DATA SHEET

Wireless Dimming PIR Fixture Mount High/Low Bay Sensor

Suitable for indoor or outdoor[1] use

E341446

Overview

- Low Profile PIR sensor
- Mounts in Fixture
- Bluetooth® SIG mesh
- High-End Trim, Zoning, Continuous Dimming
- Integral Ambient Photo Sensor
- LED Motion indicator
- Active High output for relay drive
- Mounting height up to 40 ft (12.2 m)
- Conforms with DLC NLC5 Cybersecurity Standards

Applications

The PSC-BL-I-FM-DC0-BLE-SR (standard) uses PIR Motion Detector Architecture and passive infrared (PIR) technology for improved detection coverage for ceiling or fixture mount, high bay, and low bay applications.

The PSC-BL-I-FM-DC0-BLE-SR features an integral photo sensor and 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 (HB) up to 40 ft (12.2 m) high. 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.

Accessories

Power Pack: The PSC-BL-I-FM-DC0-BLE-SR operates on 12-24 VDC input and requires a separate power pack such as the mwConnect PacWave™ PSC-AC-PP-200/400/700C/800/900.

Alternatively, the sensor can operate with a driver that has an auxiliary output (12 V).

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 High Control output can be used to trigger relays or other control circuitry.

[1]**Outdoor use:** When using the sensor in an outdoor application, the sensor body must be mounted in a sealed enclosure while the sensor lens and collar can be mounted outside.

See TruBlu™ Commissioning User Manual for more info.

*For dim to off, mwConnect PacWave™ PSC-AC-PP-200/700C/900 Power Pack or LED dimming driver capable of dimming to off is required.

Summary

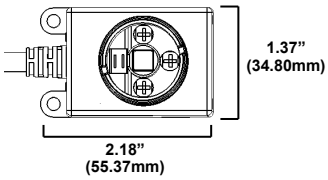
Sensor Type: PIR occupancy sensor with ambient photo sensor (30-10,000 lux operating range)
Input Voltage | Current Consumption: 12-24 VDC | 50 mA
0-10V Output: 30 mA
Output: Active High Vin-2.5 V 30 mA source
Mounting Height: - High Bay: Fixture or ceiling mount max to 40ft (12.2m) Mounting Height: - Low Bay: Fixture or ceiling mount max to 30ft (9.1m)
Max Sensor Range: High Bay: 70ft (21.3m) radius Max Sensor Range Low Bay: 60ft (18.2m) radius
Max Wireless 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 at 30°C
Color: White
Warranty: 5 years

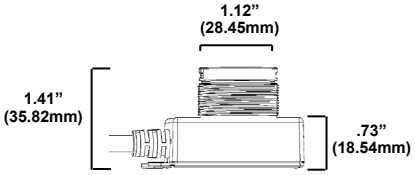
Note:
1. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

