MCWONG

DATA SHEET

IP65 Wireless Dimming PIR High or Low Bay Sensor

Suitable for indoor or outdoor

c UL us LISTED
E341446

Overview

- Interior/Exterior PIR sensor
- Mount in Fixture, JBOX, Ceiling, or Ceiling Tile
- Casambi Wireless Mesh
- High-End Trim, Zoning, Continuous Dimming
- IP-65 Rating
- LED Motion indicator
- Active High output for relay drive
- Mounting height up to 40 ft (12.2m)
- ioXt Alliance cybersecurity certification

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 PSC-BL-I-FM-DC0-BLE-CB/ S/B 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 and ceiling mounts 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 turning lighting on or off for exterior and parking entrance applications. Daylight capability application is not intended for daylight harvesting.

Side and Bottom Mount IP65 enclosure available for fully outdoor rated option.

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 McWong Casambi Commissioning User Manual for more information.

Accessories

Power Pack: The PSC-BL-I-FM-DC0-BLE-CB operates on 12-24 VDC input and requires a separate power pack such as the McWong 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, McWong PacWave™ PSC-AC-PP-200/700C/900 Power Pack or LED dimming driver capable of dimming to off is required.

Summary

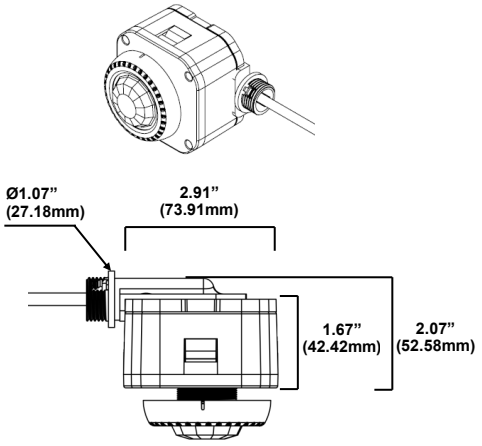
Sensor Type: PIR occupancy/vacancy sensor
Input Voltage | Current Consumption: 12-24 VDC | 50 mA
0-10V Output: 150 mA
High: Vin-2.5 V 150 mA source
Mounting Height: - High Bay: Fixture or ceiling mount up to 40ft (12.2m) Mounting Height: - Low Bay: Fixture or ceiling mount up to 30ft (9.1m)
Max Sensor Range: High Bay: (12.2m) radius Max Sensor Range Low Bay: 30ft (12.2m) 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. Wireless Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

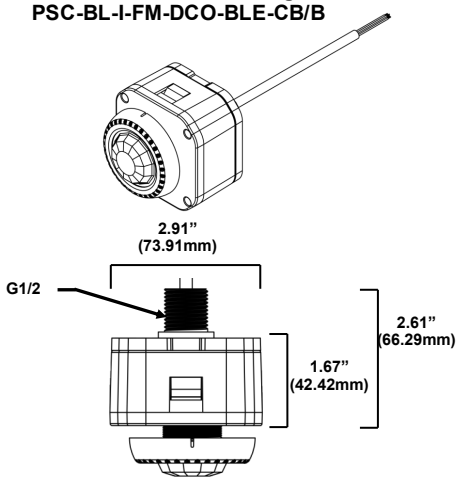
Project	
Location/Type	

Physical Dimensions

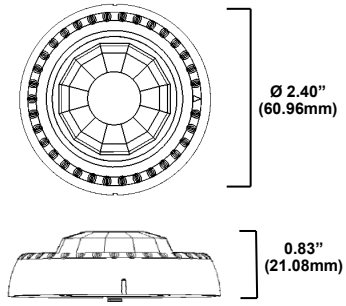
Side Mount Housing
PSC-BL-I-FM-DCO-BLE-CB/S

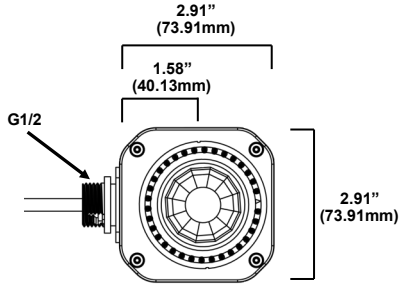


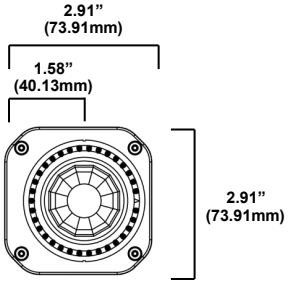
Bottom Mount Housing
PSC-BL-I-FM-DCO-BLE-CB/B



