Wireless Dimming Fixture Mount PIR/ Daylight Sensor

Suitable for indoor use only

Overview

- PIR and Daylight sensor
- Mount in Fixture
- Casambi Wireless Mesh
- High-End Trim, Zoning, Continuous Dimming

- LED Motion indicator
- Active High for Relay drive
- Mounting height of 9ft (2.7m)
- ioXt Alliance cybersecurity certification

Applications

The PSC-BL-I-CM-RD-DC0-BLE-CB uses digital PIR Occupant Sensor Architecture and Dual Element passive infrared (PIR) technology for improved detection coverage for indoor fixture mount applications.

The PSC-BL-I-CM-RD-DC0-BLE-CB also has an integral daylight sensor for daylight harvesting applications.

The PSC-BL-I-CM-RD-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 heights up to 9 ft (2.7m). 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.

For ceiling mount version see data sheet PSC-BL-I-RD-DC0-BLE-CB/CM.

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 multi-level 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.

Accessories

Power Pack: The PSC-BL-I-CM-RD-DC0-BLE-CB 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 dim to off driver that has an auxiliary output (12 V).

Summary

Sensor Type:	PIR Occupancy/Vacancy and Daylight Sensor
Input Voltage | Current Consumption:	12-24 VDC | 50 mA
0-10V Output:	100 mA
High:	Vin-2.5 V 100 mA source
Mounting Height:	Fixture mounting height at 9ft (2.7m)
Max Sensor Range:	6ft (1.8m) 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
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.

*For dim to off, mwConnect PacWave™ PSC-AC-PP-100/200/700C/900 Power Pack or LED dimming driver capable of dimming to off is required.

Project	
Location/Type	

Physical Dimensions

1.08"
(27.43mm)

6"
(152.40mm)

0.73"
(18.54mm)

1.37"
34.80mm)

2.18"
55.37mm)

Drawings are Not to Scale
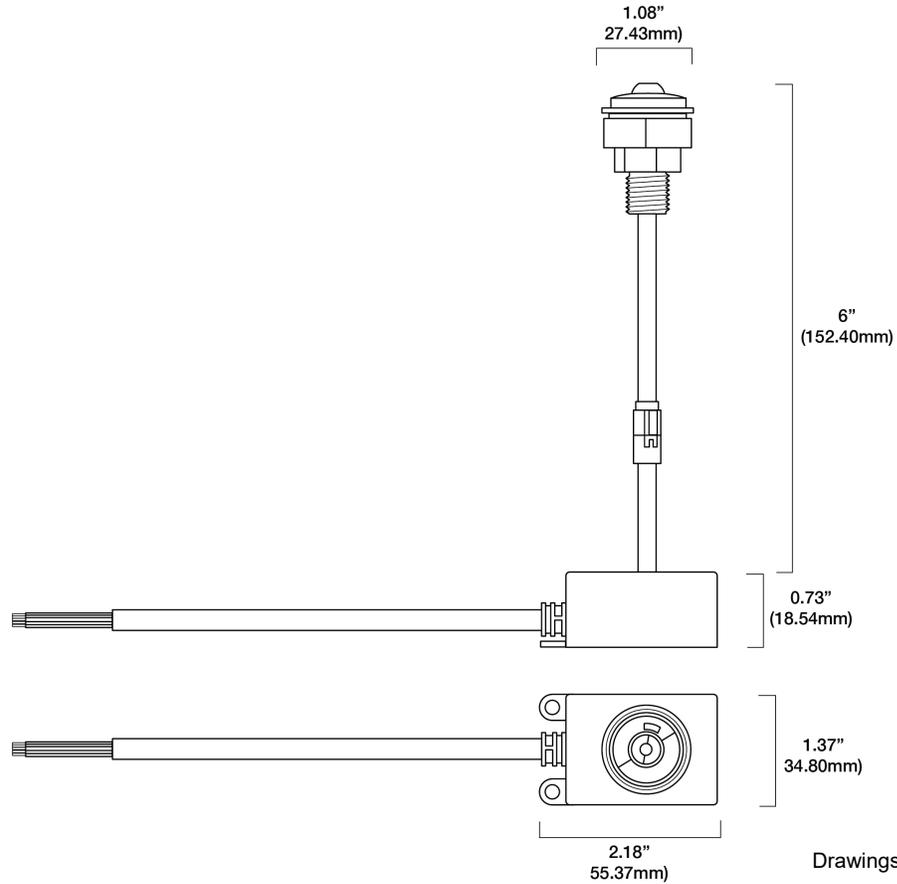
Detection Area

