

TSM-100 Series In-Fixture Dimming Sensor

Stand-alone Line Voltage Control with PIR Occupancy Sensor

HUBBELL Lighting Components

Rev 4-15-2018

In-Fixture Sensor	Electrical Specifications
Input Voltage Range:	120-277Vac @ 50/60Hz
Relay Load Ratings:	Max 400W @ 120-277VAC
AC Relay Inrush Current:	≤ 221A
Standby Time Delay Periods:	10secs, 1 min, 5 mins (default), 15 mins, 30 mins, 60 mins
Dimming Time Delay Periods:	l min, 30mins, 60mins (default), off (dimming always on)
Dimming Levels:	0%, 10%, 20% (default), 30%
0-10VDC Dimming Current:	Max 100mA (sink)
Photodiode Sensitivity Range:	I-185 fc
Operating Temperature:	-25°C to +45°C
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 E	lectrical Specifications
Product Type:	External Photodiode
Sensitivity Range:	I-185 fc
Connector Type:	3-pin
Wire Lead Length:	17.72 inches
Operating Temperature:	-25°C to +45°C
Operating Humidity:	20-90% non-condensing
Weatherproof Rating:	IP66 (if fully installed inside rated fixture)
Weight:	5.38 oz. (152.4 grams) plus lens



- 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
- I 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



 Part
 Model
 Description

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

Part	Model	Accessory
93057511	TSM-100-LI	Lens #1, Optimized for 8 ft Mount Height, 0.4 oz (Parking Garage Lens)
93057512	TSM-100-L2	Lens #2, Optimized for 8-40 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-
FCC Part 15	Class B





TSM-100 Series In-Fixture Dimming Sensor

Stand-alone Line Voltage Control with PIR Occupancy Sensor



HUBBELL Lighting Components

Dimensions



Typical Application Wiring



Hubbell Lighting Components • 1225 Bowes Rd • Elgin, IL 60123 • T 847-515-3057 • F 847-515-3047 • hubbelllightingcomponents.com Copyright © 2018 Hubbell Lighting Components, a division of Hubbell Lighting, Inc. All rights reserved. HUBBELL



TSM-100 Series In-Fixture Dimming Sensor

Stand-alone Line Voltage Control with PIR Occupancy Sensor

HUBBELL Lighting Components

TSM-100P-DR Mounting



* Recommended <0.125" [3.18mm] maximum fixture wall thickness for optimal mounting and performance (UL Certified Outdoor Enclosure)

Coverage Patterns



TEST SENSOR

TEST

0

5

30%

. 60m turns off light if already on, turns on light for 5 secs if motion

is detected, turns off light (process repeats for 2m)

 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)

 SET DIMMING LEVEL light dimming level after time delay has passed (sensor dims light to save energy)

Hubbell Lighting Components • 1225 Bowes Rd • Elgin, IL 60123 • T 847-515-3057 • F 847-515-3047 • hubbelllightingcomponents.com Copyright © 2018 Hubbell Lighting Components, a division of Hubbell Lighting, Inc.All rights reserved.

10s

15m

24h

EI AV

≧ 0%

once

SET STANDBY TIME DELAY

motion is no longer detected

duration before activated sensor dims light

SET AMBIENT LIGHT THRESHOLD

detection cut-off point when light is kept off:

disabled (sun icon), 1, 3, or 5 footcandles

duration in which light is dimmed before

SET DIMMING TIME DELAY

being turned off completely

1m

30m

1

10%

1m

5m

60m

3

20%

