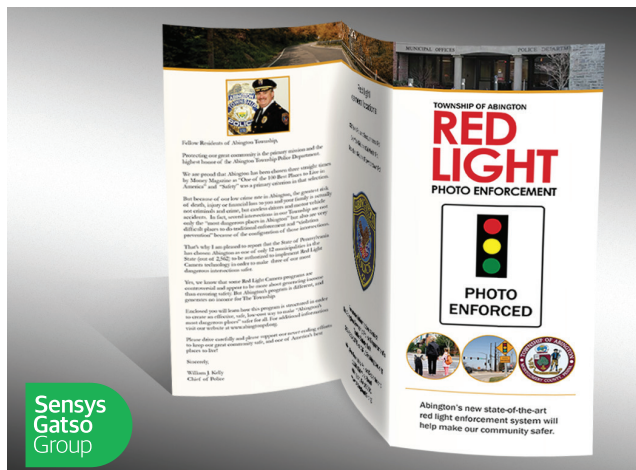
- Media releases & industry studies
- Tri-fold and leaflet design
- Local signage
- Community meetings and forums
- Social Media coordination

Press release

Program officials may consider issuing a preliminary press release to the local community announcing the new program. The press release is designed to act both as a flag-waving gesture to improve traffic safety and as a signal to the community that Sensys Gatso intends to be an integral part of the continued implementation and enforcement of the safety plan.

Posters/Signage

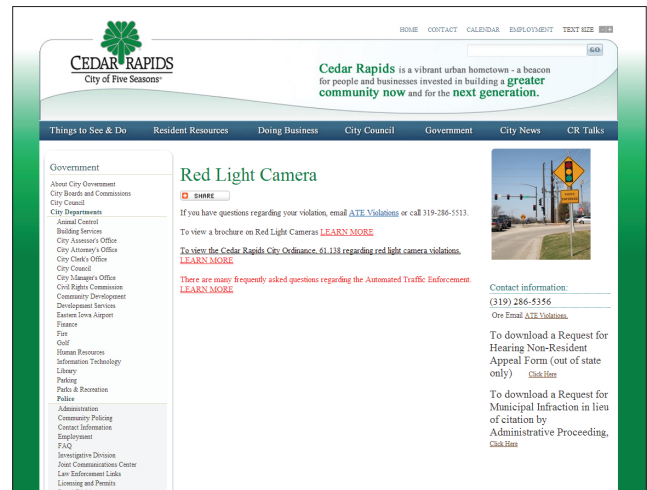
Signage/posters shall be installed at locations as determined by program officials. Installation, maintenance and associated costs are to be assumed by Sensys Gatso. Public awareness can posters will be introduced in advance



of the cameras going live at newly enforced zones. Installation and roll-out of any public awareness material shall have appropriate approvals prior to placement, and Sensys Gatso shall submit drawings depicting the size, legend, materials used and location of the sign.

Public Education Materials

At no cost Sensys Gatso can developed a tri-fold leaflet which can be distributed throughout the program area. The full color educational leaflet frames FAQ's into a simple format and may include a letter and photograph from local authorities. The FAQ's within the leaflet are representative of the comments and questions that Sensys Gatso has heard over many decades of photo enforcement. Public suspicion can often be allayed through the use of our inclusive communication within local communities.



Web Presence

Sensys Gatso will assist in the development and execution of web-based promotional and informational material per the direction of program officials. Features such as program rationale, governing law and ordinance, physical facts and locations of the camera systems, and guidance through the violation disposition process can all be accessed and launched through dedicated program portals.

Social Media

The reality is that traffic can be dangerous, and the dangers associated with unsafe driving should be observed and discussed. Presenting those dangers without "playing down" to the audience has always been a goal of Sensys Gatso. We are prepared to offer any and all outlets to

program officials in this regard. Awareness outlets such as Facebook, Twitter and other social media information channels can and will be important tools in the effort to promote your program and inform your local constituency. Content can be delivered utilizing existing web-based public safety forums and platforms or through Sensys Gatso-built outlets.

Community Meetings

Sensys Gatso will commit to attend public awareness meetings and will assist program officials in their efforts to articulate the benefits of a photo-enforcement program. As installation of the enforcement zones is completed and the public awareness campaign has begun, at the officials discretion a 10- to 30 day courtesy "warning period" may be initiated. During this period the program would operate normally with the exception that fines would be waived as a public awareness gesture.

Opt-in text messaging

An effective social media campaign can prove invaluable in terms of public engagement and acceptance of the photo enforcement program. Sensys Gatso intends to introduce a Facebook page to provide information and forums for interested citizens. Additionally, citizens may join the automated opt-in list from the sign-up screen on the local website to receive automated text messages containing notices and updates regarding the enforcement program. When an interested party sends a keyword to an established short-code number their mobile phone



number can be automatically added to a database of opt-in contacts. Management of mobile keywords and the automated text message response system will be overseen by Sensys Gatso and its vendor as part of an overall information campaign.

Industry awareness

The conception and production of effective outreach deliverables will be the responsibility of Sensys Gatso in concert with program officials. Our team will work to develop public service narratives for use in media announcements and program updates. Additionally, Sensys Gatso will assist program officials in gathering important polling and public opinion data to gain insight into the community's perception of the program and its areas of weakness in the public arena. Sensys Gatso will ensure that annual program reporting includes contextual narrative regarding the real value to public safety that a Sensys Gatso-delivered solution offers. Sensys Gatso will monitor state and federal reports regarding the quantitative value of automated photo enforcement, and provide content updates to program officials for use in public awareness narratives. Sensys Gatso will also monitor and report on local and national legislative activities regarding automated photo enforcement. Sensys Gatso will utilize local public relations resources to gain key local insight and both source and deliver promotional, program-specific reports and materials. In addition, Sensys Gatso will develop quantitative and qualitative program status report for legislative, public safety and other governmental officials designed to inform from a contractual/budgetary point-of-view.



Value Added



Over-the-road speed enforcement system

Future-Proof Technology

A Sensys Gatso solution strength is its versatility. Fixed-speed enforcement functionality can be activated with a single programming request, turning an intersection-based red light enforcement zone into a speed-on-green solution. No structural, physical or technological modifications required.

Any red light program could become a red light / speed program. Any existing pole with a power supply could become a speed enforcement zone. The constituent imaging, detection, flash and control units of a T-Series can be custom-installed into new or existing enforcement vehicles to provide fixed-mobile and industry-first "In-Traffic" mobile speed enforcement.

MOBILE ENFORCEMENT

In-vehicle mobile speed detection; industry first "In Motion" mobile speed enforcement.

