Optical Sensors
ST-9730, ST-9731, ST-9732
Data Sheet

The EMTRAC Optical Sensor detects optical strobe signals from vehicle-mounted emitters and outputs the interpreted signals through the attached Sensor Cable (ST-9734) to the cabinet-mounted EMTRAC Priority Detector.

The Optical Sensor may be mounted on mast arms, span wire, or other appropriate structure with a direct, line-of-sight view of the intersection approach.

EMTRAC Optical Sensors detect optical pulses from both EMTRAC and non-EMTRAC vehicle emitters. The Optical Sensor is fully compliant with NEMA TS2 standards and is encapsulated in a rigid weatherproof enclosure and is supplied with all hardware and sealing gaskets.

In addition to the sensor, the EMTRAC Optical System also comprises the control-cabinet mounted Optical Detectors, which are available in two-channel (ST-9320), four-channel (ST-9340), and Dual-Function (RF/optical) models. The EMTRAC Optical System is the preferred method for signal-priority control for agencies looking to update existing optical systems, while adding the ability to detect multiple types of legacy emitters.

Specifications

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<tr>
<th>Detection Range</th>
<th>2,500 ft (762 m) max.</th>
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<td>Field of View</td>
<td>16° Conical, 60° Conical Available</td>
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<tr>
<td>Power</td>
<td>+17 to +30 VDC</td>
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| Wiring                   | Blue: GROUND
                          | Yellow: DIRECTIONAL SIGNAL
                          | Orange: +17 to +30 VDC
                          | Un-insulated (bare): TWIST WITH BLUE WIRE AT CONTROL CABINET |

*System specifications subject to change.*

**Temperature Range**
-30° to 165° F (-34° to +74° C)

**Humidity**
5% to 95% relative

**Dimensions**
H-6.0’ (153 mm), W-1.5’ (38 mm), D-8.5’ (216 mm)

**Weight**
1.0 lb. (454 g)

**Enclosure**
All circuitry is encapsulated in environmental protective polyurethane.

**Installation**
Internal four-connection terminal block.
Shielded 3 cond. sensor cable for control cabinet run. 3/4” mounting aperture at sensor base.