DATA SHEET

Wireless Dimming Fixture Mount PIR Sensor

Suitable for indoor use only

E341446

Overview

- PIR sensor
- Mount in Fixture
- Bluetooth® SIG mesh
- High-End Trim, Zoning, Continuous Dimming
- LED Motion indicator
- Active High output for Relay drive
- Mounting height of 10ft (3m)
- Conforms with DLC NLC5 Cybersecurity Standards

Applications

The PSC-BL-I-RT-DC0-BLE-SR uses digital PIR Occupant Sensor Architecture and Dual Element passive infrared (PIR) technology for improved detection coverage for indoor ceiling, or acoustical tile mount applications. The sensor is ideal for LLLC (Luminaire Level Lighting Control) strategies in larger areas like open offices, cafeterias, corridors where it is desired to maximize granular energy savings.

The PSC-BL-I-RT-DC0-BLE-SR is a Class 2 Device designed to satisfy CA Title 24 requirements for dimming* of lighting fixtures.

The sensor is suitable for a variety of indoor applications. It supports fixture mounting heights up to 10ft (3m). Both sensor and power pack are rated for use in temperatures ranging from -30° to 70° C and relative humidity from 90 to 95% at 30°C.

For Ceiling Mount Version see data sheet PSC-BL-I-RT-DC0-BLE-S-CM.

*For dim to off, mwConnect PacWave™ Power Pack or LED dimming driver capable of dimming to off is required.

Sensor Operation

TruBlu™ Mesh Controls: Qualified by Bluetooth SIG for its Bluetooth Mesh 1.0.1 specification, the sensor connects to a Bluetooth mesh network and is accessed via the TruBlu web portal or mobile app for initial design, setup and scheduling, as well as subsequent parameter adjustments.

Advanced functionality such as energy monitoring, and demand response is available with the optional TruBlu Gateway.

Dimming: 0-10V dimmer connects to 0-10V control on the LED driver.

Relay Control: An additional Control High Output can be used to trigger relays or other control circuitry.

See the TruBlu Commissioning User Manual for more information.

Accessories

Power Pack: The PSC-BL-I-RT-DC0-BLE-SR-CM operates on 12-24VDC input and requires a separate mwConnect PacWave™ power pack. See mwConnect PacWave™ Power Pack data sheets.

Alternatively, the sensor can also operate with a driver that has a12V auxiliary output.