OVER THE ROAD TRUSS

Highway trestle-based speed monitoring and "Section Control" average speed enforcement.

AMBER - BLUE - SILVER ALERT

Instantly available embedded functionality within all Sensys Gatso enforcement solutions.

WEIGH IN MOTION

Roadway-based automated big-rig overload detection.

CONGESTION CHARGING

Automated capture of vehicles that have not paid to enter busy city centers at peak times of day.

LOW EMISSION SMOG CHARGING

Automated capture of vehicles that have not met emissions testing as they illegally enter a city.

ACCESS CONTROL

Vehicle screening and parking lot access control.

PARKING LOT SPEED CONTROL

Strategically placed speed cameras for improved safety in parking lots and garages.

BLOCK THE BOX

Automated capture of vehicles blocking cross-traffic at high volume intersections.

RAIL ROAD CROSSING

Automated capture of vehicles crossing railroad tracks as train approaches.

ALPR

Sensys Gatso has had extensive experience utilizing license plate reading and recognition technology in a number of enforcement applications.

OVER-HEIGHT VEHICLE

A T-Series system will "build" a predetermined height reference point within an enforced zone to verify trucks do not violate the city over-heights laws.

CODE ENFORCEMENT / PARKING ADMINISTRATION

Utilizing our proprietary technology as well as partner technology SGUSA can provide a full-scale parking/code management solution.

Merchant processor

Secure Payments Overview

Currently, all physical payments processed here in our Massachusetts headquarters utilize advanced hardware and document management software systems, with utilization of Rabobank Merchant Services for Check21 Virtual Check Processing and X9 Image Processing. We use our high-speed OPEX/MAVRO scanners as well as desktop scanning units for non-localized imaging. This is our standard process and will vary somewhat for certain clients based on their particular business rules. For example, several of our partner clients will not accept underpayments nor issue refunds for over-payments. We have built flexibility into our payment processing work flows, and our back-end systems support any reporting requirements the City may expect.

All payments, whether made by a citizen on their computer, a customer service representative on the phone, or an in-person walk-in customer are made through our PCI-Compliant Payment Portal. Our Merchant Services Provider Rabobank, through their partner Worldpay/Trustwave ensures this PCI-DSS standard. This compliance standard is affirmed monthly:



Success!

You have completed the PCI certification for SENSYS GATSO USA INC.

SENSYS GATSO USA INC

Merchant ID

4445025408849

Username

m.pavao@gatso.com

What's next?

- If your service includes vulnerability scans, please return monthly to check the status of the scan. You will receive emails when the scans are completed.
- The SAQ you submitted is valid for one year, until 2020-02-04. You will receive email reminders to renew your compliance next year.
- Your PCI status is reported to Worldpay on your behalf.

Citizens utilizing our portal are directed to phone our Call Center should they wish to inquire about partial payments or address several outstanding citations. Miami Beach business rules will determine how non-standard payments are accommodated. On the Portal our "Pay This Amount" feature precludes over or underpayments. Our internal software developers have built in standard receipting; CC acceptance; 3rd party application integration; and scannable document specification features into our payment portal solution. We are able to offer full compliance with any standards and technical specifications that the City requires regarding enterprise cashiering. As noted in our initial response, we have our own software and systems development teams in-house at Sensys Gatso.

Secure Data Exchange with Payment Portal

Once a violation is approved by the City, the metadata will be exchanged with the Violator Payment Portal server with its status set to "UNPAID". In this portal the citizens/customer service reps can log in using the citation number and a uniquely generated PIN number for that citation to review the evidence and possibly pay their fine. They can also contest the violation and book a hearing date directly. (Alternatively, they can send a check to pay the citation.) If they pay online or contest the violation online this data will be exchanged with the Processing Application Server. Also, if a check is applied there will be an associable data exchange so the relevant record in the Violator Payment Portal will be set to "PAID".

The database on the Violator Payment Portal will secure each individual record using cryptography that relies on the citation and PIN number, so that in case the server is compromised the data is inaccessible. This feature is in accordance with the "defense in depth" methodology as required by our internal Server Security Policy.

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Additional **Materials**

COST PROPOSAL FORM

Failure to submit Cost Proposal Form, in its entirety and fully executed by the deadline established for the receipt of proposals will result in proposal being deemed non-responsive and being rejected.


Bidder affirms that the prices stated on Cost Proposal Form below represents the entire cost of the items in full accordance with the requirements of this RFP, inclusive of its terms, conditions, specifications and other requirements stated herein, and that no claim will be made on account of any increase in wage scales, material prices, delivery delays, taxes, insurance, cost indexes or any other unless a cost escalation provision is allowed herein and has been exercised by the City Manager in advance. The Cost Proposal Form shall be completed mechanically or, if manually, in ink. **Cost Proposal Forms completed in pencil shall be deemed non-responsive.** All corrections on the Cost Proposal Form shall be initialed.

The cost proposed shall be all-inclusive for the installation and implementation of a turnkey red light violation enforcement cameras system and related equipment, monitoring, service, maintenance, violation processing and mailing expenses, community awareness, collections activities, and all other costs related to the scope of work as required by the RFP.

Item	Description	(A) Est. Quantity	(B) Monthly Per Unit Fee	(C) Monthly Total (A X B)	¹ Annual Total Cost to City (C x 12)
1	Fixed Fee Per Installed Camera	10	\$ 3,250	\$ 32,250	\$ 390,000

¹Annual Total Cost to City shall be basis for allocation of cost points.

²The City may, at its sole option, request the addition of additional cameras at the fixed price offered.

Bidder's Affirmation	
Company:	Sensys Gatso
Authorized Representative:	Andrew Noble, President
Address:	900 Cummings Center, Suite316-U, Beverly MA 01915
Telephone:	978-922-7294 x210
Email:	a.noble@sensysgatso.com
Authorized Representative's Signature:	

GRANT OF EQUIPMENT
AUTHORIZATION

Certification
Issued Under the Authority of the
Federal Communications Commission
By:

CETECOM ICT Services GmbH
Untertuerkheimer Strasse 6-10
66117 Saarbruecken,
Germany

Date of Grant: 07/22/2015
Application Dated: 07/22/2015

Gatsometer BV
Claes Tillyweg 2
Haarlem, 2031CW
Netherlands

Attention: Theodorus Janssen , technology director

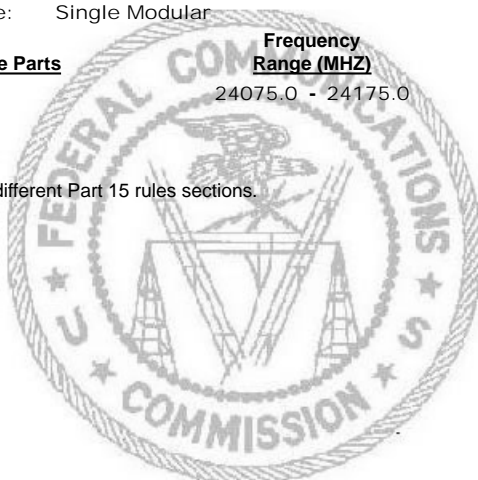
NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: TVO-RT4
Name of Grantee: Gatsometer BV
Equipment Class: Part 15 Field Disturbance Sensor
Notes: RT4
Modular Type: Single Modular

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
CC	15.245	24075.0 - 24175.0			

CC: This device is certified pursuant to two different Part 15 rules sections.