Lens Cover

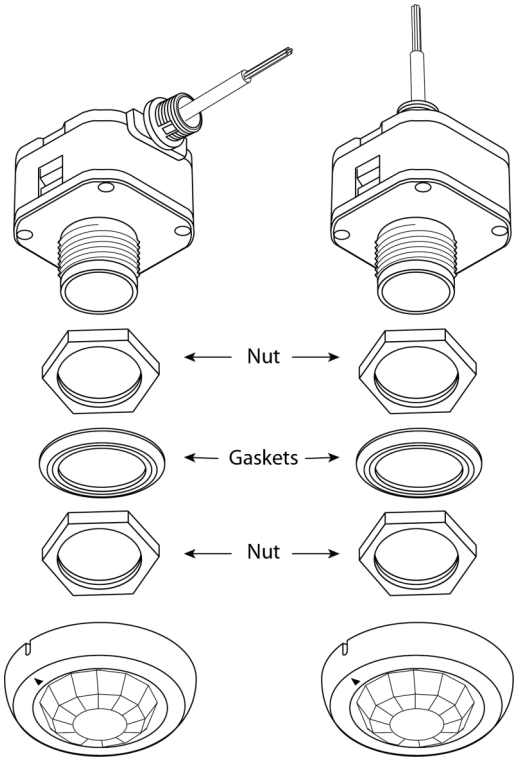






Drawings are Not to Scale

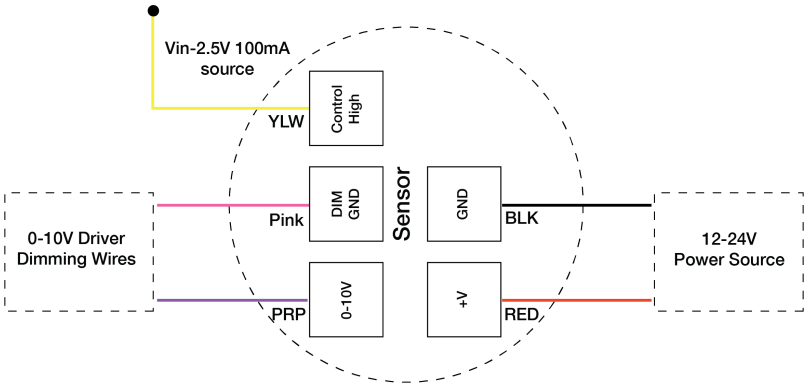
Installation Ceiling, Wall or Fixture Mount



Detection Area Lens Orientation

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)

