Optical Emitter

ST-9770 (LED)
ST-9771 (Strobe)

The EMTRAC Optical Emitters are mounted on first-response and transit vehicles to enable optical transmission of signal-priority requests. The emitter is equipped with a high-intensity LED or strobe module and integrated power supply housed in a rugged, compact, weather-resistant enclosure.

The Optical Emitter connects to the vehicle battery and the activation-sense source (for example, to the light-bar for first-response vehicles or the ignition switch or other location for transit vehicles).

The emitter may also connect to the EMTRAC Vehicle Computer Unit (VCU) to allow activation based on pre-defined detection zones. The EMTRAC Optical Emitter is also available with various light sources and mounting options

Optical Emitter with Magnetic-Mount Base*

Features

- Compatible with all major brands of wayside-mounted optical-detection hardware.
- Installation options range from basic optical-only performance, GNSS-assisted activation, and dual RF/optical capability.
- Transmits both low and high priority signals, with the transmitting priority levels configurable through the EMTRAC Systems Manager software.
- Configurable to transmit encoded and non-encoded signals to communicate specific vehicle IDs and classes.
- High-intensity LED and strobe options provide reliable directional operation regardless of outdoor lighting conditions.
- Multiple enclosure styles allow for mounting flexibility to best utilize the available cab or compartment space.

Specifications

Dimensions (without magnetic base) and Operation	
Height:	2.75 in. (70 mm)
Width:	3.5 in. (89 mm)
Depth:	3.0 in. (77 mm)
Weight:	1.5 lbs (0.68 kg)
Cable Length:	15 ft (4.57 m) standard; Custom lengths available
Operating Temp:	-34°C (-30°F) to +74°C (+165°F)
Humidity:	5% to 95% Relative

Power and Connections	
Watts:	12
Voltage:	9 - 42 VDC
Current:	1A max (at 12 volts), 0.5A max (at 24 volts)
Construction:	Aluminum enclosure, polycarbonate lens
Connections:	4-Connection CPC (circular plastic connector)

**Magnetic base optional*