ATTESTATION OF CONFORMITY

Issued to: GATSOMETER BV
PO BOX 4659
2003 EZ Haarlem

For the product: T Series

Trade name: GATSOMETER

Type: System box

Ratings: IP65

Manufactured by: GATSOMETER BV
Claes Tillyweg 2
2031 CW Haarlem

Subject: Degree of protection provided by enclosure

Requirements: IEC 60529:1989 + A1:1999
EN 60529:1991 + A1:2000

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in test report no 2183296.01-INC issued on 4 June 2015.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 4 June 2015

Number: 2183296.01A

DEKRA Certification B.V.



F.S. Strikwerda
Certification Manager

© Integral publication of this attestation and adjoining reports is allowed

Certificate

Standard **ISO 9001:2015**

Certificate number **SZ 4600841**

TÜV Rheinland Nederland B.V. certifies the managementsystem of:

Certificate holder

Sensys Gatso Netherlands B.V.

Claes Tillyweg 2, 2031 CW Haarlem

The Netherlands

Scope

Selling, development, supply, support, maintenance, service and certification of traffic enforcement solutions.

EA Code: **19**

During the certification audit proof has been furnished that the requirements according to the above mentioned standard are fulfilled. TÜV Rheinland Nederland B.V. will regularly perform inspections.

Validity

Date of issue : **3 March 2018**

Certificate expiry : **3 March 2021**

Original approval : **12 December 1996**



Accredited by the Dutch
Council for Accreditation

C.C.M. van Houten, LSM Systems
TÜV Rheinland Nederland B.V.
Westervoortsedijk 73, 6827 AV Arnhem
P.O. Box 2220, 6802 CE Arnhem
The Netherlands



Certificate

Standard **ISO 14001:2015**

Certificate number **SY 4600841**

TÜV Rheinland Nederland B.V. certifies the managementsystem of:

Certificate holder

Sensys Gatso Netherlands B.V.
Claes Tillyweg 2, 2031 CW Haarlem
The Netherlands

Scope

Selling, development, supply, support, maintenance, service and certification of traffic enforcement solutions

EA Code: 19

During the certification audit proof has been furnished that the requirements according to the above mentioned standard are fulfilled. TÜV Rheinland Nederland B.V. will regularly perform inspections.

Validity

Date of issue : **23 April 2018**
Certificate expiry : **23 April 2021**
Original approval : **10 December 2010**



C.C.M. van Houten, LSM Systems
TÜV Rheinland Nederland B.V.
Westervoortsedijk 73, 6827 AV Arnhem
P.O. Box 2220, 6802 CE Arnhem
The Netherlands

Certificate

Standard **ISO 27001:2017**

Certificate number **SP 1119809**

TÜV Rheinland Nederland B.V. certifies the managementsystem of:

Certificate holder **Sensys Gatso Netherlands B.V.**
Claes Tillyweg 2, 2031 CW Haarlem

Scope **The support, maintenance, service and development of managed traffic enforcement systems, in accordance with the Declaration of Applicability of 4 April 2019.**

EA Code: **19**

During the certification audit proof has been furnished that the requirements according to the above mentioned standard are fulfilled. TÜV Rheinland Nederland B.V. will regularly perform inspections.

Validity Date of issue : **8 May 2019**
Certificate expiry : **8 May 2022**



C. C. M. van Houten, LSM Systems
TÜV Rheinland Nederland B.V.
Westervoortsedijk 73, 6827 AV Arnhem
P.O. Box 2220, 6802 CE Arnhem
The Netherlands



NLETS, THE INTERNATIONAL JUSTICE & PUBLIC SAFETY NETWORK

Nlets Strategic Partner
designation is approved by the Nlets Board of Directors to

Gatso USA, Inc.

Granted: May 04, 2011



Steven E. Correll, Executive Director, Nlets

CERTIFICATE OF COMPLETION

Nlets Strategic Partner

Gatso

Has Successfully Completed the 2016 Nlets Transactional History Audit

Granted: February 1st, 2017



Steven E. Correll
Executive Director, Nlets

Completed with
distinction





Declaration of Conformity

Applicant Company: Gatsometer BV
Address: Claes Tillyweg 2
2031 CW Haarlem
The Netherlands

Product description: T-Series fixed
Manufacturer: Gatsometer BV

Gatsometer BV declares, under her sole responsibility, that this product is in conformity with the following standards or standardized documents:

EMC Directive 2004/108/EG

R&TTE Directive 99/5/EG

LVDirective 2006/95/EG

WEEE Directive 2002/96/EG

RoHS II Directive 2011/65/EU

When and where issued:

Date (dd/mm/yyyy): 14-12-2015
Location: Haarlem, The Netherlands
Declaration approved by: B. Mulders
Gatsometer BV

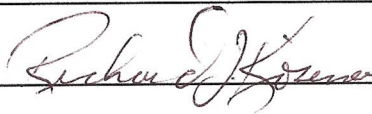
Signature: 

Florida Traffic Infraction Detector Equipment and Testing Compliance Matrix

Date: 14-Aug-13

Authorized
Official
Name (print): Richard J Kosina

Manufacturer: Gatsometer BV

Signature: 

Item, Model No.: Intersection Safety Camera, T Series (Statio)

