

TruBlu Mesh Fixture Mounted PIR Wireless Sensor

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



Suitable for indoor or outdoor use



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 PSC-AC-PP-200/400/700C/800/900.

Alternatively, the sensor can operate with a driver that has an auxiliary output (12 V). For dim to off, an mwConnect PSC-AC-PP-200/700C/900 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 High Control output can be used to trigger relays or other control circuitry.

Outdoor Rated: The sensor is rated IP65 when installed in an IP65 device or enclosure.

See TruBlu™ Commissioning User Manual for more info.

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

Load Control Output:
10-22 VADC Active High 30 mA

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) diameter
Max Sensor Range Low Bay:
60ft (18.2m) diameter

Max Wireless Range¹
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

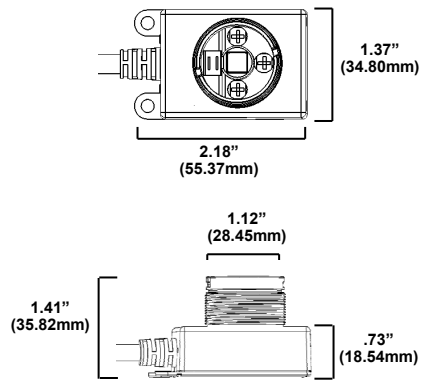
Note:
1. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

