

# Wireless Dimming PIR Fixture Mount High/Low Bay Sensor

## Overview

- Low Profile PIR sensor
- Mounts in Fixture
- Casambi Wireless Mesh
- High-End Trim, Zoning, Continuous Dimming
- ioXt Alliance cybersecurity certification
- LED Motion indicator
- Active High output for relay drive
- Mounting height up to 40 ft (12.2 m)



Suitable for Indoor only



## Applications

The PSC-BL-I-FM-DC0-BLE-CB (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-CB 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).

\*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.

## Sensor Operation

**Casambi Wireless Mesh Controls:** The sensor connects to a wireless mesh network via a mobile app, available as iOS or Android, to allow initial setup and subsequent parameters adjustments.

**User Interface:** Using the mobile app, features include: setup, control real time feedback, and scheduling without a gateway or internet access.

**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.

See the mwConnect Casambi Commissioning User Manual for more information.

## Summary

Sensor Type:  
PIR occupancy/vaccancy sensor

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<sup>1</sup>  
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:

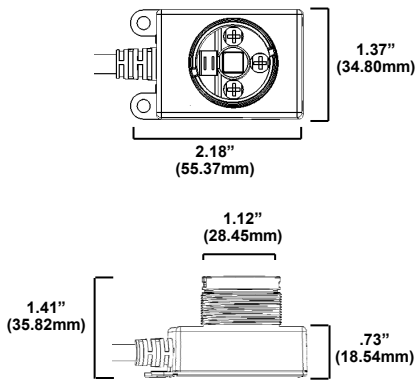
1. Wireless Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