ID No.	Section	Requirement	Item comply? (Yes/No)	Comments
1	1.3.1	TID defines 'Compliant Vehicle' as a motor vehicle that stops behind the stop bar or clearly marked stop line when facing a traffic control signal steady red indication or traveling over the stop bar or clearly marked stop line when facing traffic control signal steady green or steady yellow indications.	Yes	
2	1.3.2	TID defines 'Event' as when a motor vehicle fails to stop behind the stop bar or clearly marked stop line when facing a traffic control signal steady red indication.	Yes	
3	1.3.4	Section 316.003(87), Florida Statutes defines a TID as a vehicle sensor installed to work in conjunction with a traffic control signal and a camera or cameras synchronized to automatically record two or more sequenced photographic or electronic images or streaming video of only the rear of a motor vehicle at the time the vehicle fails to stop behind the stop bar or clearly marked stop line when facing a traffic control signal steady red light.	Yes	
4	2.1	TID captures an Event with a single vehicle in a single through lane.	Yes	
5	2.2	TID captures an Event with a single vehicle in a single through lane with the presence of multiple compliant vehicles in the same lane.	Yes	
6	2.3	TID captures an Event with a single vehicle in a single through lane with the presence of multiple compliant vehicles in the same and adjacent through lanes.	Yes	
7	2.4	TID captures multiple Events with multiple vehicles in a single through lane.	Yes	
8	2.5	TID captures multiple Events with multiple vehicles in the same and adjacent through lanes.	Yes	
9	2.6	TID meets the requirements of Sections 2.1 – 2.5 for left turn lane Events.	Yes	
10	2.7	TID is capable of identifying Events where the speed of a single vehicle or multiple vehicles making a right turn on red is more than a configurable threshold speed. Speed is in miles per hour.	Yes	
11	3.1	TID captures and stores photographic or electronic image of the intersection that includes the rear of the vehicle and license tag at a time the vehicle is in advance of the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light visible in the image.	Yes	
12		TID captures and stores photographic or electronic image of the intersection that includes the rear of the vehicle and license tag at a time the vehicle is beyond the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light visible in the image.	Yes	
13		If Right Turn on Red events are enforced, TID captures and stores a minimum of 5 seconds of streaming video of the intersection that includes the rear of the vehicle and license tag beginning at a time the vehicle is in advance of the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light and ending at a time after the vehicle is beyond the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light.	Yes	
14		At least one of the two photographic or electronic images of the license tag, including license tag state, number and specialty logo (if applicable), is clearly legible. The viewable images have a minimum pixel resolution of 640 by 480.	Yes	
15		The video has a minimum pixel resolution of 320 by 200 with a minimum frame rate of 5 frames per second.	Yes	
16		TID includes protective measures to prevent modification or unauthorized manipulation of captured and stored photographic or electronic images and video.	Yes	
17		TID does not capture nor store any front photographic or electronic images or videos of vehicle occupants.	Yes	

ID No.	Section	Requirement	Item comply? (Yes/No)	Comments
18	3.2	TID captures and stores the following Event information in English text and/or Arabic numerals: 1. Names of intersecting Street and Highways; 2. A unique identifier of the intersection; 3. Lane number; 4. Direction of travel; 5. Month, day and year of the Event; 6. Hour, minute, and second of the photographic or electronic images in the local time; and 7. The difference in time from the beginning of the traffic control signal steady red light to the associated photographic or electronic images in tenths of a second.	Yes	
19		The time of the photographic or electronic images or video are synchronized to an external source such that it is always within plus or minus one minute of Coordinated Universal Time (UTC).	Yes	
20		The alpha-numeric data and corresponding photographic or electronic image(s) are automatically captured at the same time. The data is associated with the photographic or electronic image without human intervention.	Yes	
21	4.1	The TID equipment does not interfere with any traffic control signal or other FDOT or Traffic Signal Maintaining Agency equipment. TID equipment that requires regulation by the Federal Communications Commission (FCC) meets the requirements in the 2005 Code of Federal Regulation (CFR), Title 47, Part 15, and is FCC certified. The FCC identification number is externally displayed on the TID equipment.	Yes	
22	4.2	If visible illumination is used, the power of an illuminator (flash) device does not exceed 350 watts/second.	Yes	
23	4.2	The illuminator device has the capability of being filtered and/or positioned to limit effects on the drivers' field of vision.	Yes	
24	4.3	TID cabinets and camera housings have protective measures against vandalism.	Yes	
25	5.0	If the Traffic Signal Maintaining Agency allows access to the traffic control signal cabinet, the TID does not impact operations or maintenance of the traffic control signals, pedestrian signals, or any other traffic control devices.	Yes	TID uses optical means to monitor the traffic signal phasing. Access to traffic controller cabinet should not be required.
26	5.1	Any attachment to traffic control signal cabinet wiring is electrically isolated from the traffic control signal cabinet. Electrical sensing devices are "donut" current transformers or Hall-effect devices. No other physical or electrical connections to traffic signal control circuits are allowed, including load switch driver control circuits, load switch signal circuits and detection circuits.	Yes	TID uses optical means to monitor the traffic signal phasing. Access to traffic controller cabinet should not be required.
27	5.2	All TID equipment is electrically isolated from traffic signal equipment. If the Traffic Signal Maintaining Agency allows access to the traffic control signal cabinet, a surge protective device(s) is installed on any conductive bonds between the traffic control signal cabinet equipment and the TID equipment to protect the traffic signal equipment.	Yes	TID uses optical means to monitor the traffic signal phasing. Access to traffic controller cabinet should not be required.
28		If electric power is obtained from an FDOT or Traffic Signal Maintaining Agency power service, a surge protective device(s) is installed between the TID equipment or circuit breaker and the power service. All surge protective devices and grounding systems installed meet the current FDOT Standard Specifications for Road and Bridge Construction.	Yes	
29	6.0	Testing is conducted in accordance with the manufacturer's recommendations or in accordance with the County or City testing requirements, whichever is more stringent. Testing is conducted at regular intervals in accordance with the manufacturer's recommendations or in accordance with the County or City testing requirements, whichever is more frequent.	Yes	
30		Testing includes, at minimum, System Test Function and Self Test Function.	Yes	
31	6.1	The TID activates and creates Event information consistent with an Event, when artificially activated by a system test function.	Yes	
32	6.2	The TID performs and records the results of a daily internal self test sequence that confirms proper operation of each critical system component.	Yes	
33	6.2	If the system fails on one or more portions of the internal self test, the system renders itself inoperable until a successful internal self test is recorded.	Yes	
34	7.0	The TID manufacturer provides: • Installation and/or users manual(s) required to install and calibrate all TID equipment; • Operations, maintenance and/or service manual(s) required to operate and maintain all TID equipment; • Testing results in accordance with Section 6.0 (ID numbers 30 through 33) of the Traffic Infraction Detector Equipment and Testing Specifications.	Yes	