Project

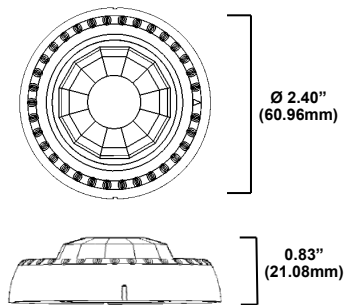
Location/Type

Physical Dimensions

Standard Housing

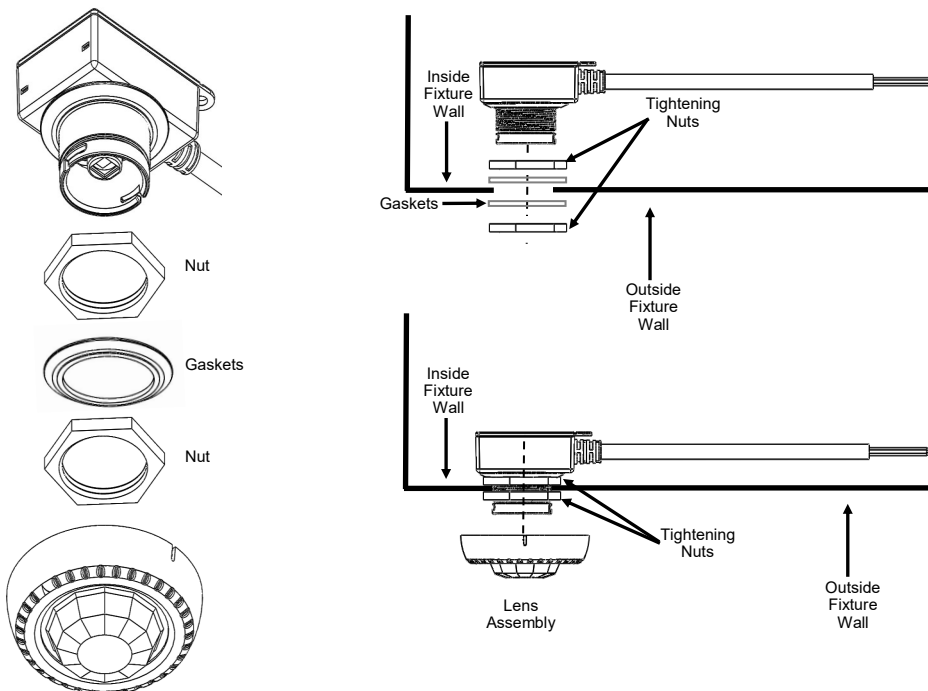


Lens Cover

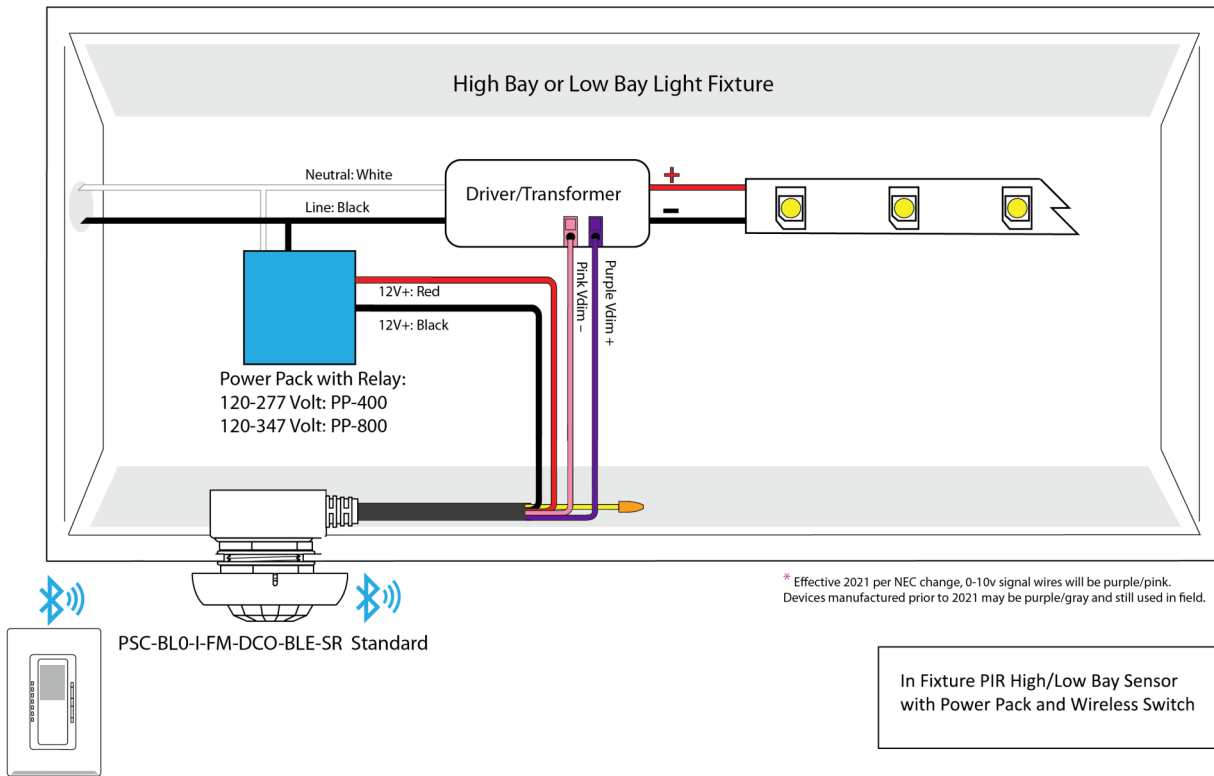


Drawings are Not to Scale

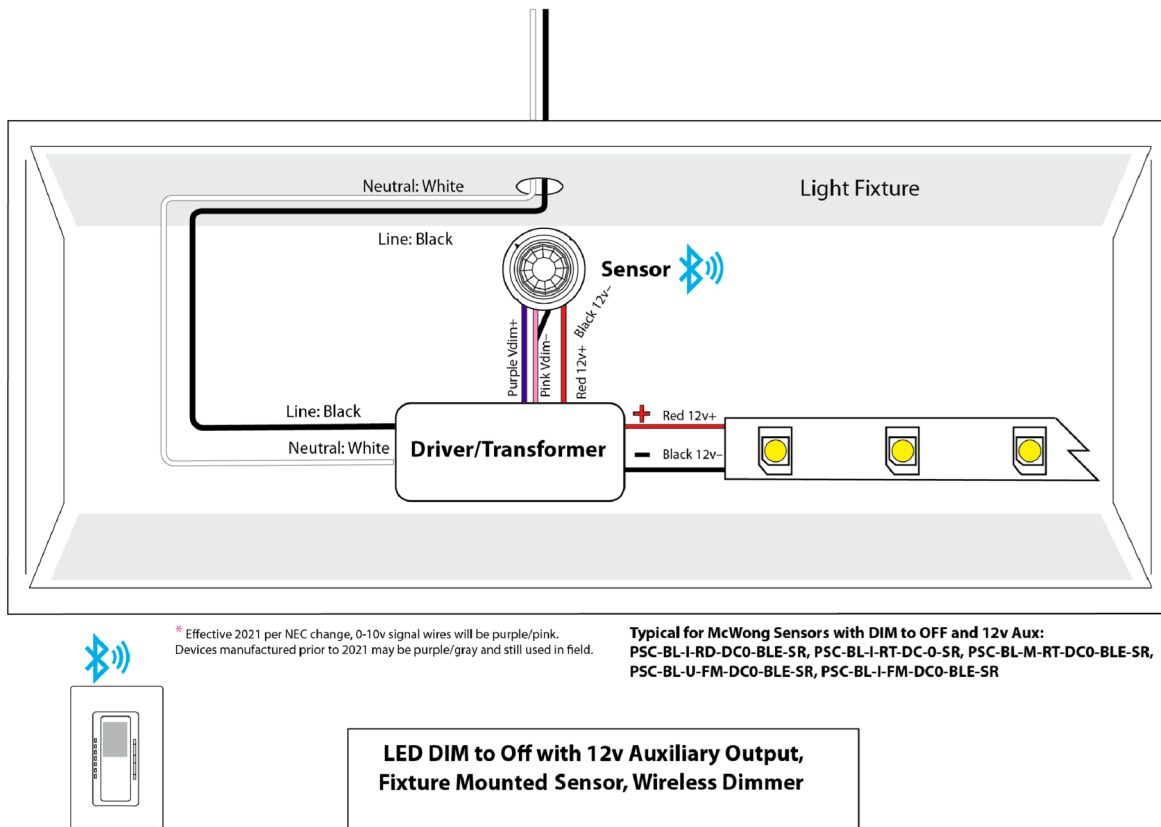
Installation



Wiring Diagram and Fixture Mount



Dim to Off Driver with 12v Auxiliary Power



Detection Area Lens Orientation

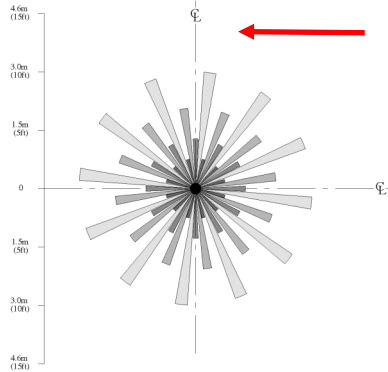


Corresponding to the CL on Detection Area Top View

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).

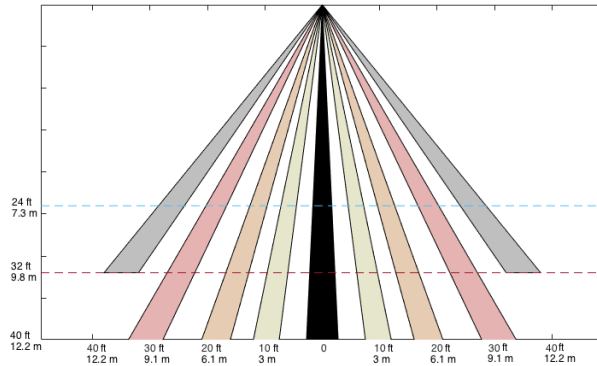
Detection Area

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

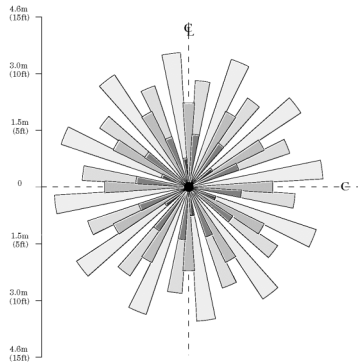


Corresponding to the Arrow on Gasketed Lens

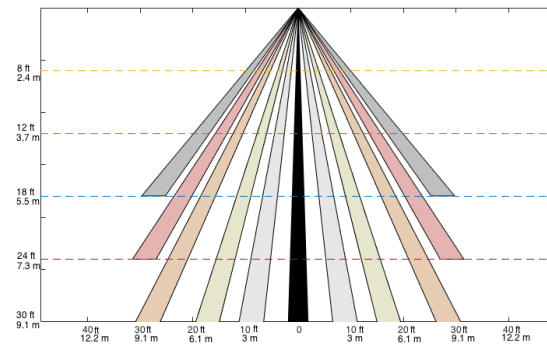
HBL - Side View



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° IP65 Low Bay Lens, maximum coverage 60ft diameter at 30ft height, White Color		
PIR-BL01-F3-LBL-BN	360° IP65 Low Bay Lens, maximum coverage 60ft diameter at 30ft height, Brown Color		
PIR-BL01-F3-LBL-BK	360° IP65 Low Bay Lens, maximum coverage 60ft diameter at 30ft height, Black Color		
PIR-BL01-F5-HBL	360° IP65 High Bay Lens, maximum coverage 70ft diameter at 40ft height or 80ft dia. at 32ft height, White Color		
PIR-BL01-F5-HBL-BN	360° IP65 High Bay Lens, maximum coverage 70ft diameter at 40ft height or 80ft dia. at 32ft height, Brown Color		
PIR-BL01-F5-HBL-BK	360° IP65 High Bay Lens, maximum coverage 70ft diameter at 40ft height or 80ft dia. 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.