Project

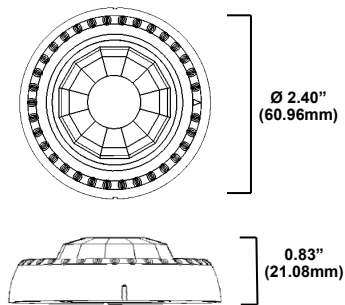
Location/Type

Physical Dimensions

Standard Housing

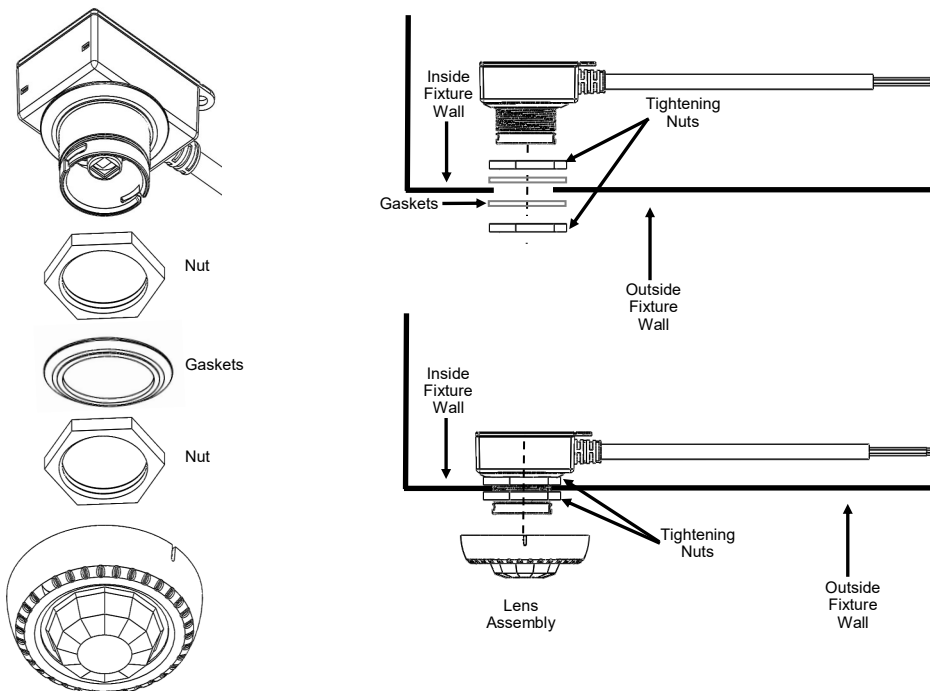


Lens Cover

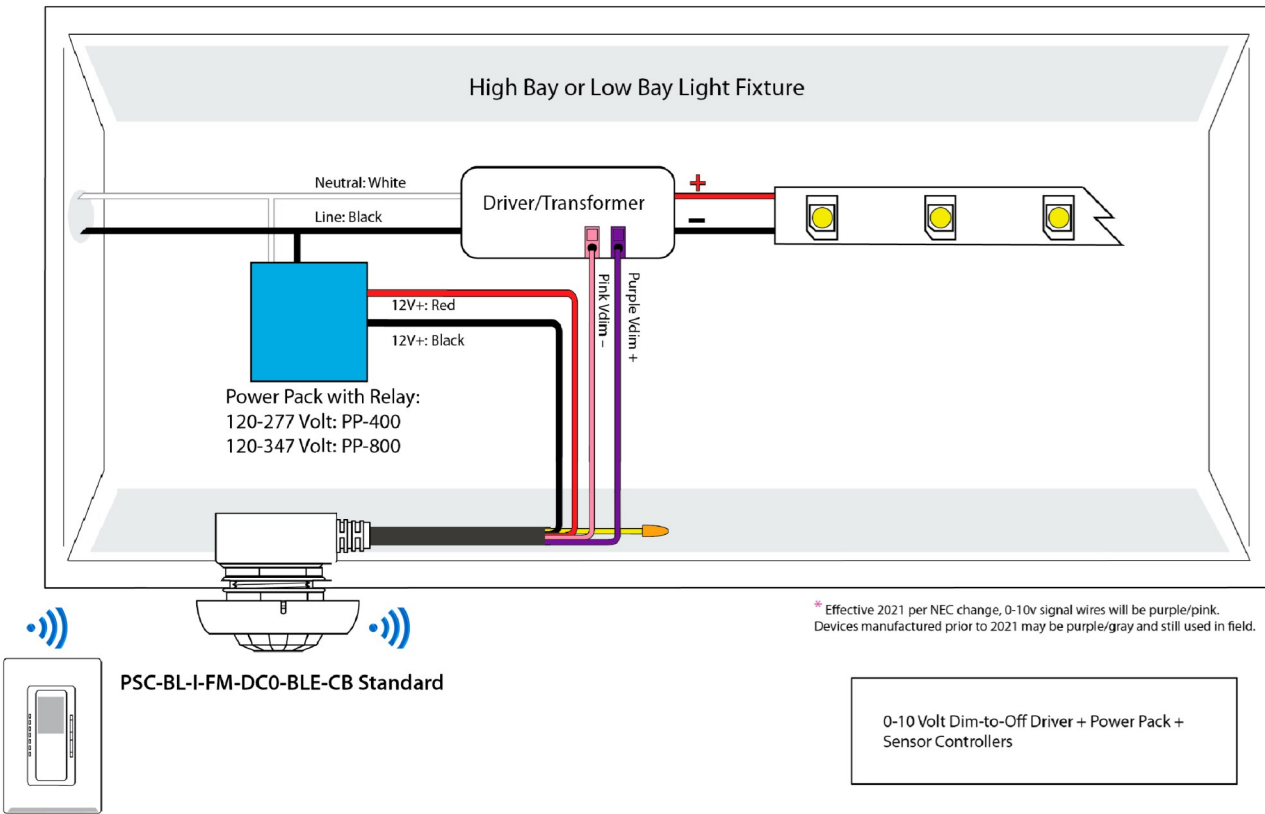


Drawings are Not to Scale

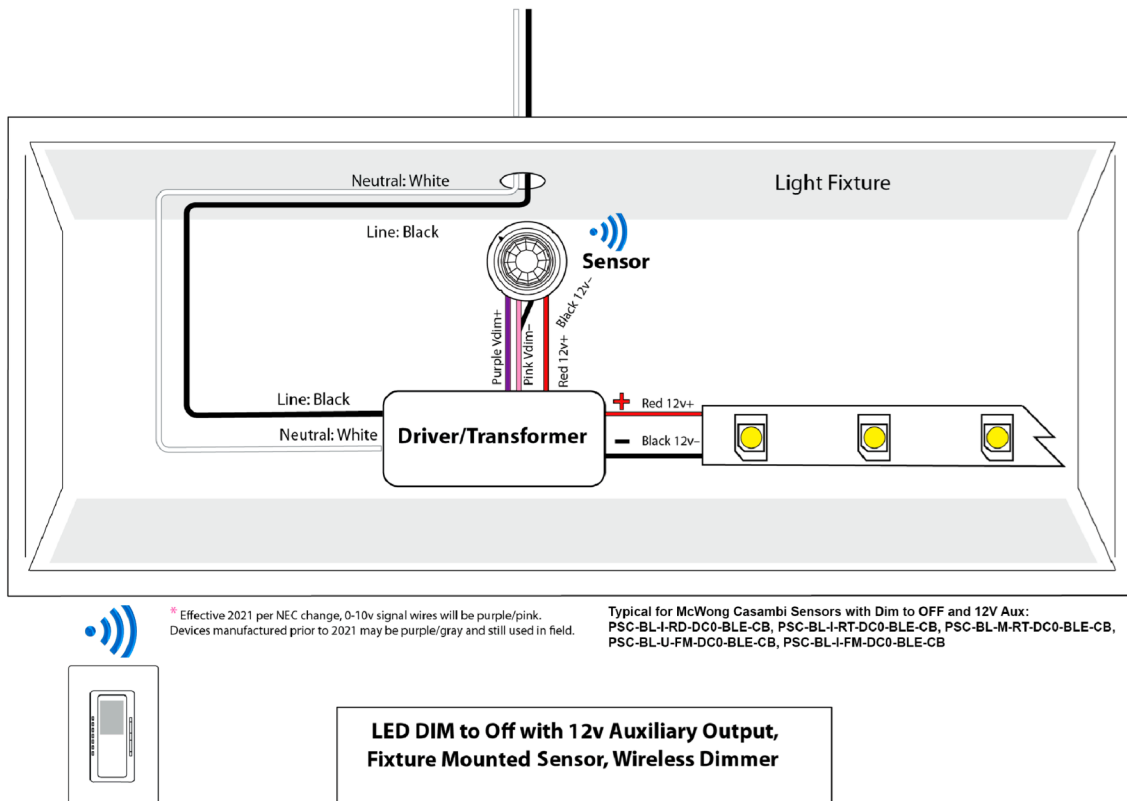
Installation



Wiring Diagram and Fixture Mount



Dim to Off Driver with 12v Auxiliary Power



## Detection Area Lens Orientation



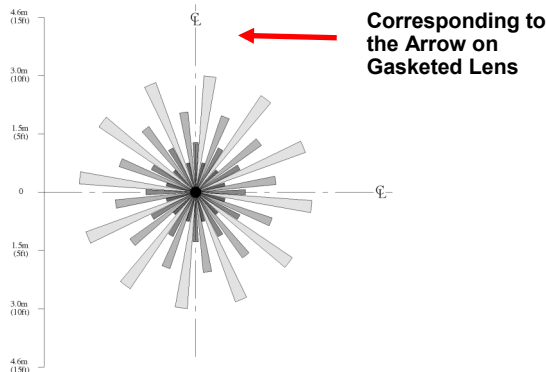
Corresponding to the CL on Detection Area Top View

### Fresnel Lens:

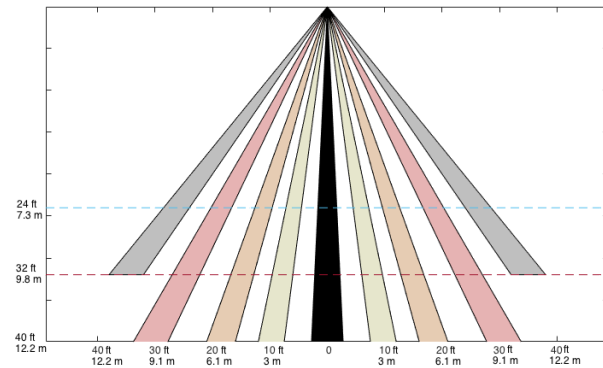
Lenses are available in:  