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

06/04/2019

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 have ADDITIONAL INSURED provisions or 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 Charles River Insurance Brokerage, Inc. 5 Whittier St., 4th Floor Framingham MA 01701	CONTACT NAME: Ellen Bohn Gitlitz PHONE (A/C, No. Ext): (508) 656-1400 E-MAIL ADDRESS: pbethoney@charlesriverinsurance.com	FAX (A/C, No): (508) 656-1499
	INSURER(S) AFFORDING COVERAGE	
INSURED (978) 922-7294 Sensys Gatso USA, Inc. 900 Cummings Center Ste 2000-t Beverly MA 01915	INSURER A: Hanover Insurance Company NAIC # 22292	
	INSURER B: Charter Oak Fire Insurance Com 25615	
	INSURER C: Massachusetts Bay Insurance Co 22306	
	INSURER D:	
	INSURER E:	
INSURER F:		

COVERAGES

CERTIFICATE NUMBER: Cert ID 4173

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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			H6601N369337	01/01/2019	01/01/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> AUTOS ONLY			AMNA185020	01/12/2019	01/12/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
C	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	WDNA185027	01/12/2019	01/12/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000 \$ \$

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

RE: Red Light Violation Camera System and Related Support Services 2019-093-JC

City of Miami Beach is named as additional insured as required by written contract or agreement, subject to policy forms, terms and conditions. A thirty day notice of cancellation applies, except ten days for non payment of premium.

CERTIFICATE HOLDER**CANCELLATION**

City of Miami Beach 1700 Convention Center Drive Miami Beach FL 33139	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 
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ACORD 25 (2016/03)

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BUSINESS CONDUCT GUIDELINES

Introduction

Integrity is the keystone of the corporate values of Sensys Gatso USA, Inc. (“Sensys Gatso”). Sensys Gatso places significant trust in its Employees,¹ suppliers and business partners to be the stewards of Sensys Gatso’s good name and reputation and to act decisively if they become aware of possibly unlawful or unethical conduct, or suspect there has been a violation of Sensys Gatso’s business conduct and workplace policies. Managers play a critical role in fostering business integrity in the workplace by developing, promoting, and leading a culture of integrity in their teams.

Sensys Gatso USA provides communications channels for Employees, suppliers, business partners, and others to report concerns or suspected violations to the company. These reporting channels include mechanisms for submitting anonymous reports. Sensys Gatso does not tolerate threats or acts of retaliation against any Employee for reporting a concern or suspected violation. Any reported concern or suspected violation will be reviewed and investigated, if appropriate. Findings of misconduct will be subject to disciplinary action, which may include termination of employment or business relationship.

Work Environment

Sensys Gatso strives to create a positive and pleasant work environment. To that end, Sensys Gatso expects Employees, suppliers and business partners to act honestly and fairly, to treat others as they expect to be treated and to conduct themselves in a mature and responsible manner. To this end, Sensys Gatso has adopted workplace policies, available upon request, related to the following:

- Sensys Gatso is an equal opportunity employer and does not discriminate based upon an individual’s race, color, religion, national origin, ancestry, sex, age, marital status, sexual orientation, gender identity, handicap, disability, veteran status or National Guard or reserve unit obligations.
- Sensys Gatso is committed to maintaining a work environment free of harassment.
- Sensys Gatso is committed to maintaining a safe working environment for all Employees and visitors.

Self-Dealing and Conflicts of Interest

Sensys Gatso expects and requires Employees to be honest and fair in dealings with fellow Employees, Sensys Gatso suppliers, customers, competitors, and members of the general public. No Employee may obtain an unfair advantage over another or a competitor through manipulation, concealment, abuse of confidential information, misrepresentation of material facts, self-dealing or any other intentional unfair practice. Examples of self-dealing include, but are not limited to, filing a false expense statement,

¹ The term “Employee” as used herein, whether in the singular or the plural, includes all Sensys Gatso employees, officers, directors, agents and contractors.

accepting a bribe or kickback, copying computer software, lying to or misleading a manager or customer concerning business facts, taking company property including money, or other similar misdeeds.

Moreover, Employees owe a duty to Sensys Gatso to advance Sensys Gatso's legitimate interests when presented with appropriate opportunities to do so. Employees are prohibited from taking for themselves opportunities that are discovered through the use of Sensys Gatso property, information or position without the consent of the Board of Directors. No Employee may use Sensys Gatso property, information or position for personal gain and no Employee shall compete with Sensys Gatso directly or indirectly.

Employees must avoid conflicts of interest. A conflict of interest exists when an Employee or a member of that Employee's family is involved in a matter or has a personal interest that affects the Employee's impartiality and objectivity in making decisions concerning that Employee's duties and responsibilities as a Sensys Gatso Employee. For purposes of these Guidelines, the appearance of a conflict of interest may be treated as an actual conflict of interest.

Lobbying and Political Involvement

Employees have frequent contact with public officials. Employees must take care to avoid violating any applicable restrictions as to lobbying or acting such that they would be required to register as a lobbyist unless so registering is a requirement of their position and they have so registered.

Employees engaged in political activities must keep such activities separate from their work. If Employees are engaged in political activity of any kind, they must be careful not to use Sensys Gatso's name or resources, and ensure that such activities do not adversely affect any business relationships. In addition, Employees should exercise discretion in discussing political subjects with business contacts.

Prohibition Against Company Political Contributions

Sensys Gatso funds or assets shall not be used for political contributions of any kind, whether in the United States or in a foreign country. This prohibition covers not only direct contributions, but indirect support of candidates or political parties; e.g., the purchase of tickets for special dinners or other fund-raising events, the loan of Employees to political parties or committees, and the furnishing of transportation or duplicating services. In exceptional situations, based on the Company's need and only with the prior approval of Sensys Gatso's President, political activity may be permitted relative to matters that are: (1) lawful, (2) determined to be closely related to the interests of the Company, its Employees, or its shareholders, and (3) do not violate any applicable restrictions as to lobbying.

Fair Competition and Gifts

Sensys Gatso deals with its suppliers and customers fairly and impartially. A "gift" is a present, hospitality, free good or service, or favor for which market value is not paid by the recipient, including, without limitation, meals, drinks, entertainment, recreation opportunities, door prizes, promotional items, discounts, awards, transportation, or use of equipment, materials time or facilities. Any Employee who offers or approves the offer of a gift must ensure that the gift is proper, will not be

deemed to be an attempt to obtain an unfair business advantage and will not reflect poorly on Sensys Gatso. An Employee may not use personal funds or resources or the funds or resources of another to make a gift that cannot be made with Sensys Gatso resources.

An Employee may only accept gifts that are lawfully made. All gifts offered to and accepted by Employees belong to Sensys Gatso; provided however that an Employee may keep a gift for personal use only when the acceptance of the gift promotes Sensys Gatso's business relationships and goodwill, is consistent with applicable ethical standards, is not deemed to be an attempt to obtain an unfair advantage and will not reflect poorly on Sensys Gatso.

