



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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TSM-100 Series In-Fixture Dimming Sensor

Stand-alone Line Voltage Control with PIR Occupancy Sensor

Rev 8-14-2017

**Intelligent Device
ECOSYSTEM**
classic

In-Fixture Sensor Electrical Specifications

Input Voltage Range:	120-277Vac @ 50/60Hz
Relay Load Ratings:	Max 800W @ 120-277VAC
AC Relay Inrush Current:	≤ 221A
Standby Time Delay Periods:	10secs, 1min, 5mins (default), 15mins, 30mins, 60mins
Dimming Time Delay Periods:	1min, 30mins, 60mins (default), off (dimming always on)
Dimming Levels:	0%, 10%, 20% (default), 30%
0-10VDC Dimming Current:	Max 100mA (sink)
Photodiode Sensitivity Range:	1-185 fc
Operating Temperature:	-40 - 131 °F
Operating Humidity:	20-90% non-condensing
Weatherproof Rating:	IP66 (if fully installed inside rated fixture)
Weatherproof Rating:	Class 2
Regulatory Code Compliance:	California Title 24

External Sensor Electrical Specifications

Product Type:	External Photodiode
Sensitivity Range:	1-185 fc
Connector Type:	3-pin
Wire Lead Length:	17.72 inches
Operating Temperature:	-40 - 131 °F
Operating Humidity:	20-90% non-condensing
Weatherproof Rating:	IP66 (if fully installed inside rated fixture)
Weight:	5.38 oz. (152.4 grams) plus lens

- Line voltage on/off control of lighting fixtures
- 0–10V dimming control compatible with dimmable LED drivers and fluorescent ballasts
- Standby time delay duration (10sec to 60min) before activated PIR sensor dims light and motion is no longer detected
- 1 to 60 min and 24 hr dimming time delay for dimmed lighting
- Photodiode accessory measures ambient light and observes threshold set at measured or preset light levels
- Built-in quick installation testing mode
- Non-volatile memory, remembers settings even if AC power to module is removed
- IR remote control allows quick setup, settings adjustment, and manual on/off override
- Multiple lenses available for different coverage areas
- Compact, UV resistant, flame retardant, impact resistant, and recyclable polycarbonate construction
- IP66 rated for use in outdoor/wet locations when fully installed in equivalent rated fixture
- Recommended max. fixture wall thickness <0.125" [3.18mm] for optimal mounting and performance
- TSM mounts inside the bottom of light fixture
- 5 year warranty



IP66 TITLE 24



TSM-100-DR

TSM-100-PC

Part	Model	Description
93057510	TSM-100P-DR	In-Fixture, PIR Sensor with 0-10V Dimming

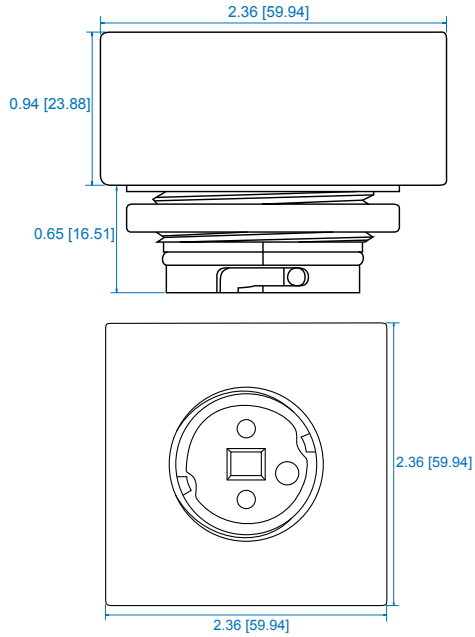
Part	Model	Accessory
93057511	TSM-100-L1	Lens #1, Optimized for 8-12 ft Mount Height, 0.4 oz
93057512	TSM-100-L2	Lens #2, Optimized for 12-40 ft Mount Height, 0.4 oz.
93057513	TSM-100-PC	External Photocell Daylight Sensor, 0.5 oz.
93057514	TSM-100-RC	Handheld IR Remote Control, 2.5 oz.