Summary

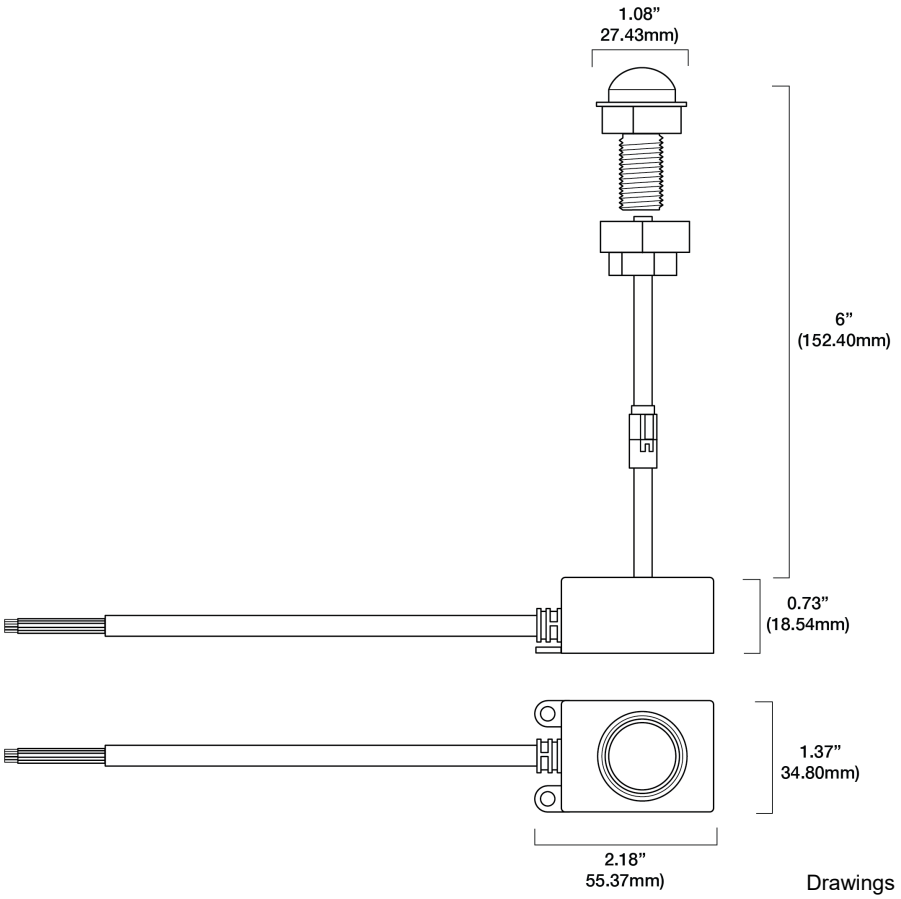
Sensor Type: PIR Occupancy/Vacancy Sensor
Input Voltage | Current Consumption: 12-24 VDC | 50 mA
0-10V Output: 30mA
Output: Active High Vin-2.5V 30mA source
Mounting Height: Fixture mounting height at 10ft (3m)
Max Sensor Range: 10ft (3m) radius
Max Bluetooth Range [1]: 100ft (30.4m)
Operating Temperature: -30° C to 70°C
Storage Temperature: -40° C to 80°C
Relative Humidity: 90-95% non-condensing
Color: White
Warranty: 5 years

Note:

1. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

Project	
Location/Type	

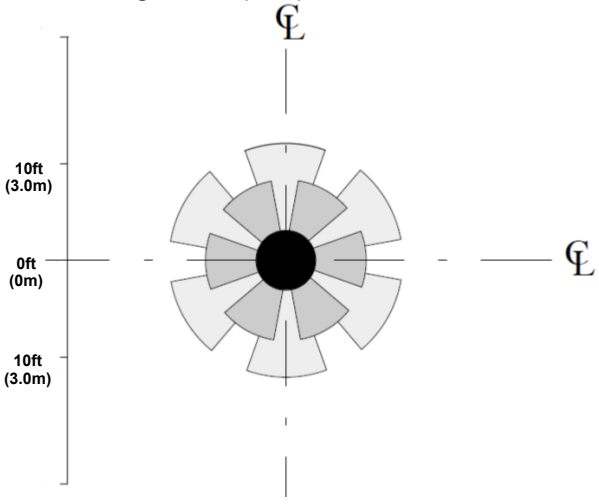
Physical Dimensions



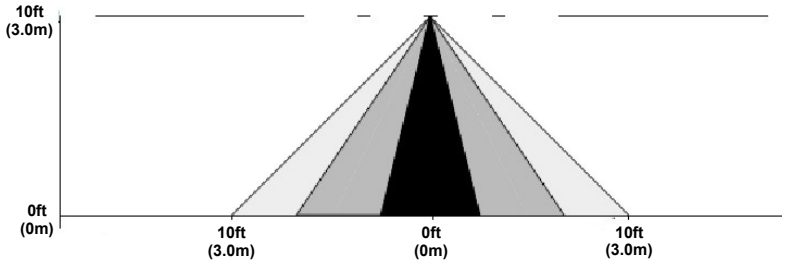
Drawings are Not to Scale

Detection Area

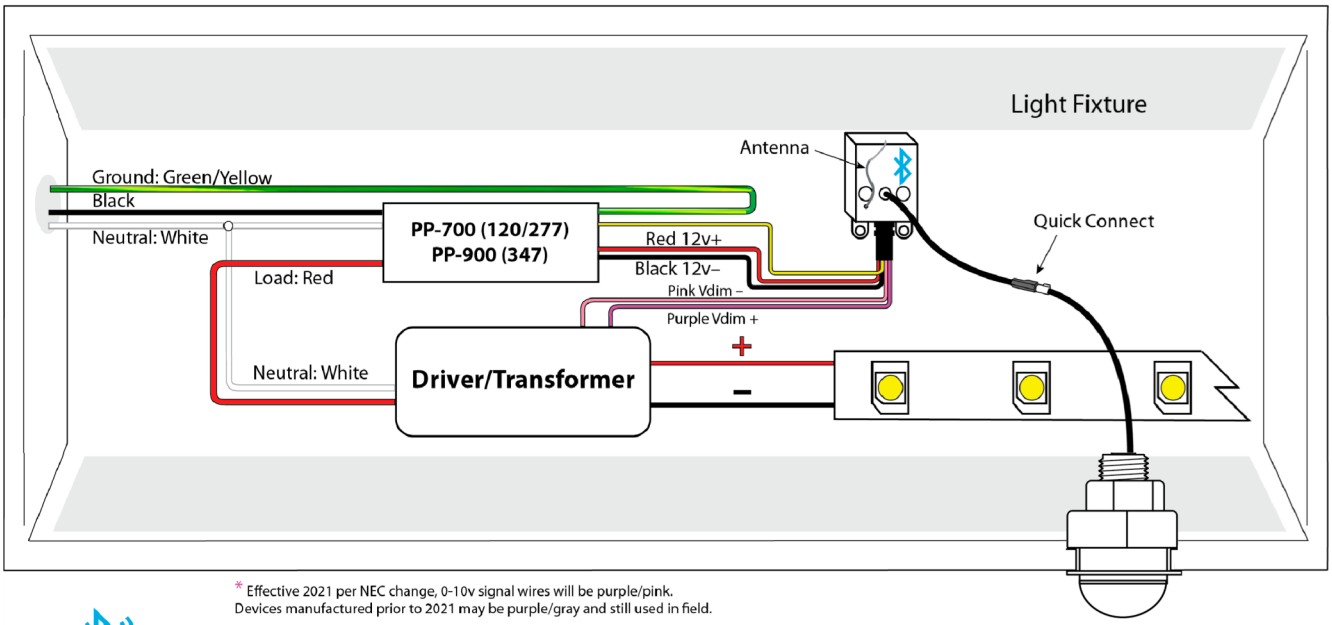
Floor Coverage at 10 ft (3.0m)



