



Global Traffic
Technologies

Opticom™ Infrared System

Opticom™ Model 795H Low-Profile LED Emitter

An Opticom™ Infrared System Matched Component Product

November 2008

Description

The Opticom™ Model 795H Low-Profile LED Emitter is a compact, lightweight, encoded signal device intended for use inside emergency vehicle light bars. The Model 795H is intended for installation by Original Equipment Manufacturers (OEMs) and authorized OEM installers only.

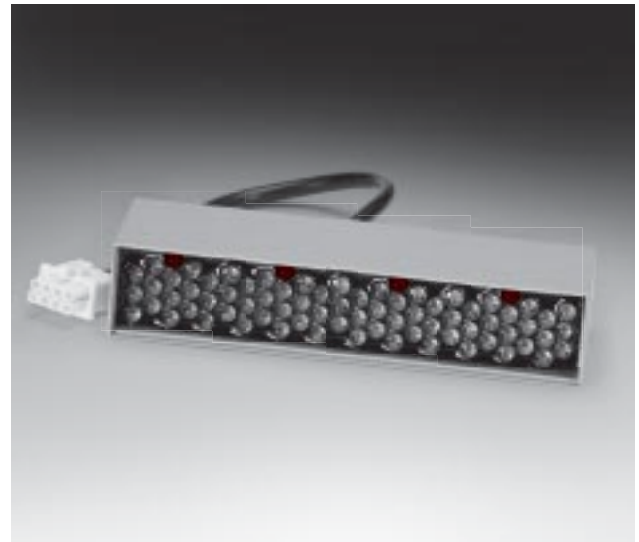
The Opticom model 795H consists of an LED emitter array with an integral power supply. Accessory switch devices are also available. The operation of the device may be customized through its interface software.

The encoded signal pattern (composed of the individual vehicle class code and vehicle identification number) generated by the Opticom model 795H is determined after installation through the use of interface software.

The Opticom model 795H separates precisely timed pulses of infrared light at the base flash rate of approximately 14 Hz. It also interleaves programmed encoded pulses that carry the vehicle class and ID number information. These additional pulses are sensed and processed by other Opticom™ Infrared System components to activate the system.

Features

- Non-visible, penetrating infrared communication
 - Directional
 - Consistent, day and night transmission
- Compact, single-source system
- Encoded signal transmission



Opticom™ Model 795H Low-Profile LED Emitter

- 10,000 discrete vehicle IDs
- Compliant with European Commission Directive EN 2004/104/EC Annex 1, Electromagnetic Compatibility for Vehicles and Trailers
- RS485, J1708 serial interface
- Low power consumption
- Mounts directly into most low profile lightbars
- Emitter disable capability, indicated by slow flashing of the emitter switch's indicator light and/or visible LEDs on the emitter
- Self-diagnostic with visual feedback through the switch's indicator light and visible red LEDs on the front of the emitter
- Cumulative flash counts available through the interface software

Accessories



Opticom™ Model 793B Switch (left) and
Opticom™ Model 793S Switch (right)

- Opticom™ Configuration Software Model 790CS
- Switches
 - Rocker-type switch for knockout/panel mounting (with simple mounting bracket – model 793B)
 - Fully enclosed pushbutton switches (with dashboard mounting bracket)
- On/Off (model 793S)
- Interface software (Download at <http://www.gtt.com/Tech-Support-Tools/Software-Downloads>
 - Available programming cable (Part #79-1000-0157-0)
- Model 793S Switch, Model 793B Switch, Customer-supplied Switch

Operating Parameters

- High priority
- 10,000 vehicle codes available
- Isolated power supply and emitter for positive or negative ground vehicle power system
- Less than 300mA peak current draw
- Self-diagnostic
- Precisely controlled high-priority flash rate of 14 Hz
- Transmission range up to 2,500 feet (762 m)
- Electrical
 - Input voltage: 10 to 32 VDC
 - Current: less than 300mA
- Environmental
 - Temperature: -30° F to +165° F (-34° C to +74° C)
 - Relative Humidity: 5% to 95%
- Vibration: SAE J575, June 2007 Section 4.2.2
- Shock: SAE J1455, 2006 Section 4.11.3.4
- Humidity: SAE J575, June 2007 Section 4.4
- Electromagnetic Emissions & Susceptibility: EN 2004/104/EC Annex 1 EMC Directive

Physical Dimensions

Depth: 1.6 in. (4 cm)

Width: 5.7 in. (14.5 cm)

Height: 1.2 in. (3 cm)

Weight: 0.5 lb. (.22 kg)

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Global Traffic Technologies (GTT) will, at its sole option, replace or refund any amounts paid for any Opticom™ Infrared System Model 795H Low-Profile LED Emitter found to be defective in materials or manufacture within two (2) years from the date of shipment from GTT.

The warranties set forth in this document shall not apply to any Opticom infrared low-profile emitter which has been (1) repaired or modified by persons not authorized by GTT; (2) subjected to incorrect installation, misuse, neglect or accident; (3) damaged by extreme atmospheric or weather-related conditions; or (4) subject to events or use outside the normal or anticipated course.

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