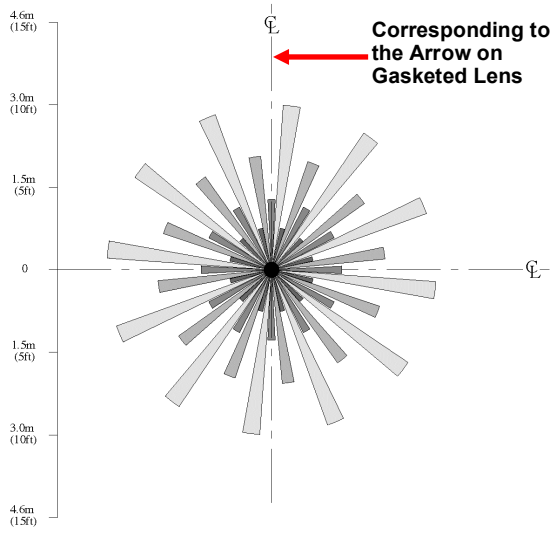
Wires



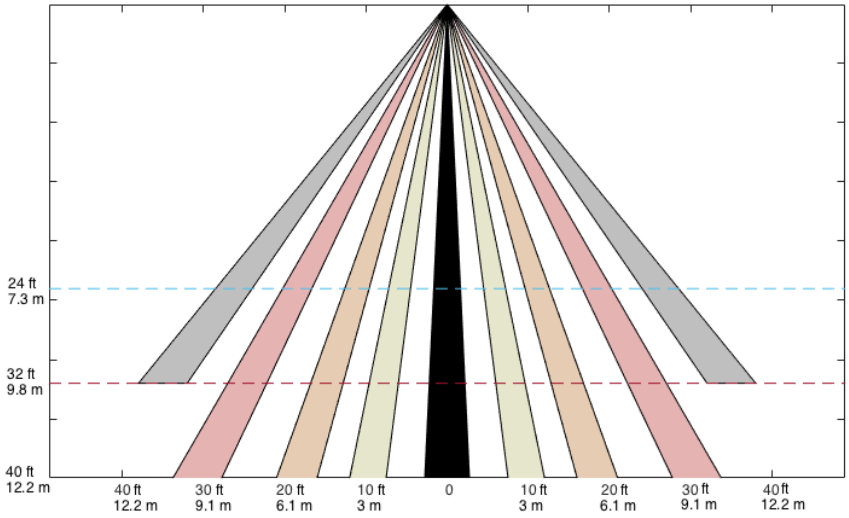
Note: If using a power pack other than PSC-AC-PP-200, connect Control High, depending on power pack relay circuitry.

Detection Area

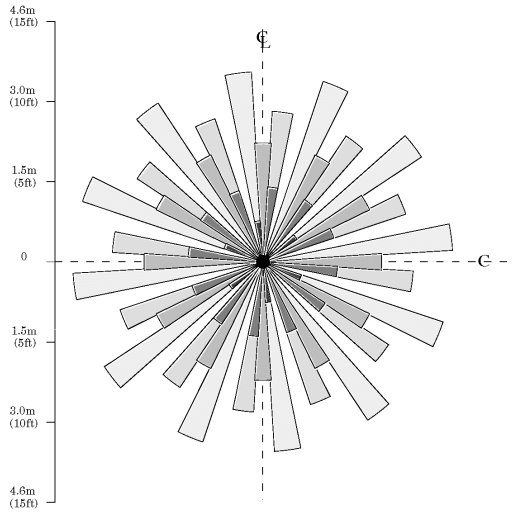
HBL: High Bay Lens-Top View at 8 ft (2.4m)



