DATA SHEET

IP65 Wireless Dimming PIR High or Low Bay Sensor

Suitable for indoor or outdoor use

Overview

- Interior/Exterior PIR Sensor
- Mounts in Fixture
- Casambi Wireless Mesh
- High-End Trim, Zoning, Continuous Dimming
- ioXt Alliance Cybersecurity Certification
- LED Motion indicator
- Sensor Output (active high) For Load Control
- Mounting Height Up To 40 ft (12.2 m)
- Conforms With DLC NLC5 Cybersecurity Standards

E341446

Applications

The PSC-BL-I-FM-DC0-BLE-CB (/S side mount or /B bottom mount) 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 sensor 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 and outdoor** 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.

The sensor is capable of daylight detection ideal for Energy Code compliance by turning lighting on or off at exterior and parking entrance applications. Daylight capability application is not intended for daylight harvesting.

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.

1 Channel Dimming: The sensor outputs one 0-10V dimming channel.

Relay Control: Load control output (active high) can be used to trigger relays or other control circuitry.

****Outdoor use note:** The sensor lens collar can be mounted outside the fixture allowing for exterior use. The sensor control needs to be mounted inside the fixture.

See the mwConnect Casambi Commissioning User Manual for more

Accessories

Power Pack: The PSC-BL-I-FM-DC0-BLE-SR operates on 12-24 VDC input and requires a separate power pack. Please check the mwConnect PacWave™ PSC-AC-PP series.

Alternatively, the sensor can operate with a driver that has an auxiliary output (12-24VDC).

Summary

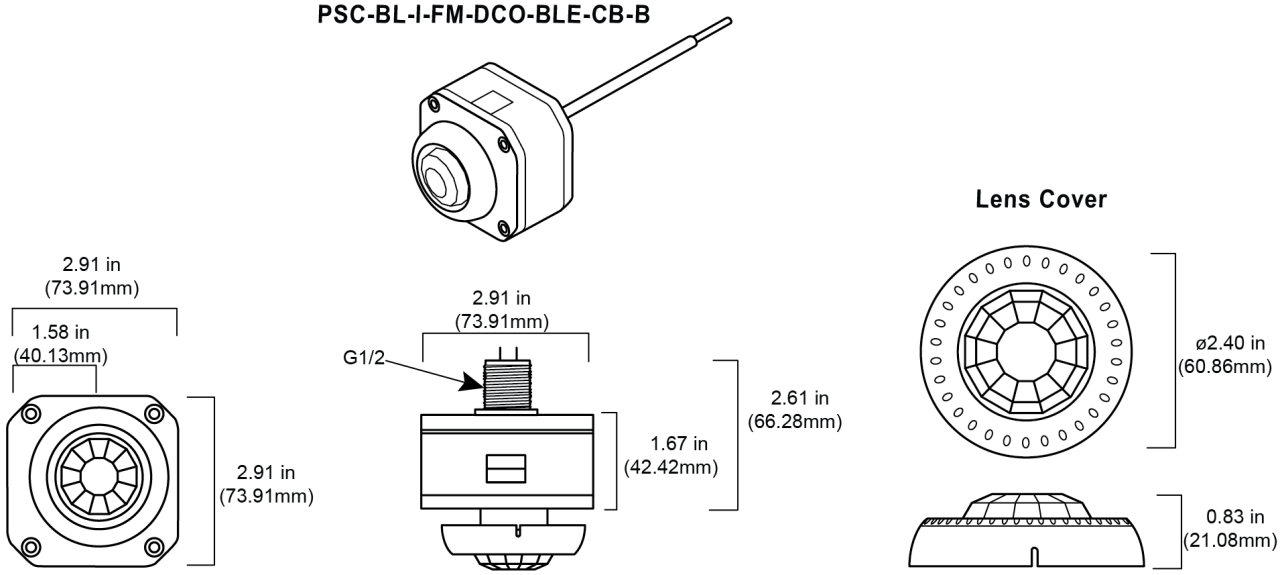
Sensor Type: PIR occupancy/vacancy sensor
Input Voltage | Current Consumption: 12-24 VDC | 50 mA
0-10V Output: 30 mA
Load Control Output: Active High Vin-2.5 V 30 mA source
Mounting Height: - High Bay: Fixture or ceiling mount max to 40ft (12.2m) Mounting Height: - Low Bay: Fixture or ceiling mount max to 30ft (9.1m)
Max Sensor Range: High Bay: 40ft (12.2m) radius Max Sensor Range Low Bay: 30ft (9.1m) 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. 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	