Project	
Location/Type	

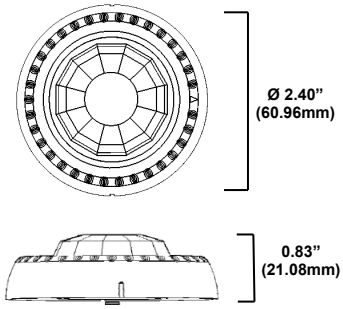
Physical Dimensions

Standard Housing



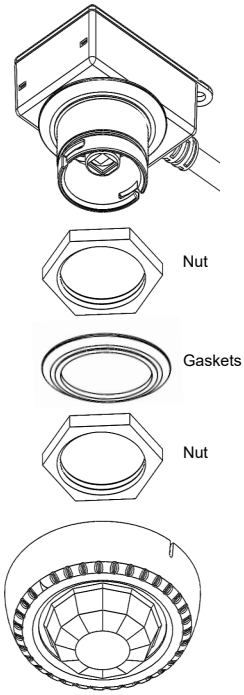


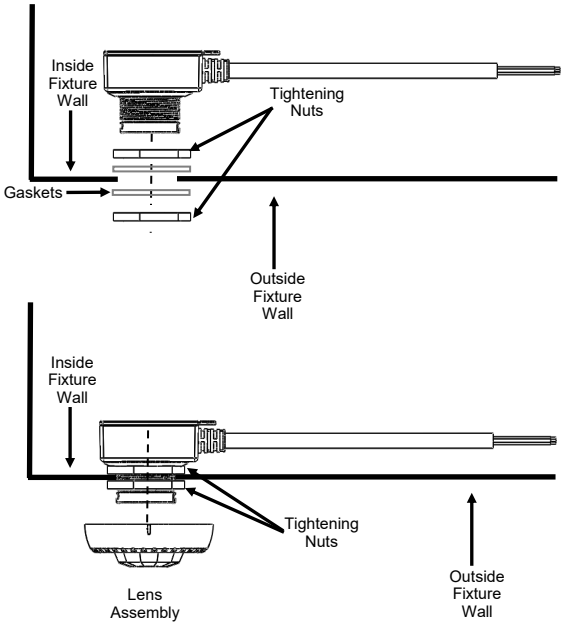
Lens Cover



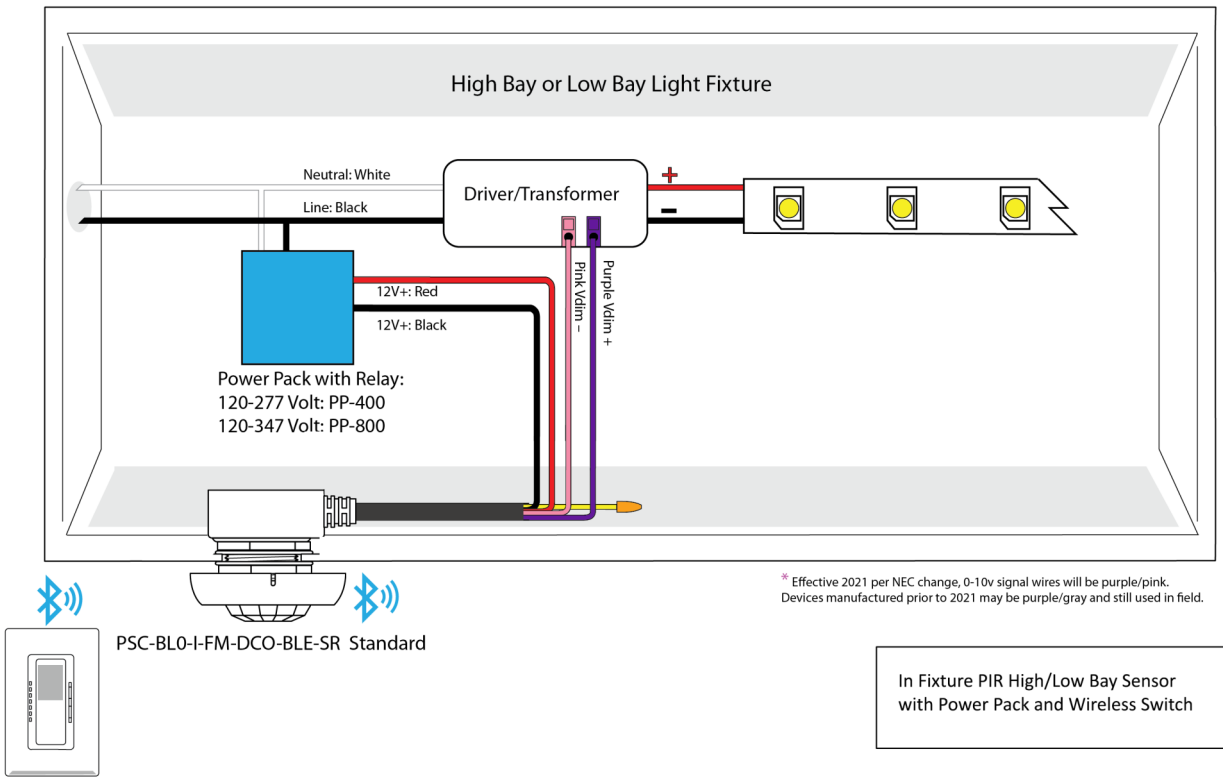
Drawings are Not to Scale

Installation





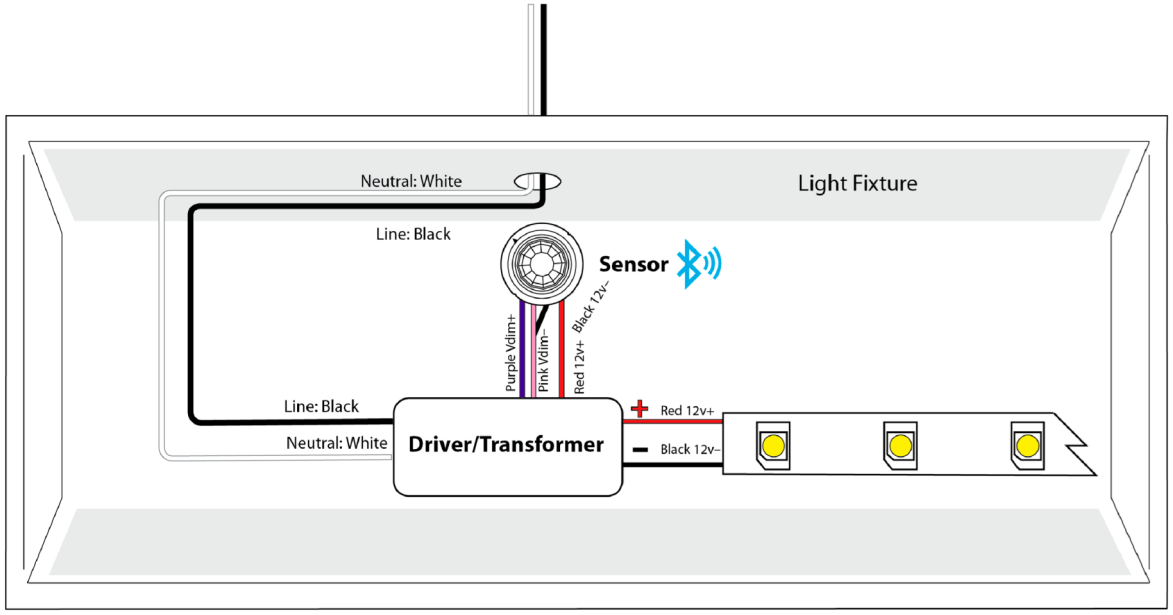
Wiring Diagram and Fixture Mount



* 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.

In Fixture PIR High/Low Bay Sensor with Power Pack and Wireless Switch

Dim to Off Driver with 12v Auxiliary Power