Working with Government Entities

Doing business with federal, state and local government is a public trust and involves a variety of procurement and ethics laws and regulations. Sensys Gatso conducts business with its government customers in strict compliance with such laws and regulations, these Guidelines and in a manner that avoids even the appearance of any conflict of interest, improper gift making, or similar impropriety. Employees shall be aware of and comply all applicable laws, rules and regulations and policies established by any governmental body for procuring products and services.

Reporting and Non-Retaliation

Employees are responsible for asking questions and seeking guidance if they have questions regarding the Guidelines or potential violations of the Guidelines. Questions should be directed to Sensys Gatso's President. Employees must act decisively if they become aware of potentially unlawful or unethical conduct, or suspect there has been a violation of the Guidelines. Employees, suppliers, partners, and others may submit an anonymous report of any concerns or suspected violations to Sensys Gatso USA, Inc. c/o Megan Taylor, 900 Cummings Center, Suite 215-U, Beverly, MA 01915 or mtaylor@westhillcounsel.com. Sensys Gatso does not and will not tolerate threats or acts of retaliation against any Employee for reporting a genuine concern or suspected violation.

Administration of these Guidelines

Each Employee is required to complete and return an annual Business Conduct Guidelines certification as a condition of employment. Any questions about these guidelines should be addressed to Andrew Noble, President, Sensys Gatso USA.

Effective June 1, 2013.

Sensys Gatso USA, Inc. ("Sensys Gatso") submits these Exceptions pursuant to Appendix C, Section C2 of the RFP and Section 36 of the Terms and Conditions for General Services Type 1, incorporated via Section 0200 of the RFP.

Section 0200 – General Conditions; Terms and Conditions for General Services – Type 1

Sec. 1(b) (General Disclaimers): Since, as part of its agreement with the City, the Proposer agrees to be bound by these Terms and Conditions for General Services (the "Terms and Conditions") under Section 0200 of the RFP (*see* RFP p. 6), the Terms and Conditions should be accurate and the Proposer should be able to rely on the Terms and Conditions and the City's compliance therewith. Therefore, Sensys Gatso proposes deleting this subsection 1(b) in its entirety and replacing it as follows:

Before submitting a response, the Proposer shall be responsible for making any and all reasonable investigations, evaluations, and examinations, as it deems necessary, to ascertain all conditions and requirements affecting the full performance of its obligations under the terms of this RFP. Ignorance of such conditions and requirements, and/or failure to make such evaluations, investigations, and examinations, will not relieve the Proposer from any obligation to comply with the provisions and requirements herein, and will not be accepted as a basis for any subsequent claim for any monetary consideration on the part of the Proposer.

Sec. 19 (Payment): This Section of the Terms and Conditions makes reference to a "Purchase Order format" but does not attach such form document. Accordingly, Sensys Gatso reserves the right to review and negotiate the terms contained in such document.

Sec. 20 (Copyright, Patents & Royalties): Sensys Gatso proposes:

(i) Replacing the phrase "liability of any nature or kind, including cost and expenses for, or on account of," with the phrase "any and all third party claims arising out of or related to" in the first sentence of this Section; and

(ii) Adding the following after the first sentence of this Section:

In the event a claim of infringement is made or appears likely to be made, the successful Proposer will either: (a) enable the City to continue to use the System, (b) modify the System to render it non-infringing; or (c) replace the System with a replacement System at least functionally equivalent. If the successful Proposer determines that none of these alternatives is reasonably available, the successful Proposer will have the right to terminate the Contract upon thirty (30) days' notice to the City.

Sec. 21 (Default): Sensys Gatso proposes inserting the phrase "fully negotiated" after the phrase "successful Proposer to execute a" in this Section 21.

Sec. 25(F) (Demonstration of Competency): Sensys Gatso will be providing its turnkey service as opposed to delivery and/or supply of goods. Accordingly, Gatso proposes deleting subsection (F) in its entirety.

Sec. 26 (Assignment): Sensys Gatso proposes adding the following to the end of this Section 26:

provided that, the successful Proposer may assign the Contract to an affiliate or in connection with a merger or sale of substantially all of the assets of the successful Proposer related to the Contract. The Contract shall bind and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

Sec. 28 (Optional Contract Usage): Sensys Gatso proposes adding the following to the end of this sentence, "*provided that* such purchases are of a similar size and scope as those set forth in this RFP and such government or non-profit agency determines that such goods and services are cost-effective and in its best interest."

Sec. 29 (Volume of Work): Sensys Gatso generally takes exception to non-exclusivity provisions to the extent they contemplate third parties installing, maintaining, or otherwise having access to its proprietary solutions. In addition, spot market purchase does not apply to the Services the successful Proposer will provide. Accordingly, Sensys Gatso proposes that this Section 29 be deleted in its entirety.

Sec. 31 (Indemnification): Due to the complexity of this project and the ever-changing legal and legislative landscape with regard to these programs, Sensys Gatso proposes deleting this Section in its entirety (except for the last two sentences regarding insurance and survival) and replacing it with a commercially-standard indemnification scheme as follows:

- a. The Contractor will indemnify, hold harmless and defend the City, its elected officials, officers, employees, agents, attorneys, representatives, and permitted assignees and all persons acting by, through, under or in concert with them (the "City Indemnitees") from and against any and all third party claims arising out of or related to: (i) any material breach of the representations and warranties of the Contractor set forth in Section X; (ii) negligence or misconduct of the Contractor or its employees, contractors, subcontractors, or agents that results in bodily injury to any natural person (including third parties) or any damage to any real or tangible personal property (including the personal property of third parties), except to the extent caused by the negligence or misconduct of the City or any City Indemnitee; and (iii) a claim that the System infringes the copyright or U.S. patent of a third party. In the event a claim of infringement is made or appears likely to be made, the Contractor will either: (a) enable the City to continue to use the System, (b) modify the System to render it non-infringing; or (c) replace the System with a replacement System at least functionally equivalent. If the Contractor determines that none of these alternatives is reasonably available, the Contractor will have the right to terminate the Contract upon thirty (30) days' notice to the City.

