

Casambi Mesh Controller with Integral Relay conforms to UL 924

Overview

- 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
- Option for Sensor/Control Input (Active High) for Relay/Load Control (Active High) for Relay/Load Control
- Manufactured in the USA (-BAB option)
- 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
- Conforms to UL STD 924 and Cert. to CSA STD C22.2 No. 141 for emergency lighting



Applications

The Wireless Room Controller (PSC-WCM-450-BLE-CB-EM) 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-EM 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. Refer to the Model Number on the last page in this datasheet for ordering options of with or without sensor.

Manufactured in the USA

The PSC-WCM-450 device is Manufactured in the USA, using both imported and US-made components, when ordered with the -BAB option.

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.

Option to 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:
Wireless Room Controller

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

Auxiliary Power Output:
12VDC 300mA

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

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 Range¹: 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

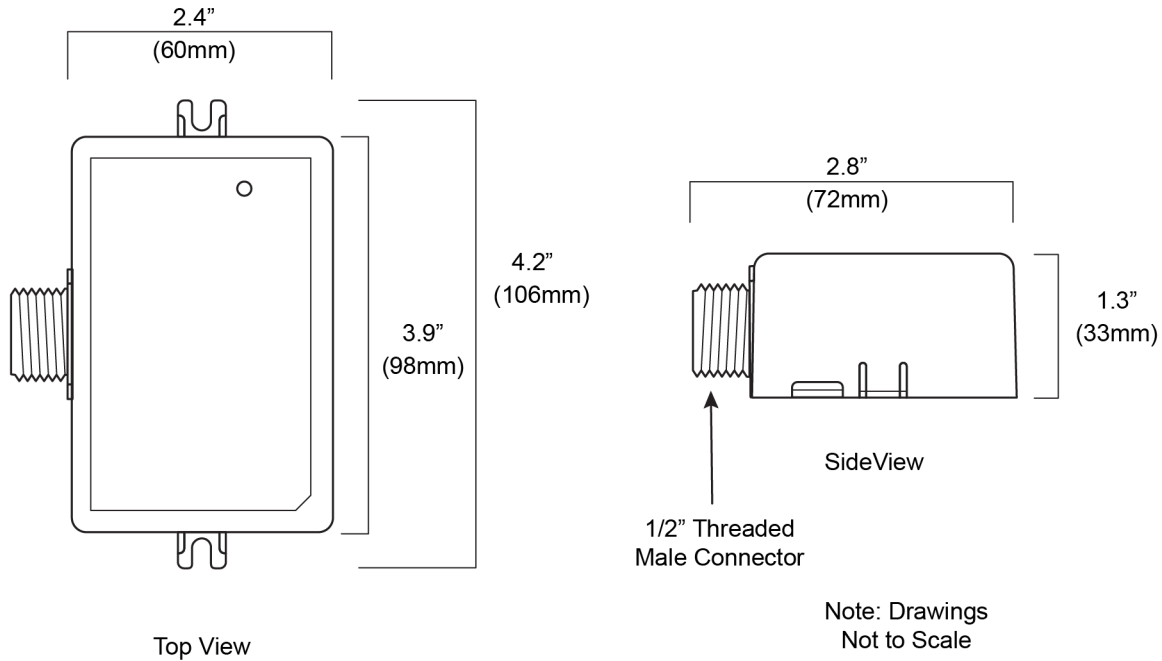
Note:

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.

