OPTICOM™ GPS Platform

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

DESCRIPTION
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 on-scene 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-to-intersection 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.

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

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.

The Opticom GPS Platform allows emergency responders to get on the scene safer and faster by preempting traffic signals.

About GTT

Global Traffic Technologies, LLC (GTT) is the manufacturer of Opticom priority control systems and Canoga™ traffic sensing systems.

SOLUTIONS FOR:

- Fire
- EMS
- Law Enforcement

GLOBAL TRAFFIC TECHNOLOGIES
Opticom™ GPS Platform

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 an approach map to define corridors of priority control activity. As an Opticom GPS Platform-equipped vehicle enters the radio range of the intersection, the vehicle's 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 components

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

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

#### Management components

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Product Number</th>
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<tbody>
<tr>
<td>CMS</td>
<td>Central Management Software</td>
<td>76-1000-1305-0</td>
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</table>

### 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.