- b. The City shall indemnify, defend, and hold harmless Contractor and its affiliates, shareholders or other interest holders, managers, officers, directors, employees, agents, representatives and successors, permitted assignees and all persons acting by, through, under or in concert with them (including but not limited to equipment suppliers and installers) (the “Contractor Indemnitees”) from and against any and all third party claims arising out of or related to: (a) any material breach of the representations and warranties of the City set forth in Section Y; (b) negligence or misconduct of the City or its employees, contractors, or agents that results in bodily injury to any natural person (including third parties) or any damage to any real or tangible personal property (including the personal property of third parties), except to the extent caused by the negligence or misconduct of any Contractor Indemnitee; or (c) the validity of the results of the City’s use of the System or any portion thereof; or the validity of any notice of violation or traffic citation issued, prosecuted, and collected as a result of the City’s use of the System except to the extent caused by Contractor’s failure to comply with the terms of the Contract.
- c. In the event of any third party claim, action, or demand for which a party seeks indemnification from the other pursuant to this Section 31 (each a “Claim”), the Indemnitee must give the indemnifying party written notice of such Claim promptly after the Indemnitee first becomes aware of it. The indemnifying party will have the right to choose counsel to defend against the Claim (subject to approval of such counsel by the Indemnitee, which approval may not be unreasonably withheld, conditioned, or delayed) and to control and settle the Claim. The Indemnitee will have the right to participate in the defense of the Claim at its sole expense.
- d. EXCEPT FOR AMOUNTS PAYABLE WITH RESPECT TO THE INDEMNIFICATION OBLIGATIONS SET FORTH IN THIS SECTION 31: (A) NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOST PROFITS OR FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES IN CONNECTION WITH THE CONTRACT, THE SERVICES, OR THE SYSTEMS, HOWEVER CAUSED, UNDER ANY THEORY OF LIABILITY; AND (B) THE AGGREGATE LIABILITY OF EITHER PARTY FOR DIRECT DAMAGES ARISING OUT OF THE CONTRACT AND THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE LIMITED TO THE FEES PAID OR PAYABLE BY THE CITY TO CONTRACTOR PURSUANT TO THIS CONTRACT DURING THE TWELVE (12) MONTHS PRIOR TO THE EVENT GIVING RISE TO SUCH CLAIM.
- e. Contractor and the City further agree that to the fullest extent permissible by law, the Laws of the State in which the work is performed and/or the services provided shall apply to the work performed and/or services provided and the application of the Indemnification and Limitations of Liability set forth herein.

For ease of reference, Sensys Gatso proposes the following as representations and warranties under these Terms and Conditions:

Representations and Warranties:

Contractor represents and warrants that at all times during the Term of the Contract:

- a. it has the legal power to enter into the Contract;
- b. the Systems are provided and will continue to perform in accordance with this Contract;
- c. the Services described herein will be performed in a workmanlike and professional manner with due care and skill;
- d. it will perform the Services described herein in compliance with all applicable federal, State of Florida, and local laws including without limitation the Fair Labor Standards Act; any statutes regarding qualification to do business; any statutes prohibiting discrimination because of, or requiring affirmative action based on, race, creed, color, national origin, age, sex, or other prohibited classification including without limitation the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 *et seq*;
- e. it is not barred by law from contracting with City or with any other unit of state or local government as a result of delinquency in the payment of any tax administered by the Florida Department of Revenue unless Contractor is contesting, in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax;
- f. the only persons, firms, or corporations interested in this Contract as principals are those disclosed to the City prior to the execution of this Contract and that this Contract is made without collusion with any other person, firm, or corporation. If at any time it shall be found that Contractor, in procuring this Contract, has colluded with any other person, firm, or corporation, then Contractor will be liable to the City for all loss or damage that the City may suffer thereby, and this Contract will be null and void, at the City's option; and
- g. neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specifically Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specifically Designated National and Blocked Person. Contractor further represents and warrants to the City that Contractor and its principals, shareholders, members, partners, or affiliates, as applicable, are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this

Contract on behalf of any person or entity named as a Specifically Designated National and Blocked Person.

The City represents and warrants that at all times during the Term of the Contract:

- a. it has the legal power to enter into the Contract and that it has complied with any and all applicable federal, State of Florida, and local procurement requirements, including, but not limited to those set forth in the City's Procurement Policies, in connection therewith; and
- b. it will utilize the System in compliance with all applicable federal, State of Florida and local laws.

EXCEPT AS OTHERWISE PROVIDED IN THIS SECTION []:

- a. THE PARTIES EXPRESSLY DISCLAIM ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT AS WELL AS ALL WARRANTIES ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE.
- b. CONTRACTOR MAKES NO WARRANTY THAT THE SERVICES AND/OR SYSTEM WILL MEET THE CITY'S REQUIREMENTS, OR THAT THE SERVICES AND/OR SYSTEMS WILL BE UNINTERRUPTED, TIMELY, SECURE, OR ERROR FREE; NOR DOES CONTRACTOR MAKE ANY WARRANTY AS TO THE RESULTS THAT MAY BE OBTAINED FROM THE USE OF THE SERVICES AND/OR SYSTEM.

Sec. 36 (Exceptions to RFP): Since the City and the successful proposer will enter into negotiations in regard to the final terms and conditions of their Contract (*see* RFP 0100, Sec. 8 (RFP p.5)), Sensys Gatso proposes that the last sentence of Section 36 be deleted in its entirety.

Section 0300 – Proposal Submittal Instruction and Format

RFP p. 7, Sec. 3 (Omitted or Additional Information): Sensys Gatso proposes adding the phrase “as listed in the References & Past Performance section of the Questionnaire and Requirements Affidavit Form” after the phrase “client information”.

Appendix A2 – Questionnaire and Requirements Affidavit Form

RFP p. 14: For clarity, Sensys Gatso proposes deleting the phrase “Proposal Certification” from the first sentence of the Preamble of Appendix A2.

Appendix C – Minimum Requirements, Specifications & Special Conditions

C3 – Scope of Services

RFP pp. 24, 25, 26, and 27, C3 Sections 1.14, 2.4(m), (n), (o), and 3.2: Sensys Gatso will operate the System on a continuous, 24-hour basis, seven (7) days per week, except for reasonable scheduled and unscheduled downtime, including system maintenance and repairs and Force Majeure. Accordingly, Sensys Gatso proposes that each reference to “24/7” and “24 hours a day, 7 days a week” be replaced with “24/7 except during commercially reasonable system maintenance or repair periods or Force Majeure Events”. For purposes of the RFP and Contract, the term Force Majeure Event shall mean conditions or other circumstances, such as acts of God, that: (i) were not foreseen, and could not have been reasonably foreseen, by the party obligated to perform, (ii) are beyond the control of the party obligated to perform, and (iii) materially hinder or interfere with the ability of the party obligated to perform to complete performance; provided, however, that no such condition or circumstance will be a Force Majeure Event if it is the result of the fault, negligence, or material breach of this Agreement by the party obligated to perform. Examples of Force Majeure events include wars, floods, strikes and labor disputes, unusual delay in transportation, epidemics abroad, earthquakes, severe adverse weather conditions not reasonably anticipated, and delays in permitting.