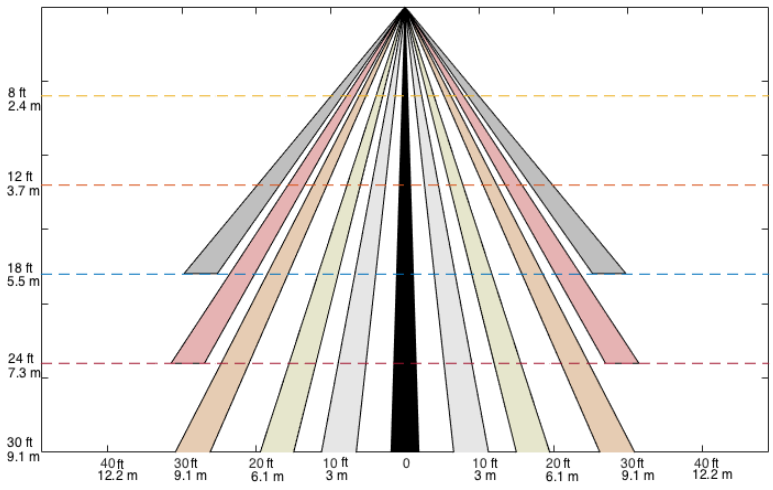
HBL - Side View



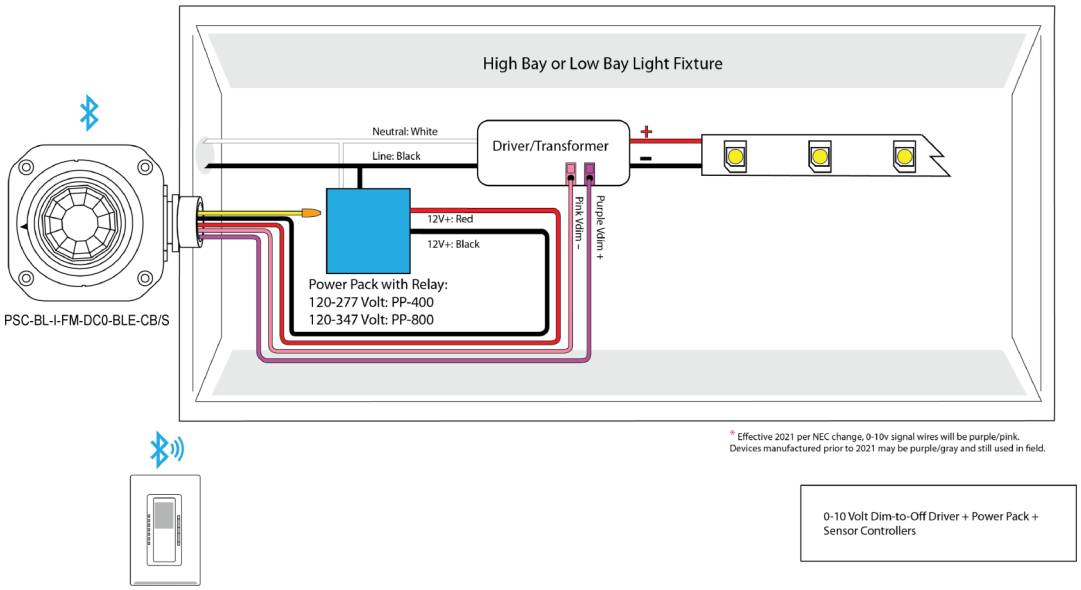
LBL: Low Bay Lens-Top View at 8 ft (2.4m)



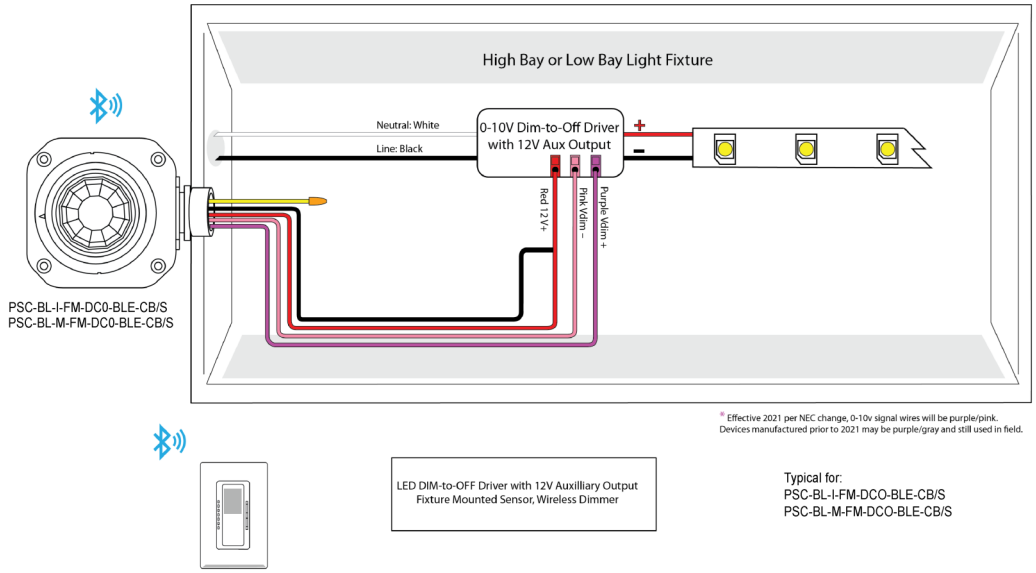
LBL - Side View



Wiring Diagram and Fixture Mount



Dim to Off Driver with 12v Auxiliary Power



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	12-2VDC	0-10VDC Control High
Add Suffix for options:	**Add Suffix for options:**		
/B	with Bottom-mount enclosure for IP65 PIR Occupancy Sensor		
/S	with Side-mount enclosure for IP65 PIR Occupancy Sensor		
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 McWong PacWave™ PSC-AC-PP-200/300/400/700C/800/900.
Design and specifications are subject to change without notice.