Floor Coverage at 9 ft (2.7m)

CL

6ft
(1.8m)

0ft
(0m)

6ft
(1.8m)

CL

Side View

CL

9ft
(2.7m)

0ft
(0m)

6ft
(1.8m)

0ft
(0m)

6ft
(1.8m)
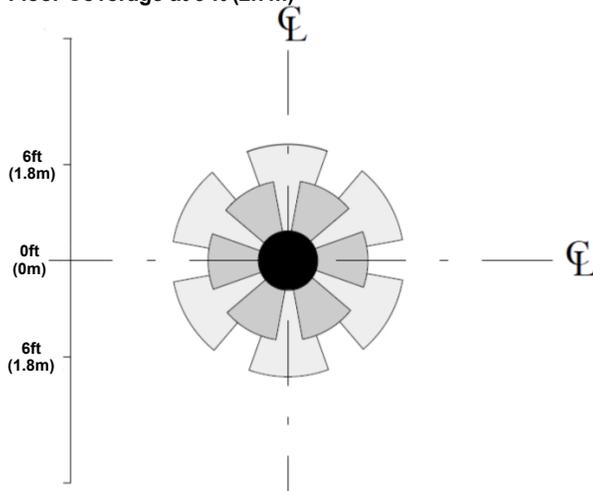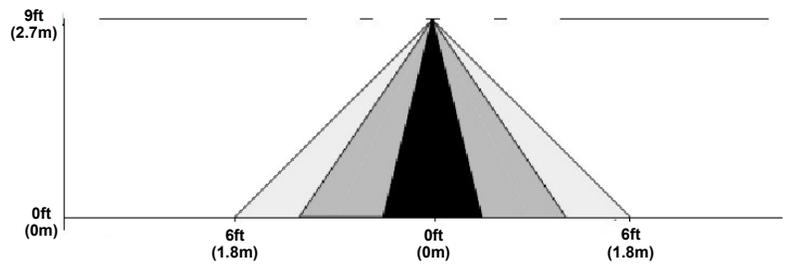
Wiring Diagram and Fixture Mount

Light Fixture

Antenna

Ground: Green /Yellow
Black
Neutral: White

PP-700 (120/277)
PP-900 (347)

Red 12v+
Black 12v−
Pink Vdim −
Purple Vdim +

Load: Red

Neutral: White

Driver/Transformer

Quick Connect

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−
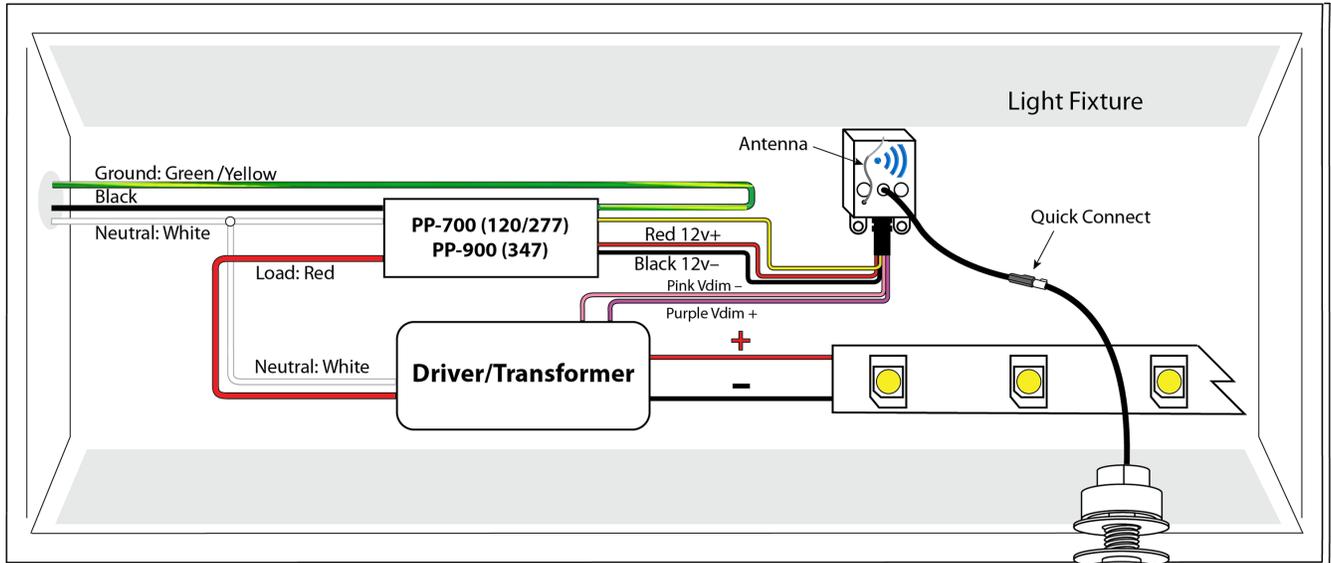
* Effective 2021 per NEC change, 0-10v signal wires will be purple/pink.
Devices manufactured prior to 2021 may be purple/gray and still used in field.
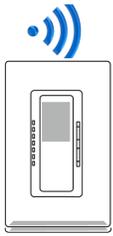
0-10 Volt Dimming Driver, PP-700 or PP-900,
PIR /Daylight Sensor

