



LED Traffic Signal Module

Arrows

LD and MF Series

The Leotek Advantage

Position horizontally, vertically, or in an angular orientation. "Fail-State Impedance" design to ensure controller and monitor compatibility in the event of loss of light output.



LD Series



MF Series

Features and Benefits

- Environmentally friendly
- Significant energy and maintenance savings
- Intertek ETL verified
- 12" modules
- Tinted or clear lens options
- Multiple connections available for specific applications
- Exceptional color uniformity and readability
- Excellent moisture and dust resistance through complete O-ring sealing
- Robust hard-coated and UV-stabilized polycarbonate lens for increased longevity against the elements
- Engineered aluminum heat sink for optimum thermal management
- Built-in Constant Current Source (CCS) provides uniform light output from the first to the last modules
- Maintains 70% of the initial lumen intensity after 100,000 hours of operation
- 5-Year Limited Warranty

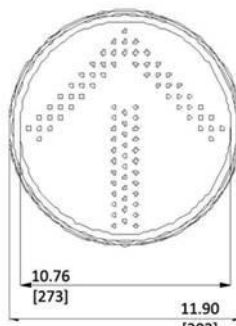
Technical Data

Operating Temperature:	-40°F to 165°F (-40°C to 74°C)	Turn-On/Turn-Off Time:	<75msec
Operating Voltage:	80 - 135Vac	Turn-Off Voltage:	>35Vac
Power Factor:	>0.90	Total Harmonic Distortion (THD):	<20%

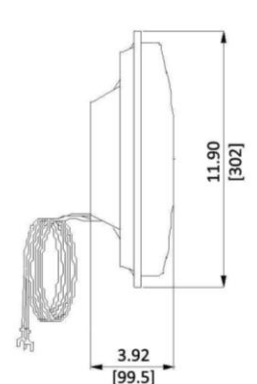
Mechanical Dimensions [in(mm)]



LD Series



MF Series










LD, MF Series

Model Specifications and Ordering Options

Example: TSL-12RA-LD-A1

TSL-(SIZE/TYPE)(COLOR)(ARROW)-(SERIES)-(VOLTAGE)

Model Number and Color	Wattage Drawn	Voltage	Dominant Wavelength	Maintained Intensity (cd) Min.	Standard
12 inch					
TSL-12RA-LD-A1 ² 	7	80-135Vac	626	56.8	ITE 2007/Caltrans/ETL ¹
TSL-12YA-LD-A1 ² 	12	80-135Vac	589	141.6	ITE 2007/Caltrans/ETL ¹
TSL-12GA-LD-A1 ² 	7	80-135Vac	500	73.9	ITE 2007/Caltrans/ETL ¹
TSL-12RA-MF-A1 	7	80-135Vac	626	58	ITE 2004/Caltrans
TSL-12YA-MF-A1 	8.5	80-135Vac	589	146	ITE 2004/Caltrans
TSL-12GA-MF-A1 	6.5	80-135Vac	500	76	ITE 2004/Caltrans
TSL-12BM-LD-A1 	6.5 7	80-135Vac	589 500	141.6 73.9	N/A

Options: Tinted lens standard, clear lens optional.

² When ordering clear lens: On LD ETL Verified models, please add “-CLR” to model number. For MF models, please indicate “clear lens.”

¹Intertek ETL Verified

Standard Conformance

- FCC Compliant for Electrical Noise
- MIL-STD-810F Moisture Resistant
- MIL-STD-883 Mechanical Vibration
- NEMA TS2 Transient Voltage Protection over 2000V



V16-111111

Information provided subject to change without notice.