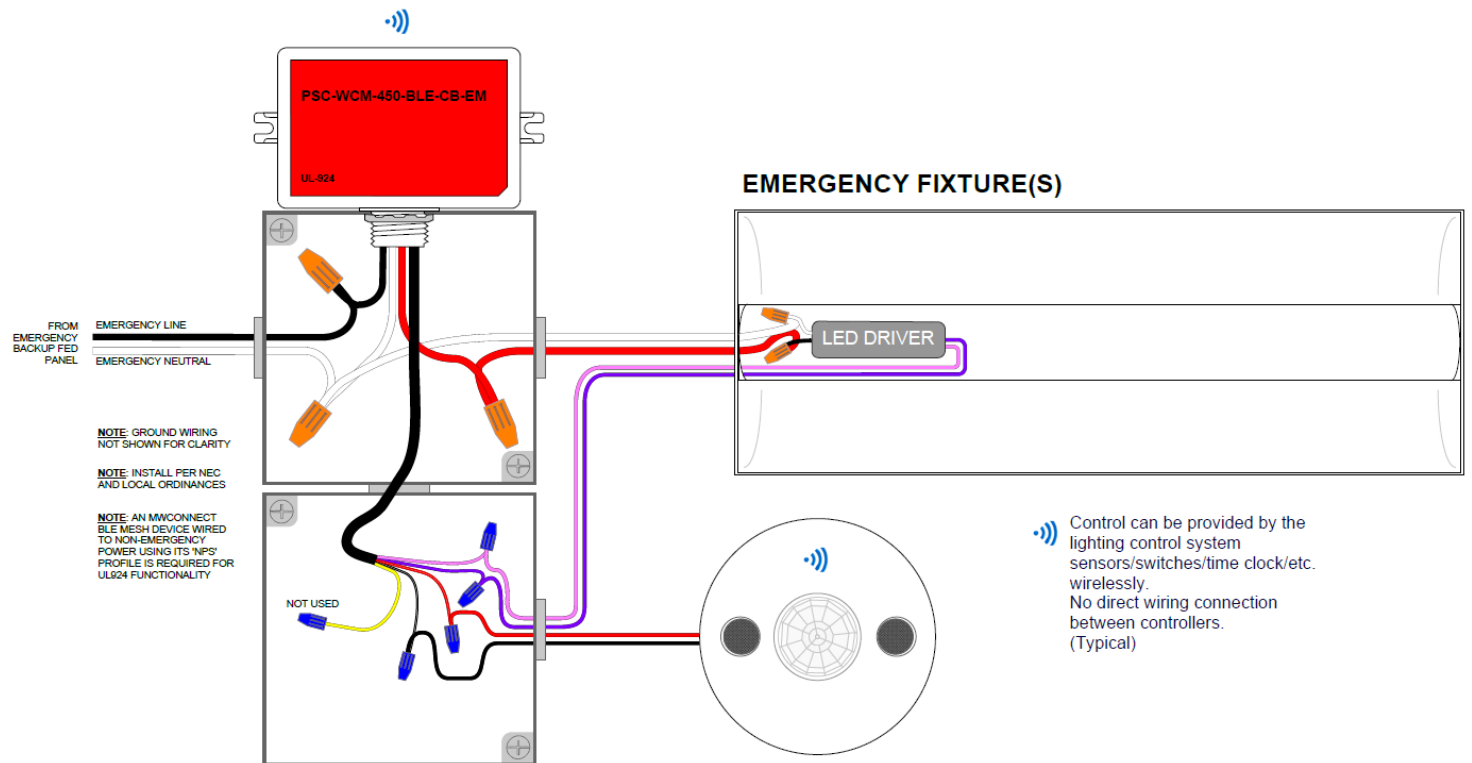
Project

Location/Type

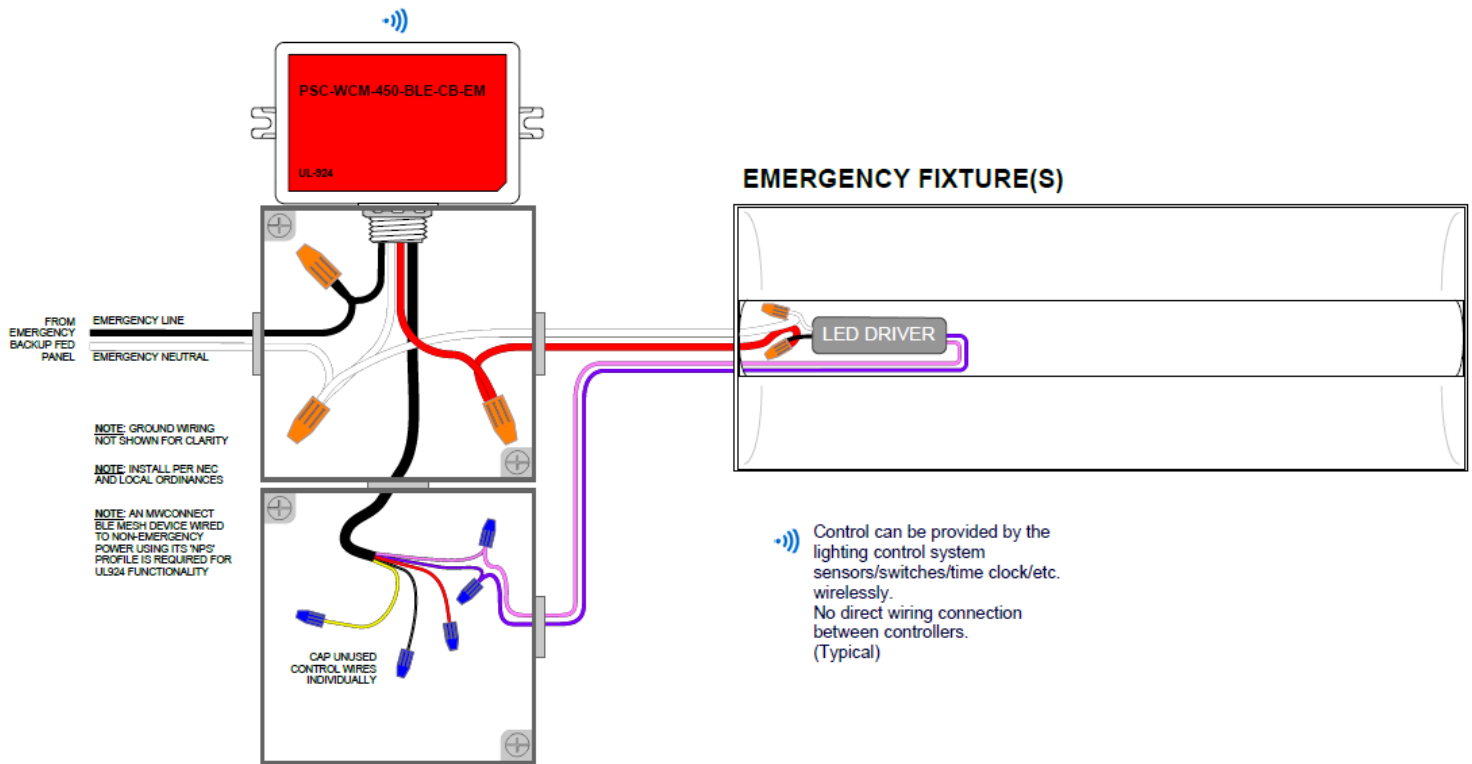
Physical Dimensions



Wiring Application Example: Controller Installed In Electrical Enclosure with Aux Power Output wired to sensor



Wiring Application Example: Controller Installed In Electrical Enclosure without Aux Power Output wired to sensor



Wiring Table

| Wire | Designation | Notes | Size |
|-----------------|---------------------------------------|---|--|
| Black | Line Input (120-277VAC) | Connect to Line Power (120 to 277 VAC, 50 or 60 Hz) | #12 AWG, 180+/- 20mm, Strip 10, Tin Plated |
| White | Neutral Input (120-277VAC) | Connect to Neutral Power and Luminaire Power Input | |
| 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+) | #22 AWG, 180+/-20mm, Strip 10mm Tin Plated |
| Black/White | Aux Power Output (12VDC-) | Connect to Auxiliary Device Power Input (12VDC-) | |
| Purple (Violet) | 0-10VDC+ Dim Output (Current Sinking) | Connect to Current Sourcing Luminaire Dim Input (0-10VDC+) | |
| Pink (or Gray) | 0-10VDC- Dim Output (Current Sinking) | Connect to Current Sourcing Luminaire Dim Input (0-10VDC-) | |
| Yellow | Load Control Input (12VDC) | This lead is capped off | |

How to Order

| Model No. (Ordering Code) | Description | Input Voltage | Relay | Dimming Output | Aux. Output |
|---------------------------|--|---------------|-------|----------------|-------------|
| PSC-WCM-450-BLE-CB-EM | Casambi Mesh Line Voltage Single Channel Wireless Room Controller with Integral Relay for emergency lighting | 120-277VAC | 20A | 0-10V, 100mA | 12V, 300 mA |
| PSC-WCM-450-BAB-CB-EM | Manufactured in the USA Casambi Mesh Line Voltage Single Channel Wireless Room Controller with Integral Relay for emergency lighting | 120-277VAC | 20A | 0-10V, 100mA | 12V, 300 mA |

Design and specifications are subject to change without notice.