

# Casambi Mesh Ceiling Mounted Dual Technology Wireless Sensor

## Overview

- Dual Tech Sensor with Passive Infrared (PIR) & Ultrasonic Detection
- Occupancy or Vacancy Operation Modes
- Compatible with Casambi Wireless Mesh Systems
- Surface Mount to Electrical Enclosure
- Features High and Low-End Trim Adjustment, Zoning & Continuous Dimming
- Suited for Mounting up to 12ft (3.7m)
- 12 to 24VDC Powered
- ioXt Alliance Cybersecurity Certification



## Applications

The mwConnect Dual Tech Occupancy Sensor uses both PIR and ultrasonic detection methods to provide improved performance in areas where a PIR sensor alone will not suffice. This device is communicates wirelessly via Casambi Mesh technology allowing for wireless control of luminaires.

The sensor is suitable for a variety of indoor applications and mounts to a standard electrical junction box or enclosure.

## Accessories

**Power Pack:** This sensor operates on 12-24VDC input power and requires a separate mwConnect power pack. See the mwConnect line of Power Packs and Power Supplies.

## 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.

See the mwConnect Casambi Commissioning User Manual for more information.

## Summary

Product Type:  
Dual Tech (PIR & Ultrasonic) Occupancy/  
Vacancy Sensor

Input Voltage: 12 to 24 VDC

Current Consumption:  
50 mA (25 mA non-BLE) @ 12VDC  
30 mA (20 mA non-BLE) @ 24VDC

Mounting:  
Ceiling mount up to 12 ft (3.7m)

PIR Sensor Range:  
1600 ft<sup>2</sup> (150 m<sup>2</sup>)

Ultrasonic Sensor Range:  
900 ft<sup>2</sup> (85 m<sup>2</sup>)

Max Bluetooth Range<sup>1</sup>:  
100 ft (30.4m)