PSC-BL-I-RD-DC0-BLE-CB
Fixture Mount PIR/Daylight Sensor

Dim to Off Driver with 12v Auxiliary Power

Light Fixture

Neutral: White

Line: Black

Antenna

Red 12v+
Black 12v−
Pink Vdim −
Purple Vdim +

Line: Black

Neutral: White   **Driver/Transformer**

Quick Connect

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−

PSC-BL-I-RD-DC0-BLE-CB
PIR/Daylight Sensor
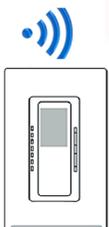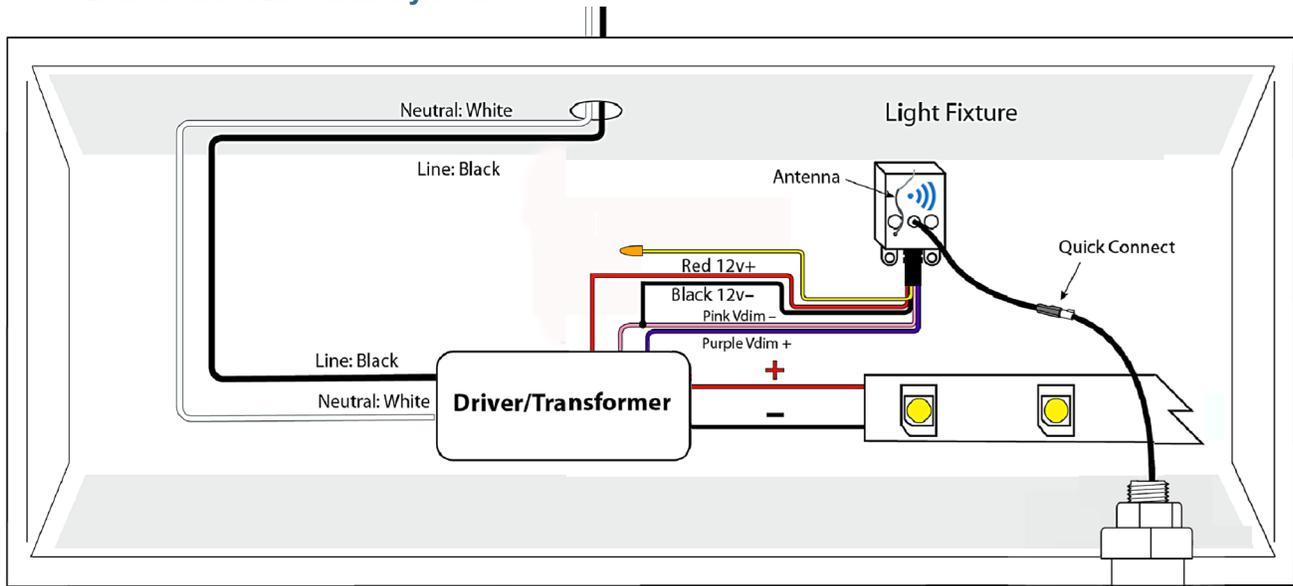
LED DIM to Off with 12v Auxilliary Output
Fixture Mount Sensor, Wireless Dimmer