Safety Cert.	Standard
UL/CUL	UL8750 & CAN/CSA C22.2 No. 250.13
EMC Standard	Notes
Withstand Voltage Relay	Input to Output Across Relay Contacts: 700 Vac
Withstand Voltage AC In to Dim Out	Input to DIM: >1750 Vac
Dimming Circuit	UL & cUL Isolated Class 2, Dim+ Purple/Dim- Gray
FCC Part 15	Class B

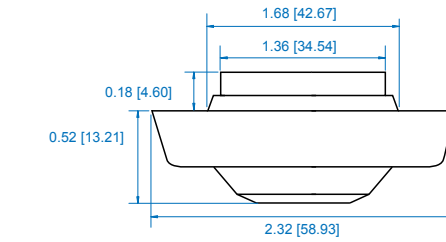


Dimensions

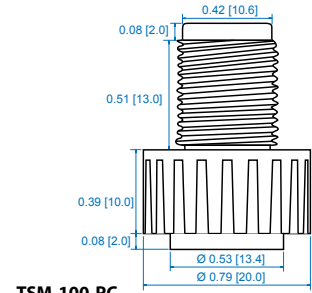
IN [mm]



TSM-100P-DR

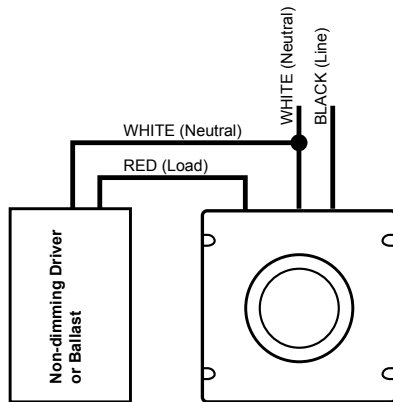


TSM-100-L1 or TSM-100-L2 Lens

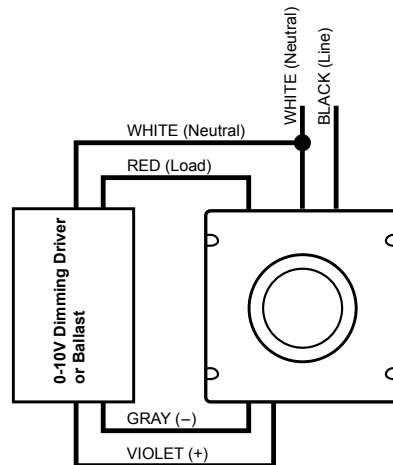


TSM-100-PC

Typical Application Wiring

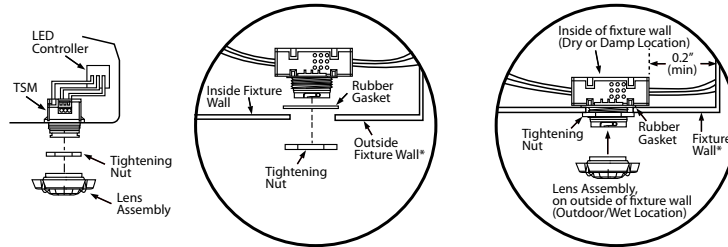


TSM-100P-DR Non-dimming



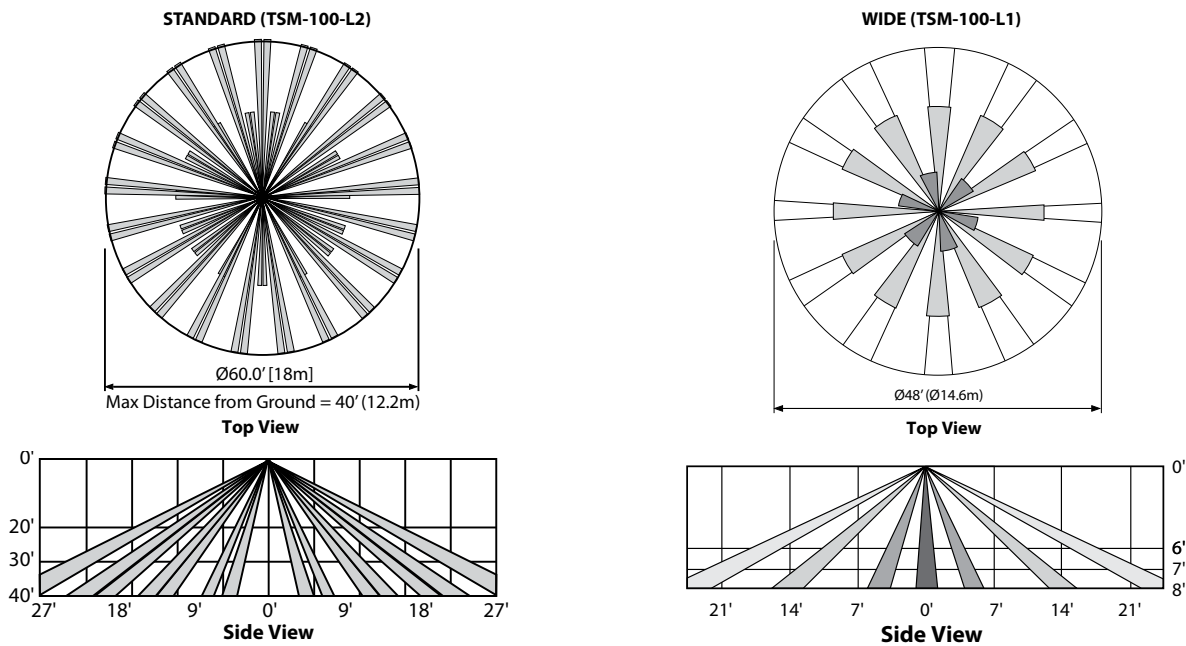
TSM-100P-DR Dimming

TSM-100P-DR Mounting



* Recommended <math><0.125\text{''}</math> [3.18mm] maximum fixture wall thickness for optimal mounting and performance
(UL Certified Outdoor Enclosure)

Coverage Patterns



Operating the Remote

<p>OVERWRITE LIGHT OFF keeps light off (sensor returns to previous state after 20m uninterrupted by motion)</p> <p>OVERWRITE LIGHT ON keeps light on (sensor returns to previous state after 20m uninterrupted by motion)</p> <p>SET SENSITIVITY LEVEL relative PIR element detector sensitivity</p> <p>SET STANDBY TIME DELAY duration before activated sensor dims light once motion is no longer detected</p> <p>SET AMBIENT LIGHT THRESHOLD detection cut-off point when light is kept off: disabled (sun icon), 1, 3, or 5 footcandles</p> <p>SET DIMMING TIME DELAY duration in which light is dimmed before being turned off completely</p>	<p>Light Control</p>	<p>ENABLE AUTO MODE Sensitivity = 100%, Standby Time Delay = 5m, Dimming Time Delay = 24h (none), Dimming Level = 20%, Ambient Light Threshold = 5 footcandles</p> <p>RESET SENSOR TO FACTORY SETTINGS Sensitivity = 100%, Standby Time Delay = 5m, Dimming Time Delay = 60m, Dimming Level = 20%, Ambient Light Threshold = disabled</p> <p>TEST SENSOR turns off light if already on, turns on light for 5 secs if motion is detected, turns off light (process repeats for 2m)</p> <p>RECORD AMBIENT LIGHT THRESHOLD set detected light level as threshold to turn on light (sensor will not turn on light if amount of ambient light equals or exceeds recorded level)</p> <p>SET DIMMING LEVEL light dimming level after time delay has passed (sensor dims light to save energy)</p>
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