

## Casambi Mesh Single Channel Controller with Integral Relay

#### **Overview**

- Single Channel Controller with 0-10VDC Dimming Output
- Mounts to 1/2" Knockout (Light Fixture or Enclosure)
- Compatible with Casambi Wireless Mesh Systems
- Features High End Trim Adjustment, Zoning & Continuous Dimming
- Sensor/Control Input (Active High) for Relay/Load Control

- Switching Relay with Zero-Crossing
- Line Voltage Input (120-277 VAC)
- 12VDC Auxiliary Output
- Approved For Lighting And Plug Loads
- Approved for Use in Plenum Applications
- ioXt Alliance Cybersecurity Certification





### **Applications**

The Wireless Room Controller (PSC-WCM-450-BLE-CB) provides wireless control of room lighting with an integral 20A relay and single channel of 0-10VDC dimming output. This unit is compatible with Casambi Wireless Mesh technology.

With an input voltage of 120-277VAC, this unit is suited for mounting to an electrical enclosure (via 1/2" knockout) or to a fixture/luminaire (via mounting tabs).

The PSC-WCM-450-BLE-CB is rated for use in Plenums and offers additional features, including 12VDC auxiliary power supply for sensors or other products and load control input that operates the integral relay.

### **Operation**

#### **Casambi Wireless Mesh Controls:**

The controller 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.

**Single Channel Dimming:** Allows for zone control of one 0-10VDC dimming channel.

Power Multiple Sensors: A 12VDC auxiliary device power output is available to power multiple devices including occupancy sensors.

**Integral Relay:** Features a 20A relay to control multiple fixtures in a lighting zone.

See the mwConnect Casambi Commissioning User Manual for more information.

## Summary

Product Type:

Single Channel Wireless Room Controller

Input Voltage | Current Consumption: 120-277VAC 50/60Hz | 100 mA

Auxiliary Power Output:12VDC 200mA (Input Voltage up to 200VAC) 12VDC 300mA (Input Voltage over 200VAC)

Sensor Control Input: Active High 10-14VDC, 30mA

0-10VDC Output: 100mA Current Sinking

Max Load Rating (20A Relay): 16A for Elec.Ballast, LED, CFL 20A for Resistive

Mounting: 1/2" Threaded Nipple to Fixture or Electrical Enclosure

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

Operating Temperature: -40°F to 104°F (-40°C to 40°C)

Storage Temperature: -40°F to 185°F (-40°C to 85°C)

Relative Humidity: 90-95% non-condensing

Color: White

Warranty: 5 years

#### Note

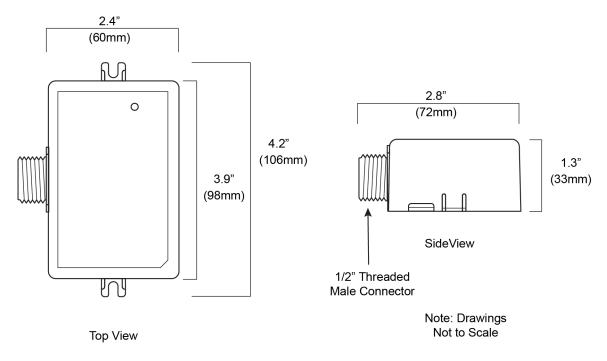
1. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for Bluetooth range accuracy.