Installation Fixture Mount
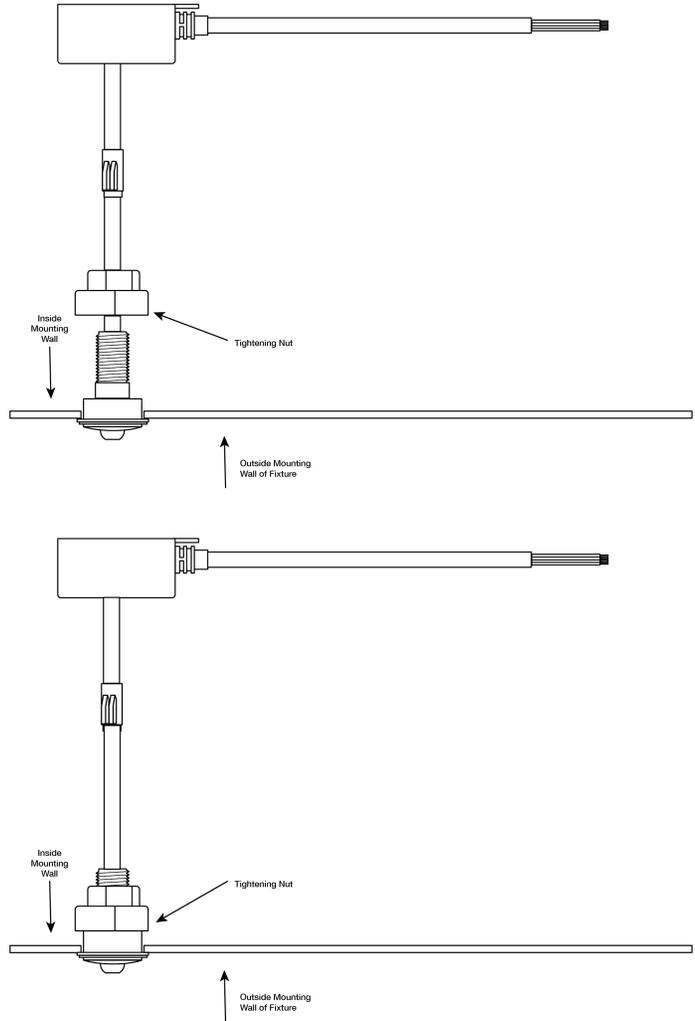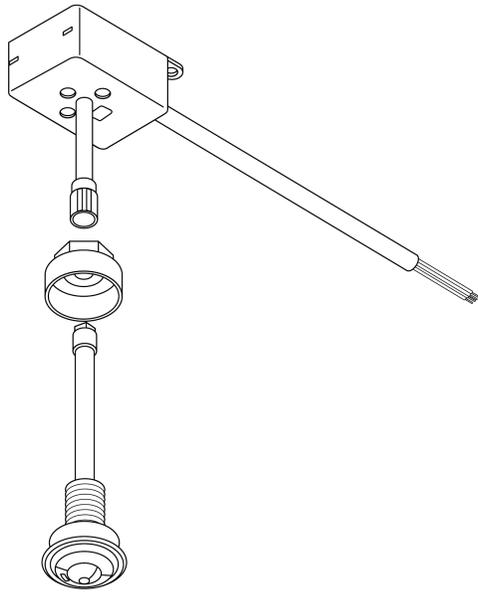
For Ceiling Mount Version see data sheet PSC-BL-I-RD-DC0-BLE-CB/CM.

Leads:

Minimum 22AWG

Heat Shrink Tube

Flying Leads with 0.394" (16mm) wire strip

12" (304.8mm)

6" (152.4mm)
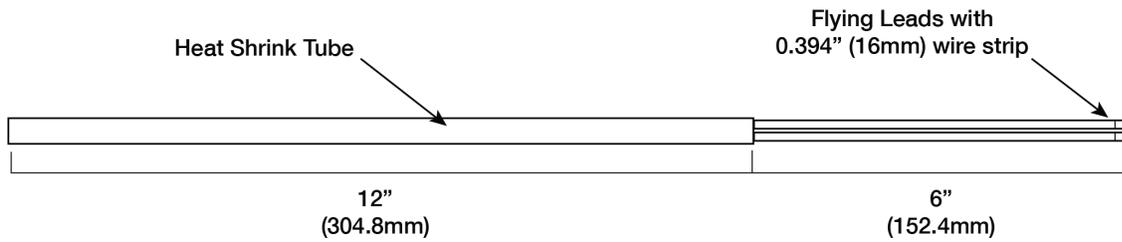
Tolerance ±1" (25.4mm)

How to Order

Model No.	Description	Input Voltage	Dimming Output	Output
PSC-BL-I-RD-DCO-BLE-CB	Passive Infrared (PIR) Fixture Mount Occupancy Sensor and Daylight Sensor with Casambi Wireless Mesh.	12-24VDC	0-10V, 100mA	Active High

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