 Low Bay Lens for mounting height at 8-30 ft (2.4-9.1 m),  
 High Bay Lens for mounting height at 20-40 ft (6.1-12.2 m).

## Detection Area

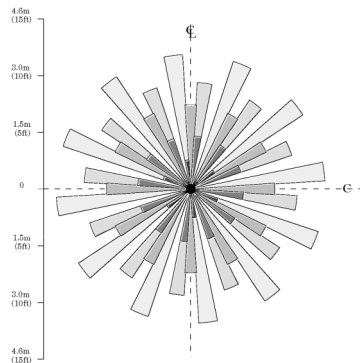
HBL: High Bay Lens-Top View at 8



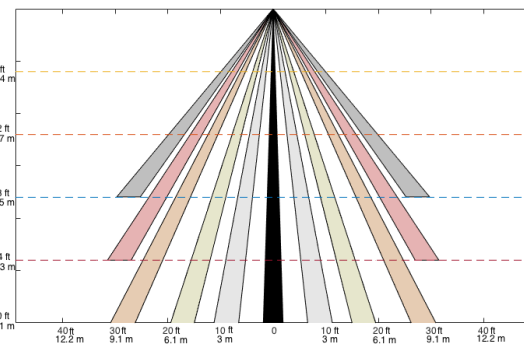
HBL - Side View



LBL: Low Bay Lens-Top View at 8 ft



LBL - Side View



## How to Order

Model No.	Description	Input Voltage	Output
<b>PSC-BL-I-FM-DC0-BLE-CB</b>	Passive Infrared (PIR) Occupancy Sensor, with Casambi Wireless Mesh	12-24VDC	0-10VDC Control High Control Low
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.