RFP p. 24, C3 Section 1.26: Sensys Gatso proposes replacing the first clause of the first sentence with the following: “Firm shall provide two (2) laptops for use by personnel designated by the City to review detected violations during the Term.”

RFP p. 26, C3 Section 2.6: Sensys Gatso proposes inserting the phrase “and approval” after the phrase “after police review” in the first sentence of this section.

RFP p. 26, C3 Section 2.12: Sensys Gatso proposes adding the following sentence to the end of this Section 2.12: “If permitted by applicable law, Firm may pass through to violators any reasonable credit card convenience fees imposed upon the Firm by its suppliers for violations paid by credit card (“Credit Card Convenience Fee”).”

RFP p. 26, C3 Section 2.14: Sensys Gatso proposes replacing the term “discretion” with the term “reasonable request” at the end of this Section.

RFP p. 26, C3 Section 2.15: Sensys Gatso objects to this provision on the basis that the pricing contained in the Cost Proposal reflects efficiencies associated with exiting gateway and merchant processors. Accordingly, Sensys Gatso proposes deleting this Section in its entirety.

RFP p. 28, C3 Section 4.5: Sensys Gatso proposes replacing the term “expert” with the term “fact” regarding witness testimony.

RFP p. 28, C3 Section 5.2: Sensys Gatso proposes replacing the term “guarantee” with the phrase “use commercially reasonable efforts”.

RFP p. 29, C3 Section 8.1: Sensys Gatso proposes deleting the phrase “at no additional cost to the City” in the last sentence of this Section 8.1 and adding the following at the end of this Section:

Each camera will remain installed in a single location for a minimum of three (3) months following the expiration of any applicable Warning Period. Upon ten (10) days prior written notice from the City, Firm will move a camera to a new intersection approach identified by the City in the manner described in the Contract. The City may elect to have Firm train one (1) or more technical staff members in how to move an installed camera to a new intersection approach, including how to attach and align the camera, as well as how to coordinate with Firm personnel for necessary technical adjustments for a new camera location. Once City designees have completed such training, upon seven (7) days prior written notice from the City, such designees may relocate a camera on a mutually agreed date and time in accordance with such training to an intersection approach with a viable camera pole. The City shall be responsible for any damage to a Firm’s camera incurred during, or as a result of, any relocation by the City.

C4 – Special Conditions

RFP p. 30, C4 Section 2: Sensys Gatso proposes replacing this Section in its entirety as follows: “The City and the Vendor may agree in writing to renew the Agreement for two (2) additional one (1) year periods (each a “Renewal Term” and together with the Initial Term, the “Term”).”

RFP Page 30, C4 Section 1: Sensys Gatso proposes adding “(the “Initial Term”)” at the end of this Section.

RFP p. 30, C4 Section 5: Sensys Gatso customizes its Agreements for each municipality according to that municipality’s enabling ordinance and community safety requirements. Accordingly, Sensys Gatso proposes deleting this Section 5 in its entirety and replacing with the following:

The successful proposer covenants that the prices and material terms set forth in the resulting contract negotiated between Proper and the City shall be at least equal to (or more favorable to) the City than the prices and material terms charged by the successful proposer to other State of Florida customers with the same or substantially similar services, in type and scope, as of the Effective Date of such resulting contract.

RFP p. 30, C4 Section 6: Consistent with its cost proposal, Sensys Gatso proposes replacing this Section in its entirety with the following termination provisions:

- a. Termination By Agreement. The Agreement may be terminated at any time by the mutual written agreement of Contractor and the City.
- b. Termination For Cause. Either party may terminate the Agreement for cause if: (a) the other party has breached its obligations under the Agreement; (b) applicable law is amended to prohibit or substantially restrict the operation of automated traffic law enforcement

- systems, including the System being provided by Contractor; or (c) any court of competent jurisdiction rules that the System, or other similar systems, violates applicable law or cannot otherwise be used to enforce notices of violation or citations issued hereunder. The terminating party must provide thirty (30) days advance written notice to the other party of its intent to terminate, which notice must include the reasons for the termination. In the case of a breach of the Agreement, the notice must provide the other party with an opportunity to cure the breach within thirty (30) days after receipt of the notice. No termination fee will be required with respect to termination for cause under this paragraph. Notwithstanding the foregoing, in the event of termination based upon (b) or (c) above, Contractor may suspend the System and all associated Services immediately upon the effective date of such amendment, ruling, or determination, as applicable.
- c. Termination By City For Convenience. The City may terminate the Agreement at any time at its convenience by giving written notice to Contractor not less than thirty (30) days prior to the termination date. If the City terminates the Agreement for convenience at any time during the first year of the Initial Term, then the City must pay Contractor a fee in the amount of \$1,000 per camera (the "Termination Fee") for each month (30 days) or partial month that remains in this 180 consecutive day period as of the termination date. The Termination Fee must be paid within thirty (30) days after the Effective Date of Termination. There is no Termination Fee if the City terminates at any time after the first year of the Initial Term.
- d. Effect of Termination. Upon the termination of the Agreement, Contractor shall promptly remove all cameras provided as part of its Services, which removal shall be completed no later than thirty (30) days after the date of contract termination. In the event Contractor has installed any other hardware or equipment as contemplated by the Scope of Work, Contractor shall remove such hardware and equipment and restore the intersections to substantially the same condition as existed prior to the Agreement and repair any damage resulting from the installation or removal of Contractor hardware or equipment. Contractor shall use commercially reasonable efforts such that removal and restoration activities occur within thirty (30) days after the effective date of termination and do not unreasonably interfere with or adversely affect traffic flow.

Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. Sensys Gatso USA	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <small>(Applies to accounts maintained outside the U.S.)</small>
<input type="checkbox"/> Individual/sole proprietor or single-member LLC	<input checked="" type="checkbox"/> C Corporation
<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____	<input type="checkbox"/> S Corporation
<input type="checkbox"/> Other (see instructions) ▶	<input type="checkbox"/> Partnership
<input type="checkbox"/> Trust/estate	<input type="checkbox"/> Trust/estate
5 Address (number, street, and apt. or suite no.) See instructions. 900 Cummings Center, STE 222T	
6 City, state, and ZIP code Beverly, MA 01915	
7 List account number(s) here (optional)	
Requester's name and address (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number									
or									
Employer identification number									
7	5	-	3	2	4	9	7	8	0

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ▶	Date ▶ 3/12/19
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.