Operating Temperature:  
-30° C to 70° C

Storage Temperature:  
-40° C to 80° C

Relative Humidity:  
90-95% non-condensing

Color: White

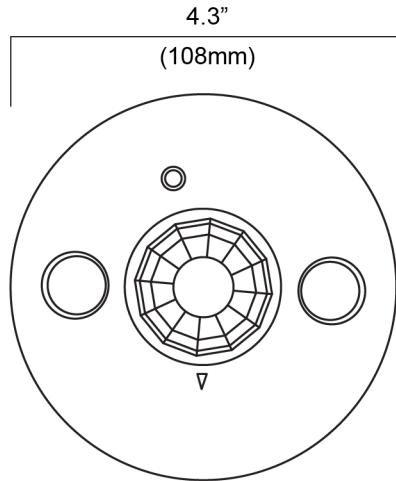
Warranty: 5 years

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

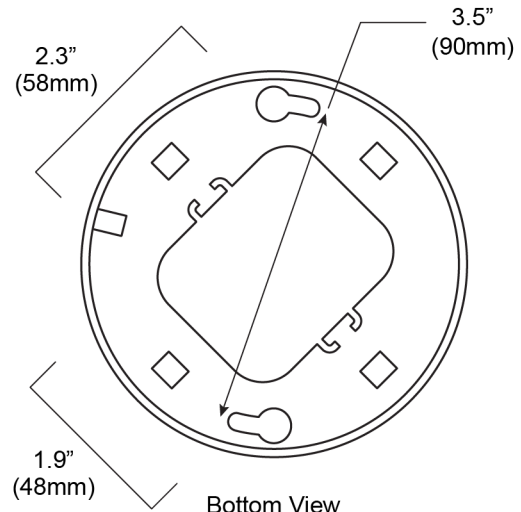
Project

Location/Type

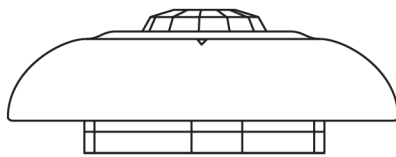
Physical Dimensions



Top View



Bottom View

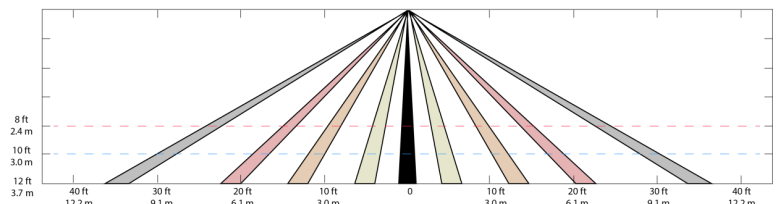
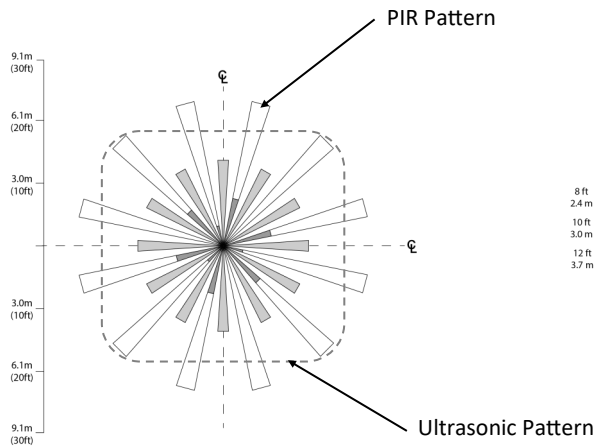


Side View

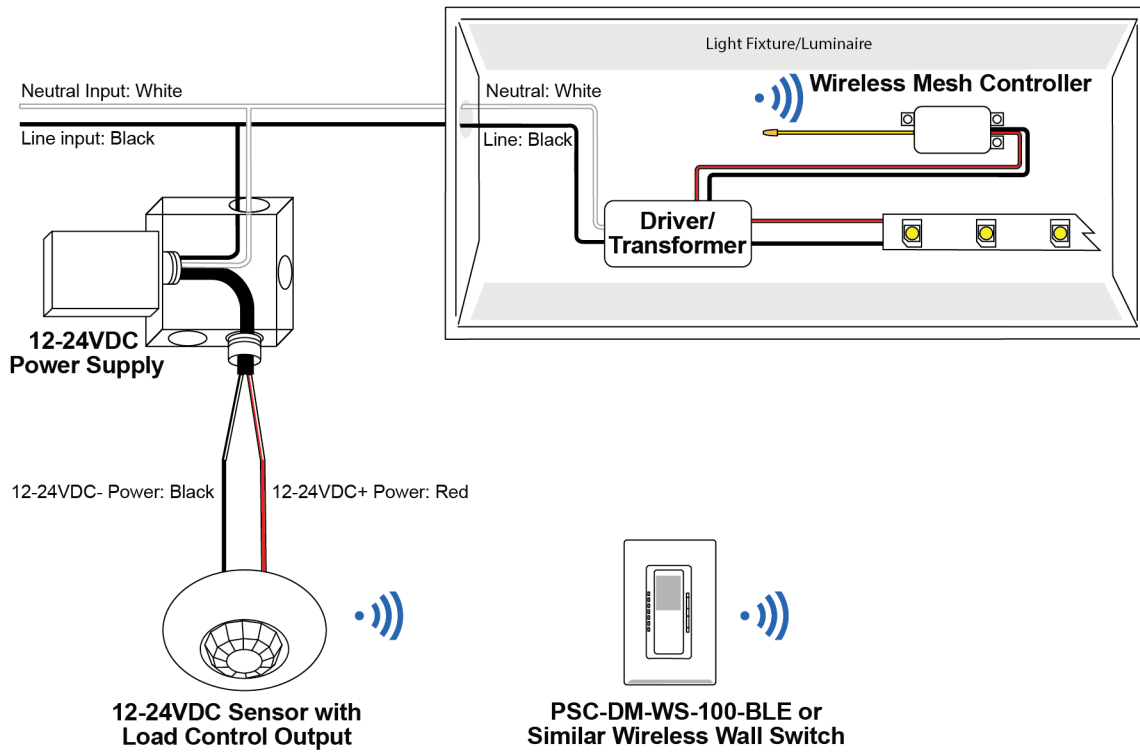
1.2"  
(31mm)  
0.4"  
(9mm)