* 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.

Typical for McWong Sensors with DIM to OFF and 12v Aux:
PSC-BL-I-RD-DC0-BLE-SR, PSC-BL-I-RT-DC-0-SR, PSC-BL-M-RT-DC0-BLE-SR, PSC-BL-U-FM-DC0-BLE-SR, PSC-BL-I-FM-DC0-BLE-SR

LED DIM to Off with 12v Auxiliary Output, Fixture Mounted Sensor, Wireless Dimmer

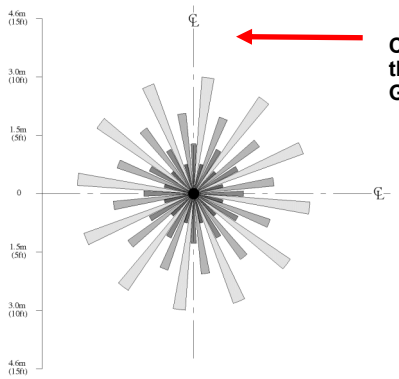
Detection Area Lens Orientation

Corresponding to the CL on Detection Area Top View

Fresnel Lens:
Lenses are available in:
Low Bay Lens for mounting height at 8-30 ft (2.4-9.1 m),
High Bay Lens for mounting height at 20-40 ft (6.1-12.2 m).

