



Smart Crosswalk™

LightStar™ M11 LED IRWL Light Fixture

Part Number: LGS-M11

Description: IRWL - In Roadway Warning Light fixture

Application Notes:

The LightStar™ M11 LED light fixture is designed to fit tightly into the protective base plate. It easily connects to the electrical cable system wires. The interior of the light fixture unit is designed with double redundancy, isolating the solid state electronics and sealed LED modules from environmental moisture and corrosive intrusion. The light fixture is fastened to the base plate with stainless steel socket head ¼"-20 screws with thread locks and factory applied anti-seize compound to the screws.

The LightStar™ M11 features a clear polyurethane light exit surface and the Debris-Free Self Clearing™ design of the base plate helps to protect against blockage of the light fixture.

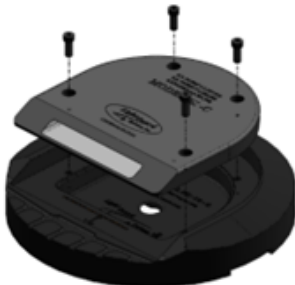

Each individual IRWL faces away from the crosswalk and points in the direction of oncoming motorists' line of sight (NOT straight forward). The result is a slightly different, uniquely pointed angle for each IRWL. A typical IRWL system employs several light fixtures on both sides of the crosswalk, using a MUTCD approved flash rate. The flashing LED light beams are highly visible both day and night. Refer to our published IRWL crosswalk layout diagrams for additional visual placement details. Our recommended layout patterns comply with the US Federal Highway Administration Manual and the Uniform Traffic Control Devices (MUTCD).

The LightStar™ M11 activates via automatic activation pedestrian detection bollards, manual & APS push buttons, or RAD devices.

Features/Benefits:

- 15 High-intensity LEDs per light fixture
- Visible up to 1,000 feet
- Easily mounts to in-roadway base plate
- 12 VDC operation
- Rugged with minimal maintenance
- simple electrical connections
- LED: ultra bright 100,000 hrs
- Enlighten1 flash rate (controller)
- Compliant with MUTCD Chapter 4, Section

General Performance Specifications

Parameter	Flashing Amber LEDs	Typical Mounting to Baseplate	Baseplate Illumination
Visibility	30° viewing angle (± 15°)		
Light Intensity	118cd; visible up to 1 mile		
Operating Temp	-20° to 50°C		
Operating Voltage	10VDC to 13.5VDC		
DC Current @ 12 VDC	<0.2 A nominal		
Avg Power Dissipation	2.5 W max		
Housing material	Nylon reinforced Thermoplastic		
Housing color	Black		
LED color	Amber, 595 nm		

Model # Reference Table Reference Table

LGS P/N	Description	Voltage
LGS-M11-R	In-Roadway Warning Light: Red	Min 9 VDC; max 10 VDC
LGS-M11-A	In-Roadway Warning Light: Amber —wavelength 590 nm—600nm	Min 10 VDC; max 13.5 VDC
LGS-M11-W	In-Roadway Warning Light: White	Min 11 VDC; max 11.5 VDC

Usage Notes and Limitations:

The LGS IRWL designed to operate in a pulsed manner for compliance with MUTCD Chapter 4N. MUTCD states that steadily illuminated lights installed in the roadway surface are considered to be Internally Illuminated Raised Pavement Markers (IIRPM). When any LGS IRWL are used as IIRPM instead of IRWL, the manufacturer's warranty will not apply. Additionally, if customers operate any LGS IRWL as IIRPM, the drive voltage should be controlled/reduced so as to limit the current/power consumed (with commensurate reduced brightness) to mitigate the risk of higher thermally induced failure rates.