# Miovision Opticom® GPS Platform

# An advanced, scalable Emergency Vehicle Preemption solution with unmatched precision and management capabilities

Building on over 45 years of best-in-class solutions, the reliable and scalable Opticom GPS platform uses GPS positioning and radio transmission to enable faster and safer onscene arrivals for emergency responders. The Opticom GPS platform provides an advanced, dependable Emergency Vehicle Preemption (EVP) solution for departments of any size.

#### **Features**

#### **Emergency Vehicle Preemption**

Using powerful and precise algorithms, the Opticom GPS-based system provides vehicle-tointersection communications to enable reliable preemption.

Opticom EVP includes configuration and conditional programming capabilities, and offers multiple modes of communication to address obstruction or range requirements.

Opticom EVP supports distributed variants that use infrared, cellular and/or GPS-enabled intersection infrastructure.

Opticom EVP provides the ability to reduce response times by enabling a request for a green light at signalized intersections.

#### IntelliGreen for stations

Emergency personnel can preempt signals for one or more directions of traffic when leaving the station from the Opticom IntelliGreen unit. The always-ready system uses precise, secure radio/GPS signal reliability that delivers faster performance. Control intersections to the left, right or both directions from the three-button base station unit.

## Mutual aid cooperation

Nearby departments with Opticom vehicle equipment can be authorized to request preemption from intersections in adjacent regions during mutual aid responses.

#### Maintainability

When paired with Opticom CMS, software and firmware can be updated automatically or on-demand remotely, whenever vehicles are connected via Wi–Fi or a cellular modem.

#### **Multimode operation**

Multimode technology allows complete interoperability between IR and GPS

components. When authorized, emergency responders with different Opticom technologies can seamlessly activate systems in adjacent regions.

Multimode technology allows departments to:

- migrate call and configuration history for analysis and reporting
- implement a full GPS solution while maintaining EVP and transit priority via IR communications

# **Built to expand**

The Opticom GPS platform can be scaled from solving one problem corridor to outfitting an entire fleet and response area.

#### **Management And Services**

# **Managed Services**

Managed services are the services needed to keep the system up and running to achieve optimal performance. Services include:

- Hosting
- Remote monitoring
- Performance tuning
- Updates and upgrades
- Repairs and replacements
- Reporting
- Help desk support

Services are provided by GTT's client services organization.

# Central Management Software

Opticom CMS provides real-time data, so traffic engineers can retrieve activity logs, diagnose maintenance issues, upgrade firmware and troubleshoot equipment. It reduces operating costs, improves workflow and results in fewer technician trips to the field.

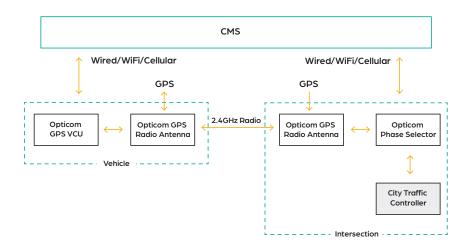
#### Warranty

From design, to manufacturing, to service and repair, every effort is made to deliver solutions that far exceed the warranty period. For complete warranty information visit www.gtt.com.

#### Typical Architectures

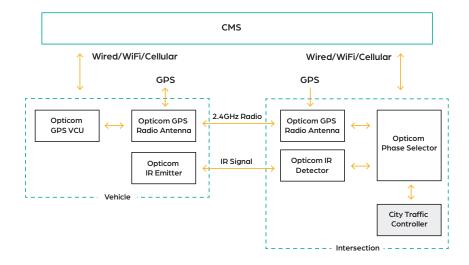
#### **GPS** system

Using Department of Defense satellites, the Opticom vehicle equipment calculates vehicle speed, heading and location. Opticom intersection equipment is programmed with and approach map to define corridors of priority control activity. As an Opticom GPS Platform–equipped vehicle enters the radio range of the intersection, the vehicles speed, heading and position information is transmitted to the intersection receiver. The preemption request is sent to the Opticom phase selector in the intersection controller cabinet where the green light is altered as needed.



# Multimode (IR and GPS) system

In a multimode system with IR and GPS components, the Opticom Vehicle Control Unit (VCU) sends a signal to the Opticom GPS radio antenna or IR emitter, which then transmits the preemption request via 2.4GHz radio or infrared light to the Opticom intersection receiver/detector. The receiver communicates with the Opticom phase selector in order to change the traffic light.



# Components

# **Intersection Compenents**

Model	Description	Product Number
764	Multimode phase selector	76-1000-1054-0
7614	Multimode phase selector-cellular	76-1000-1286-0
768	Multimode auxiliary interface panel	76-1000-1059-0
3100	Opticom GPS intersection radio unit	76-1000-1189-0
721	Detector, single channel, two directions (required for multimode operation)	78-8095-3853-7
1070	GPS installation cable	78-8125-0421-1
1060	GPS IntelliGreen control unit	76-1000-1062-0
138	IR detector cable (required for multimode operation)	78-8009-6556-4

# **Vehicle components**

Model	Description	Product Number
1050	GPS / radio antenna	78-8118-6907-8
2100	High-priority radio/GPS control unit	76-1000-1150-0
792HM	Multimode strobe emitter, high priority, multimode only	76-1000-1149-0
794HM	Multimode emitter, high priority, multimode only	76-1000-1135-0

# **Vehicle components**

Model	Description	Product Number
CMS	Central Management Software	76-1000-1305-0



For more information, visit help.miovision.com, email us at support@miovision.com, or call us NA Toll-free at 1-855-360-7752