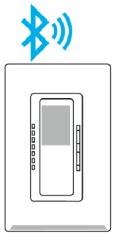
Side View



Wiring Diagram and Fixture Mount



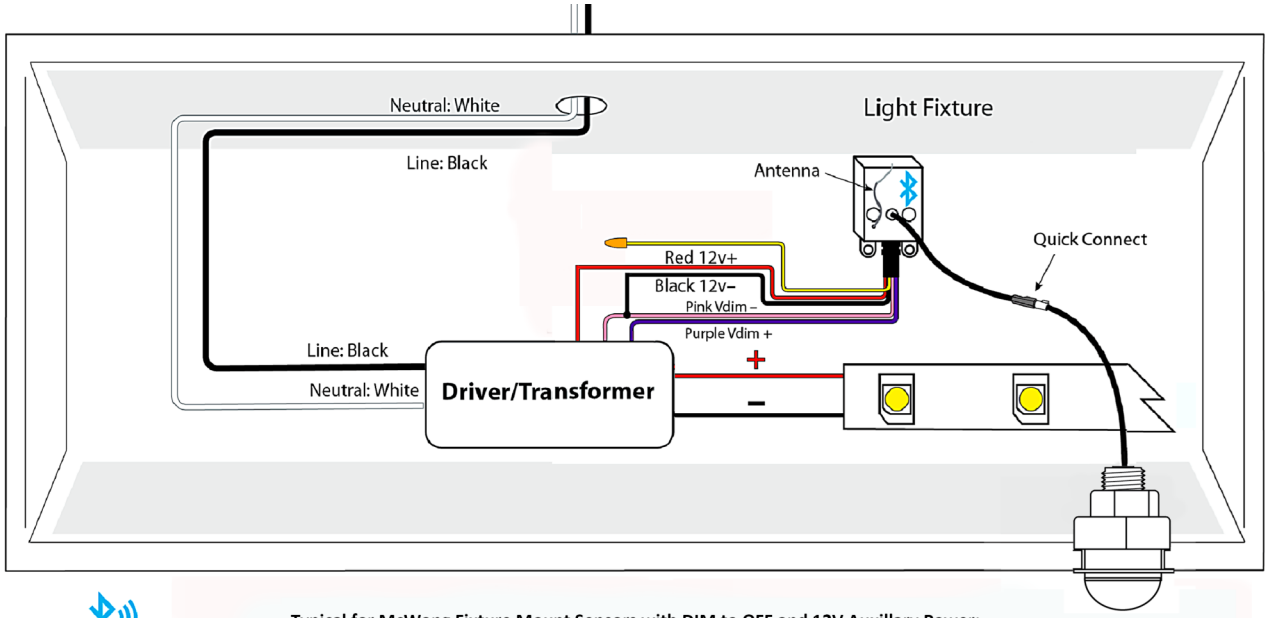
* Effective 2021 per NEC change, 0-10v signal wires will be purple/pink.
Devices manufactured prior to 2021 may be purple/gray and still used in field.