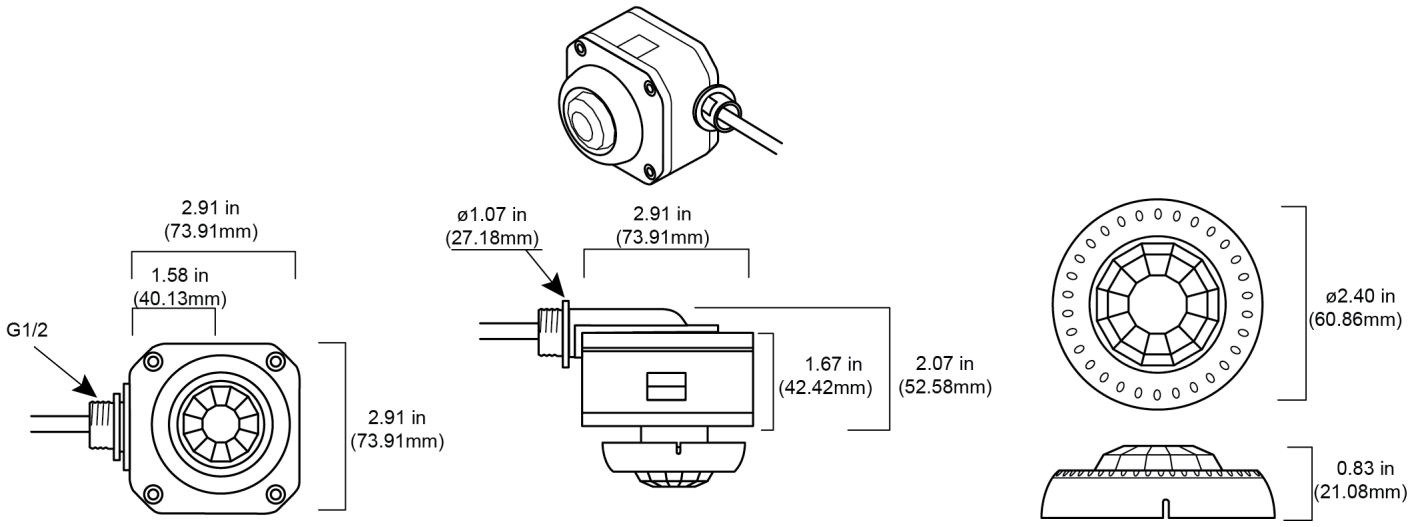
Physical Dimensions

Bottom Mount Housing
PSC-BL-I-FM-DCO-BLE-CB-B



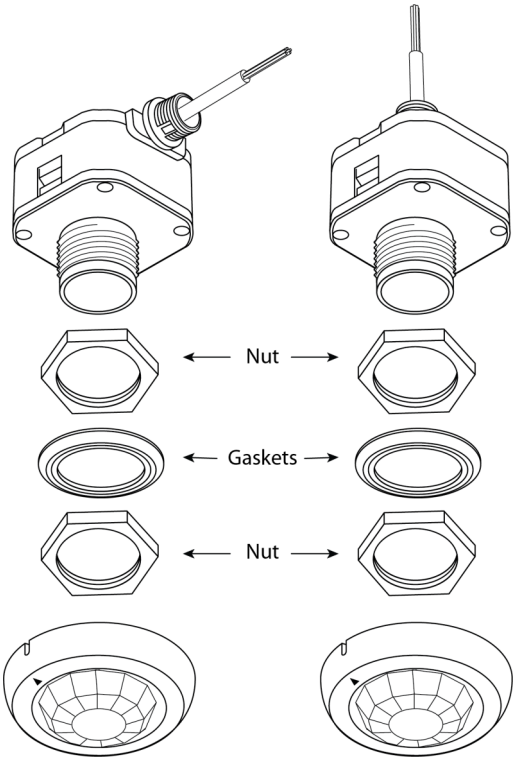
Drawings are Not to Scale

Side Mount Housing
PSC-BL-I-FM-DCO-BLE-CB-S

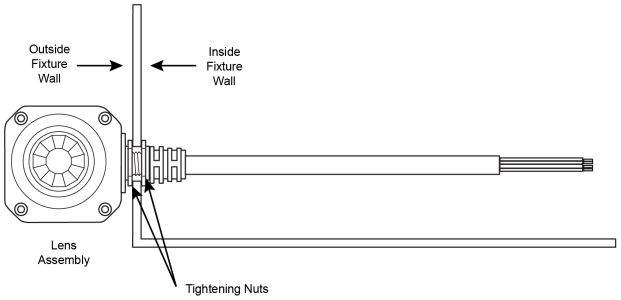


Drawings are Not to Scale

Installation

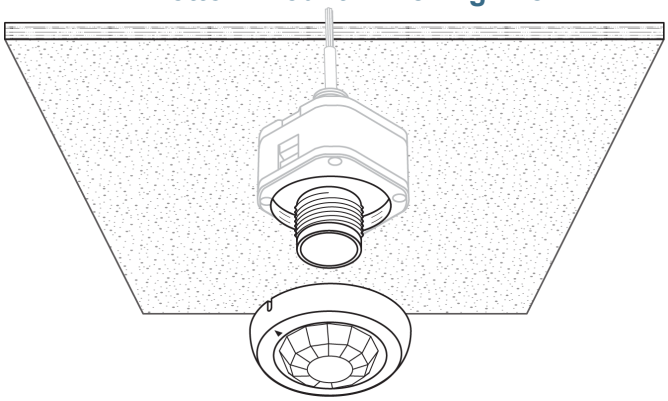


Side Mount in Light Fixture/Luminaire



PSC-BL-FM-DCO-BLE-XX-B Side Mounting Installation

Bottom Mount in Ceiling TIle



Wire Designations

PSC-BL-I-FM-DC0-BLE-XX		
Wire	**Designation**	**Notes**
Black	12-24VDC+ Power Input	Power Input
Red	12-24VDC- Power Input	Power Input
Purple	0-10VDC+ Dim Output	Luminaire Control Output
Pink/Gray	0-10VDC- Dim Output	Luminaire Control Output
Yellow	10-22VDC Control Output	Output for Controlling Power Pack relay or Similar Devices (Active High)