| Project       |  |
|---------------|--|
| Location/Type |  |

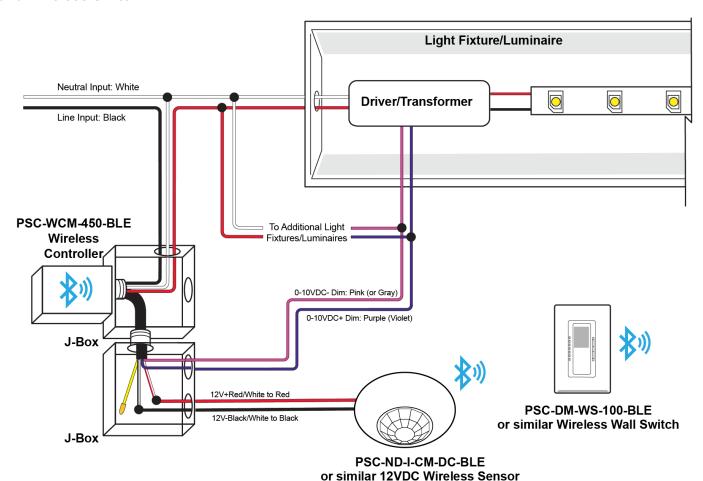




## **Physical Dimensions**

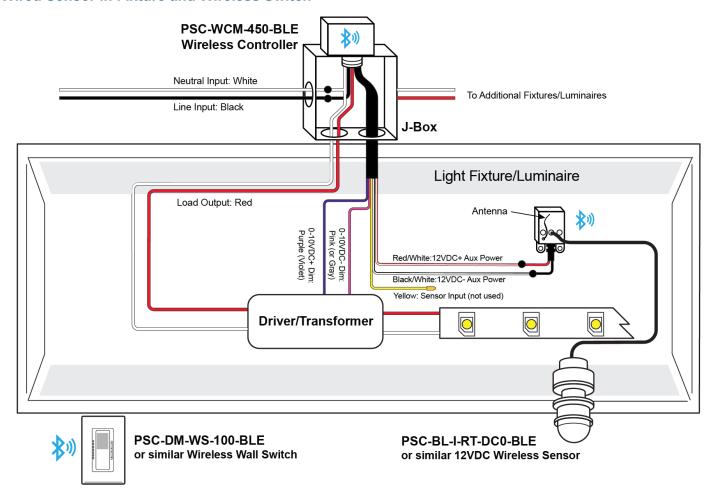


# Wiring Application Example: Controller Installed in Electrical Enclosure with Wireless Sensor and Wireless Switch





# Wiring Application Example: Controller Installed In Electrical Enclosure with Wired Sensor in Fixture and Wireless Switch



## **Wiring Table**

| Wire            | Designation                              | Notes   | Size  |  |  |
|-----------------|--|---|---|--|--|
| Black           | Line Input (120-277VAC)                  | Connect to Line Power (120 to 277 VAC, 50 or 60 Hz)           |   |  |  |
| White           | Neutral Input (120-277VAC)               |   | #12 AWG, 180+/- 20mm,<br>Strip 10, Tin Plated |  |  |
| Red             | Load Output                              | Connect to Luminaire Power Input (Voltage matches Line Input) | ] ' '   |  |  |
| Red/White       | Aux Power Output (12VDC+)                | Connect to Auxiliary Device Power Input (12VDC+)              |   |  |  |
| Black/White     | Aux Power Output (12VDC-)                | Connect to Auxiliary Device Power Input (12VDC-)              |   |  |  |
| Purple (Violet) | 0-10VDC+ Dim Output<br>(Current Sinking) |   |   |  |  |
| Pink (or Gray)  | 0-10VDC- Dim Output<br>(Current Sinking) | Connect to Current Sourcing Luminaire Dim Input (0-10VDC-)    | Strip 10mm Tin Plated                         |  |  |
| Yellow          | Load Control Input (12VDC)               | Connect to Sensor Output or Similar Device (Active High)      |   |  |  |

#### **How to Order**

| Model No.          | Description   | Input Voltage | Relay | Dimming<br>Output | Aux.<br>Output | Sensor<br>Input |
|--------------------|---|---------------|-------|-------------------|----------------|-----------------|
| PSC-WCM-450-BLE-CB | Casambi Mesh Line Voltage Single Channel Wireless Room Controller with Integral Relay | 120-277VAC    | 20A   | 0-10V, 100mA      | 12V,300mA      | YES             |

Design and specifications are subject to change without notice.