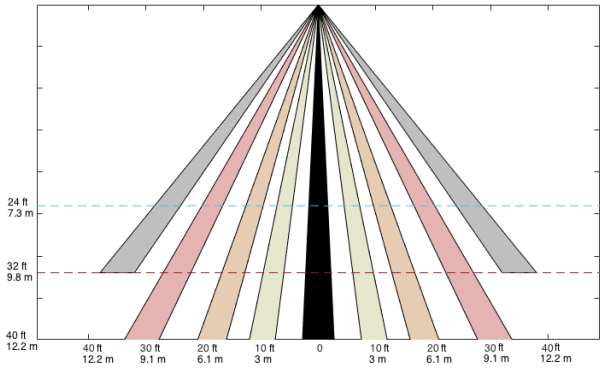
Detection Area

HBL: High Bay Lens-Top View at 8 ft (2.4m)

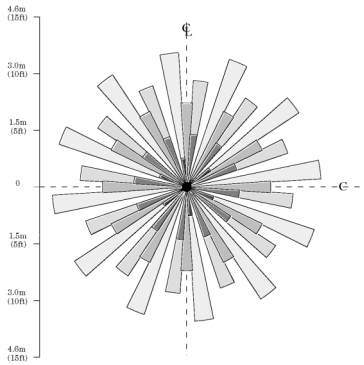


Corresponding to the Arrow on Gasketed Lens

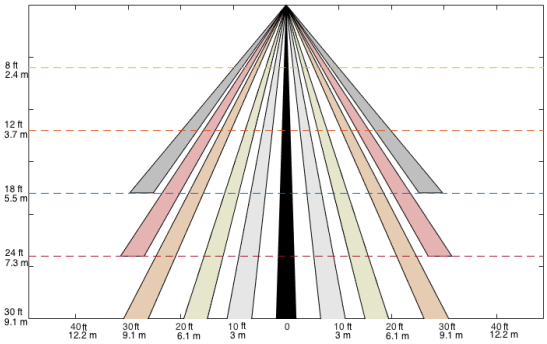
HBL - Side View



LBL: Low Bay Lens-Top View at 8 ft (2.4m)



LBL - Side View



How to Order

Model No.	Description	Input Voltage	Output
PSC-BL-I-FM-DC0-BLE-SR	Passive Infrared (PIR) Occupancy Sensor, with Bluetooth TruBlu™ Mesh. Technology Partner Silvair	12-24VDC	0-10VDC Control High
PIR-BL01-F3-LBL	360° Low Bay Lens, maximum coverage 60ft diameter at 30ft height, White Color		
PIR-BL01-F3-LBL-BN	360° Low Bay Lens, maximum coverage 60ft diameter at 30ft height, Brown Color		
PIR-BL01-F3-LBL-BK	360° Low Bay Lens, maximum coverage 60ft diameter at 30ft height, Black Color		
PIR-BL01-F5-HBL	360° High Bay Lens, maximum coverage 70ft diameter at 40ft height or 80ft diameter at 32ft height, White Color		
PIR-BL01-F5-HBL-BN	360° High Bay Lens, maximum coverage 70ft diameter at 40ft height or 80ft diameter at 32ft height, Brown Color		
PIR-BL01-F5-HBL-BK	360° High Bay Lens, maximum coverage 70ft diameter at 40ft height or 80ft diameter at 32ft height, Black Color		

For Line to Low Voltage Power Supply/Controller, please check mwConnect PacWave™ PSC-AC-PP-200/300/400/700C/800/900.
Design and specifications are subject to change without notice.