Note: Drawings  
Not to Scale

Coverage Area



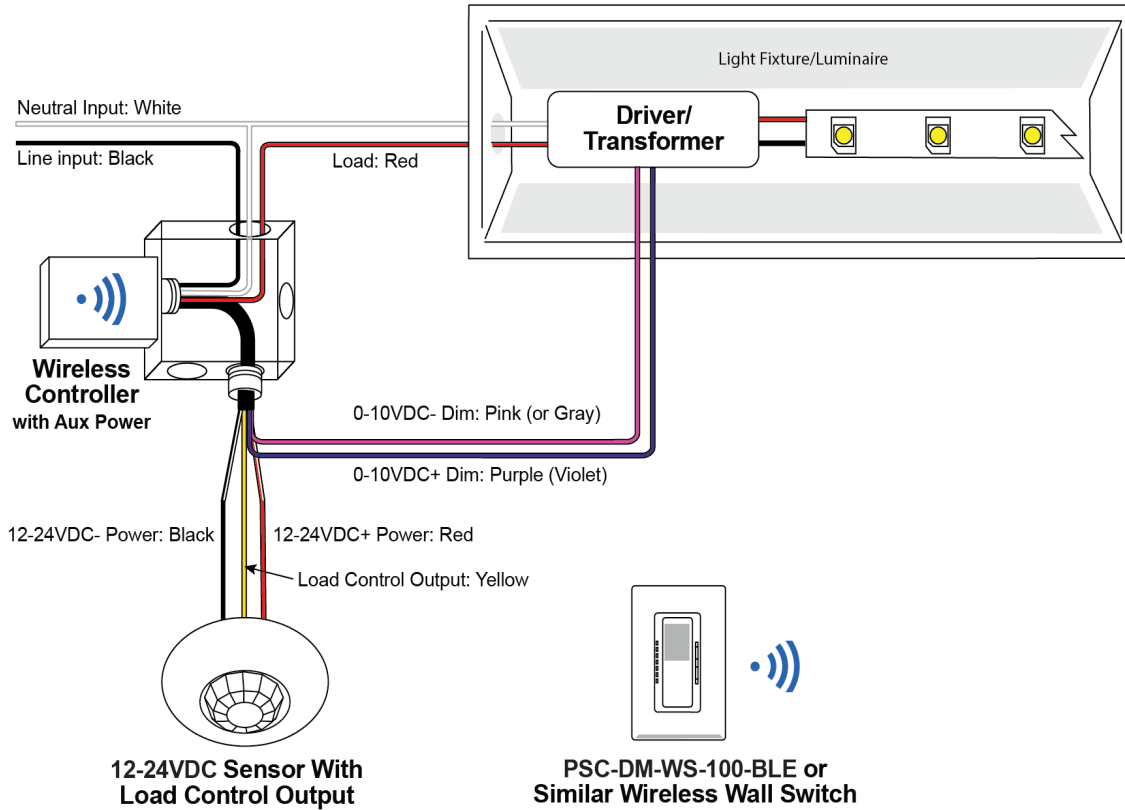
Example Application: Wireless Sensor with Power Supply



Powering Multiple Sensors

Power Supply	Power Rating	Number of Wireless Sensors (-BLE Model)	Number of Sensors
PSC-AC-PP-100	24VDC, 150mA	5 Sensors Max	7 Sensors Max
PSC-WCM-450-BLE-XX	12VDC, 300mA	6 Sensors Max	12 Sensors Max

Example Application: Sensor Installed with Wireless Area Controller and 0-10V Driver



Wiring

Wire	Designation	Notes
Red	12-24VDC+ Power Input	Sensor Power Input
Black	Power Input Common	Sensor Power Input
Yellow	10-22VDC Control Output	Output for Controlling Power Pack or Similar Devices (Active High)

How to Order

Model No.	Description	Input Voltage
<b>PSC-BL-D-CM-DC0-BLE-CB</b>	Wireless Low Voltage Ceiling Mount Dual Tech Occupancy Sensor, Casambi Wireless Mesh	12-24VDC
<b>PSC-BL-D-CM-DC0</b>	Low Voltage Ceiling Mount Dual Tech Occupancy Sensor, non-Wireless	12-24VDC

Design and specifications are subject to change without notice.