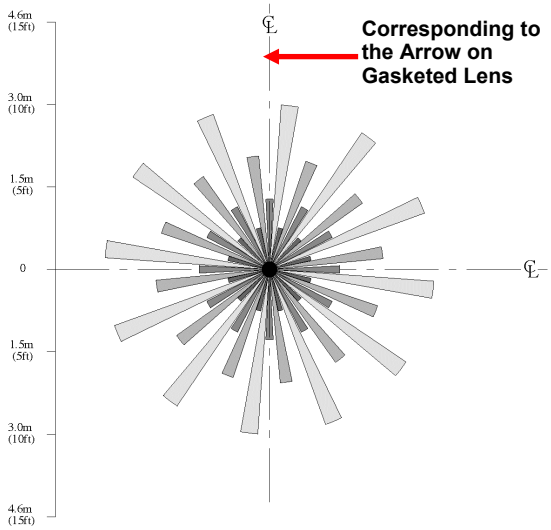
Detection Area Lens Orientation

Corresponding to the CL on Detection Area Top View

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

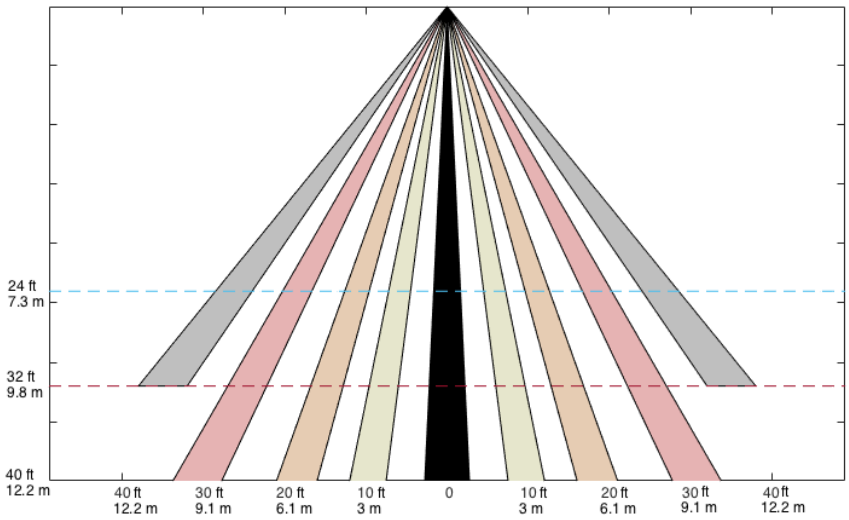
Detection Area

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

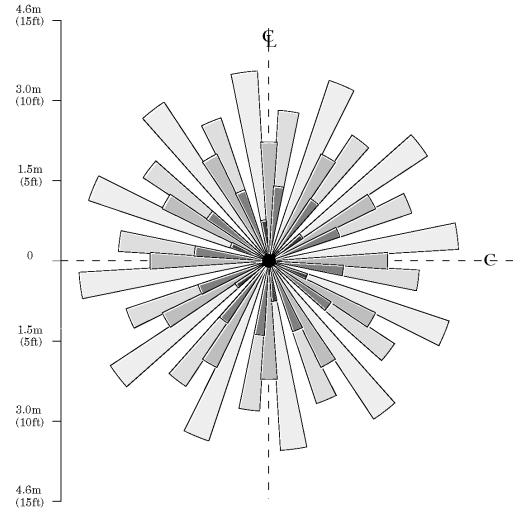


Corresponding to the Arrow on Gasketed Lens

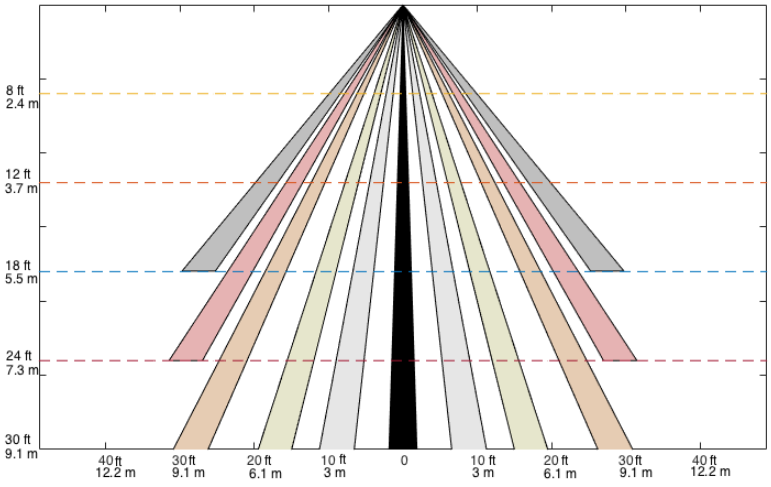
HBL - Side View



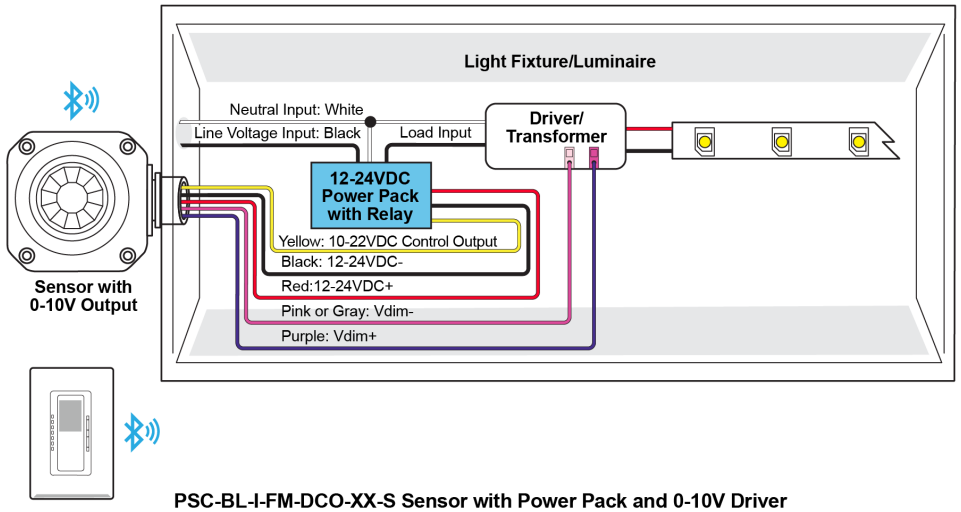
LBL: Low Bay Lens-Top View at 8 ft (2.4m)



LBL - Side View

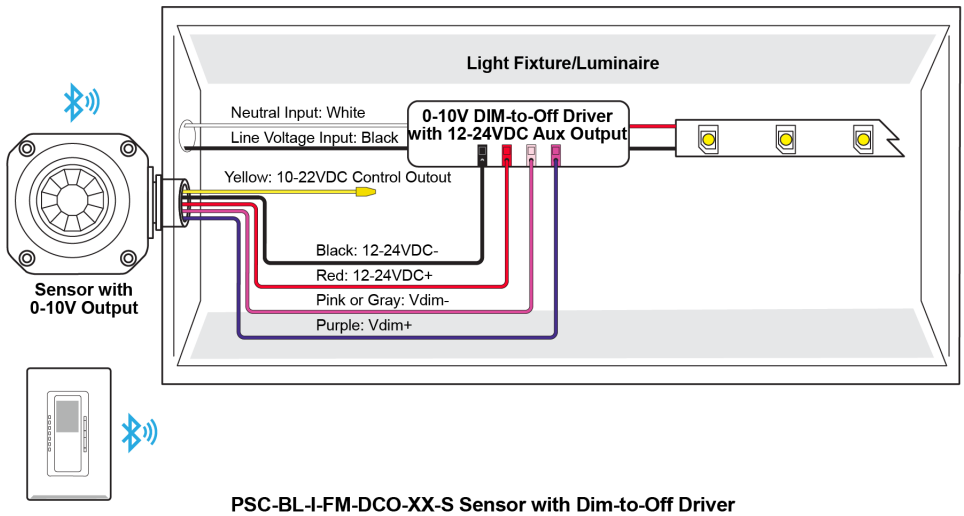


Application Example: PSC-BL-I-FM-DCO-BLE-CB /S with Power Pack and 0-10V Driver



PSC-BL-I-FM-DCO-XX-S Sensor with Power Pack and 0-10V Driver

Application Example: PSC-BL-I-FM-DCO-BLE-CB/S and 0-10V Dim-to-Off Driver with 12-24VDC Auxiliary Power



PSC-BL-I-FM-DCO-XX-S Sensor with Dim-to-Off Driver

How to Order

Model No.	Description	Input Voltage	Output
PSC-BL-I-FM-DC0-BLE-CB	Passive Infrared (PIR) Occupancy Sensor, with Casambi Wireless Mesh	12-24VDC	0-10V Dimming
Add Suffix for options:	**Add Suffix for options:**		
/B	with Bottom-mount IP65 enclosure		
/S	with Side-mount IP65 enclosure		
PIR-BL01-F3-LBL-WT	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-WT	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 Supplies, please see the mwConnect PacWave™ PSC-AC-PP Series.

Design and specifications are subject to change without notice.