

PSC-BL-U-FM-DC0-BLE-CB | Wireless Dimming Ultrasonic Sensor

Overview

- Ultrasonic sensor 40KHz ± 1kHz
- Proprietary Casambi Bluetooth Mesh
- High-End Trim, Zoning, Continuous Bi-level Dimming, Scheduling
- LED Motion indicator
- Active High/Low outputs for Relay drive



Suitable for indoor use



Applications

The PSC-BL-U-FM-DC0-BLE-CB is an ultrasonic sensor. It actively emits high frequency sound waves (40kHz) and uses the Doppler Effect to detect motion.

The PSC-BL-U-FM-DC0-BLE-CB is a Class 2 Device designed to satisfy new CA Title 24 requirements for bi-level dimming* of lighting fixtures.

The sensor is suitable for a variety of indoor applications. It supports fixture and ceiling mounts from 8-12ft (2.4-3.7m) 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.

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

Sensor Operation

Proprietary Casambi Bluetooth Mesh: The sensor can pair with an Android or iOS application to allow initial setup and subsequent sensor adjustments. The mobile application enables adjustment of sensor parameters such as time delay, dim level, and more. Additionally, features such as parameter profiles, manual dim control, and real-time feedback from the sensor can speed up configuration and provide custom user control.

Bi-level Dimming: 0-10V bi-level dimmer connects to 0-10V control on the LED driver.

Relay Control: Two additional High and Low control outputs can be used to trigger relays or other control circuitry.

See PacWave_Casambi Commissioning User Manual for more info.

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 PacWave™ PSC-AC-PP-200/400/700C/800/900.

Alternatively, the sensor can also operate with a driver that has an auxiliary output (12 V).

Summary

Sensor Type:
Ultrasonic occupancy sensor

Input Voltage | Current Consumption:
12-24 VDC | 70 mA

0-10V Output: 100 mA

High: Vin-2.5 V 100 mA source

Low: 100 mA sink current

Mounting Height:
Wall or ceiling mount at 8-12ft (2.4-3.7m)

Max Range¹:
32ft x 32ft (10m x 10m)

Max Bluetooth Range²:
49 ~ 65ft (15 ~ 20m)

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. Based on NEMA WD7-2011 test standard. Results may vary based on mounting height, angle, floor material, and line of sight. It is recommended to conduct testing for detection range accuracy.

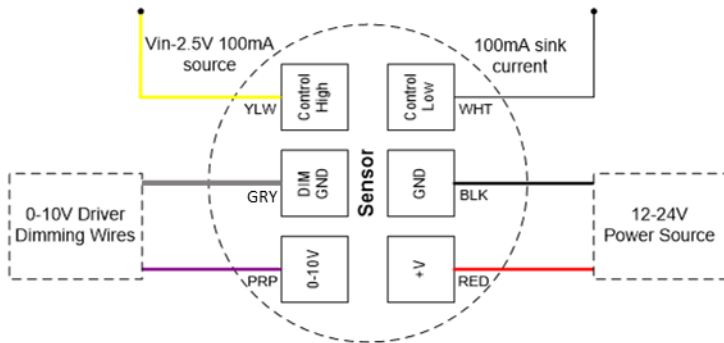
2. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for Bluetooth range accuracy.

How to Order

For Line to Low Voltage Power Supply/Controller, please check PacWave™ PSC-AC-PP-200/400/700C/800/900.

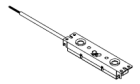
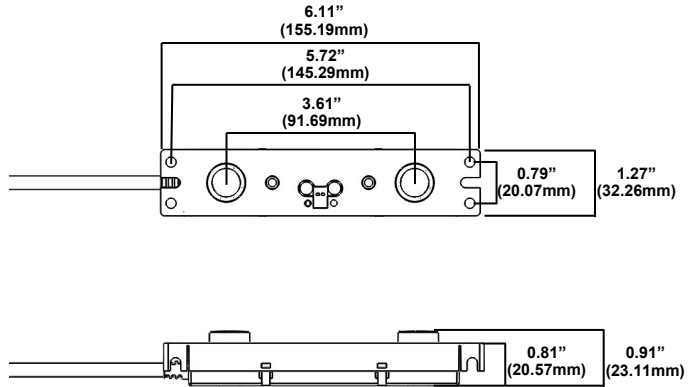
Model No.	Description	Input Voltage	Output
PSC-BL-U-FM-DC0-BLE-CB	Ultrasonic Occupancy Sensor, Proprietary Casambi Bluetooth Mesh	12-24VDC	0-10VDC Motion High Motion Low

Wiring Diagram



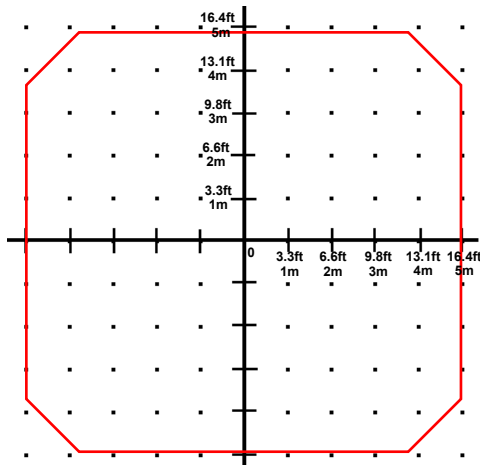
Note: If using a power pack other than PSC-AC-PP-200, connect either Control Hi or Control Low, depending on power pack relay circuitry.

Physical Dimensions

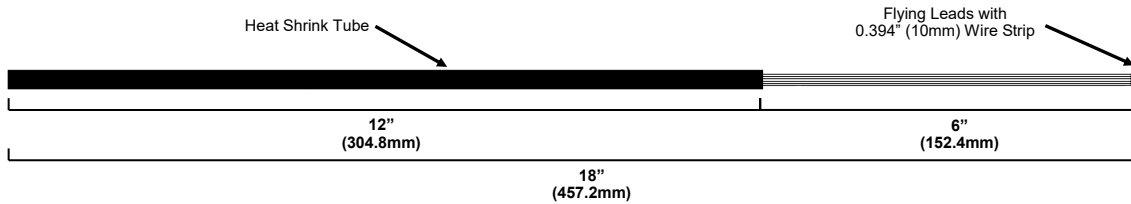


Drawings are Not to Scale

Detection Area for 7.9ft (2.4m) Ceiling Mounted



Leads: Minimum 22AWG



Tolerance ±1" (25.4mm)

Design and specifications are subject to change without notice.