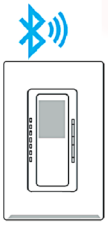


0-10 Volt Dimming Driver, PP-700 or PP-900,
PIR Sensor

PSC-BL-I-RT-DC0-BLE-SR
Fixture Mount PIR

Dim to Off Driver with 12v Auxiliary Power

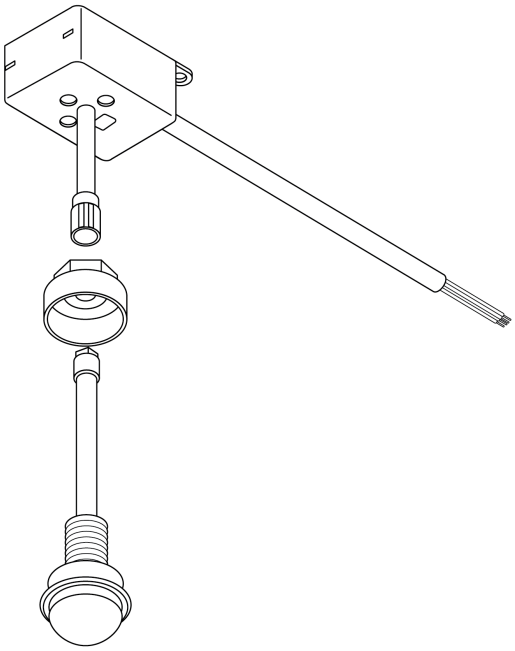


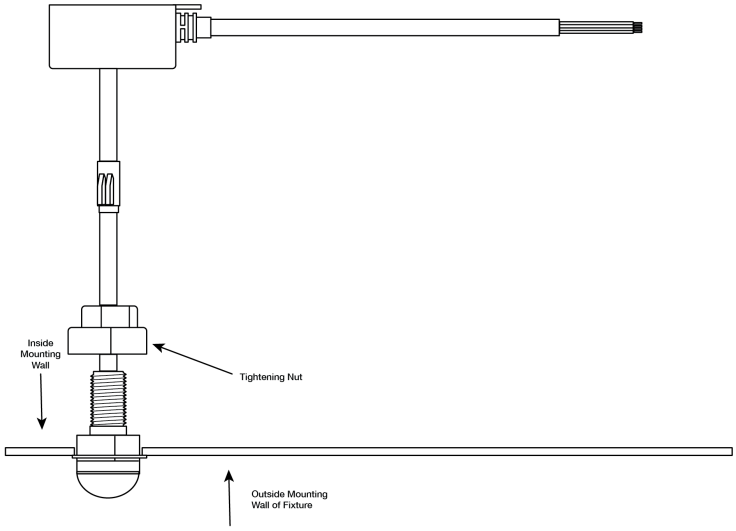


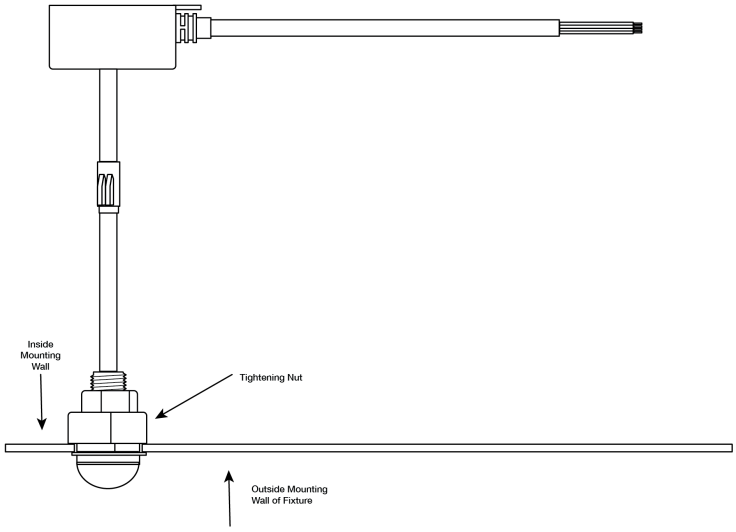
Typical for McWong Fixture Mount Sensors with DIM to OFF and 12V Auxillary Power:
PSC-BL-I-RD-DC0-BLE-SR, PSC-BL-RT-DC0-BLE-SR

LED DIM to Off with 12v Auxilliary Output
Fixture Mount Sensor, Wireless Dimmer

Installation Fixture Mount

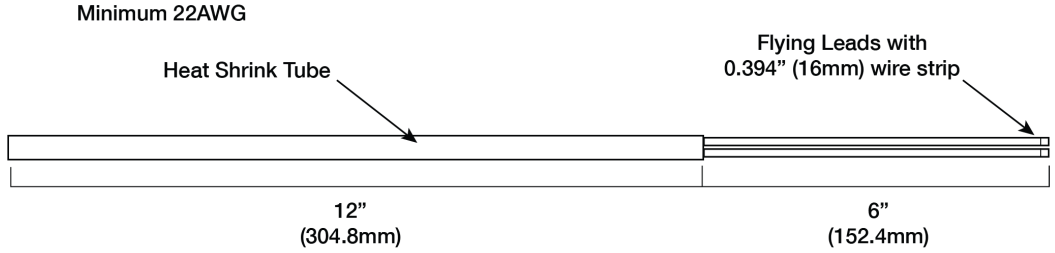






For ceiling mount version see data sheet PSC-BL-I-RT-DC0-BLE-SR-CM.

Leads



How to Order

Model No.	Description	Input Voltage	Dimming Output	Output
PSC-BL-I-RT-DCO-BLE-SR	Passive Infrared (PIR) Fixture Mount Occupancy Sensor, TruBlu,™ Silvair technology partner	12-24VDC	0-10V, 30mA	Active High

For Line to Low Voltage Power Supply/Controller, please see mwConnect PacWave™ Power Pack data sheets.
Design and specifications are subject to change without notice.