

Casambi Mesh Compact DALI Wireless Sensor-Controller

Overview

- DALI Wireless Sensor-Controller
- Digital Passive Infrared (PIR) Sensor
- Featured with a connector designed to Zhaga Book 20 specifications (Mount to 1/2" Knockout)
- Compatible with Casambi Wireless Mesh Systems
- Manufactured in the USA (-BAB option)
- DALI D4i Certified
- 360° Sensor Coverage Pattern
- Features High and Low-End Trim Adjustment, Zoning & Continuous Dimming



Applications

The PSC-ZBD-I is a DALI D4i Wireless Fixture Sensor-Controller, featured with a connector designed to Zhaga Book 20 specifications. The device includes a Passive Infrared occupancy sensor and integral daylight sensor.

The sensor-controller includes a Book 20 connector-based wiring harness to simplify installation. The device mounts in a 1/2" knockout and is secured by the included optional clips or via the threaded body.

The product communicates directly with DALI drivers and is controlled wirelessly via Casambi Mesh technology.

Manufactured in the USA

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

Accessories

The PSC-ZBD-I controller operates on power from the DALI Bus. See the Wiring Table for designation of wiring tabs/slots.

Operation

Casambi Wireless Mesh Controls: The sensor-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.

Control: The sensor-controller provides D4i compatible DALI output for driver control. Please refer to the Model Number Matix on the last page in this datasheet for available profile options.

Daylight Sensor: Features an integral Photocell for daylight control integration.

Quick Connector: The device is featured with a connector designed to Zhaga Book 20 specifications and includes a wiring harness.

See the mwConnect Casambi Commissioning User Manual for more information.

Note:

1. The application/absolute range of the sensor is subject to variation because of different types of clothing, backgrounds, and ambient temperature. It is recommended to conduct testing for 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.

Summary

Product Type:
Wireless DALI PIR Sensor and Controller

Input Voltage | Current Consumption:
DALI Bus | 30 mA

DALI: Complies with DALI D4i Specifications

Mounting: Featured with a connector designed to Zhaga Book 20 specifications (Mount to 1/2" Knockout)

Mounting Height: 8 to 15ft (2.4 to 4.6m)

Max Sensor Range¹:
15ft (4.6m) Radius

Max Bluetooth Range²:
100ft (30.4m)

Operating Temperature:
-40°F to 158°F (-40°C to 70°C)

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

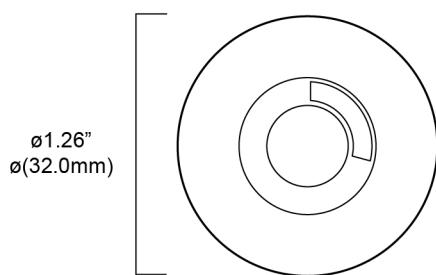
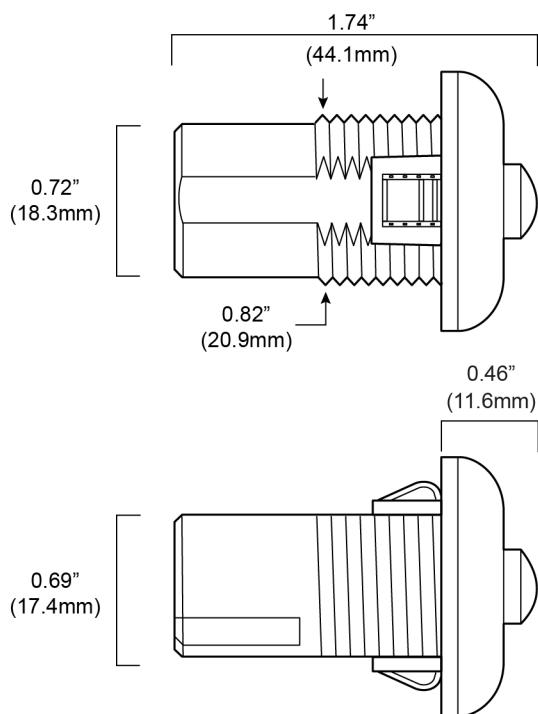
Relative Humidity:
90-95% non-condensing

Color: White

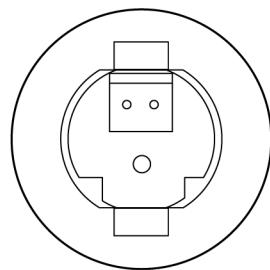
Warranty: 5 years

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

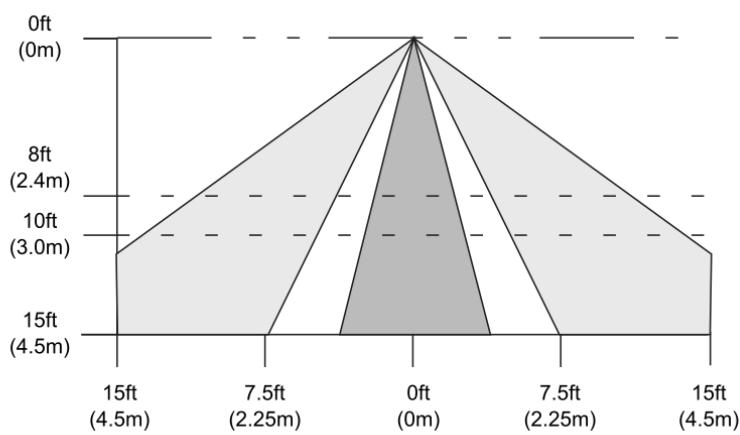
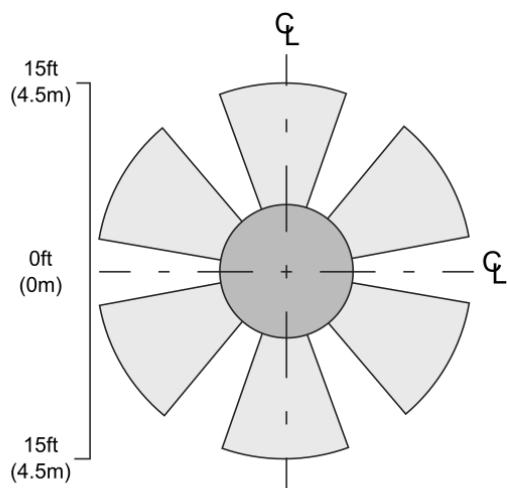
Physical Dimensions

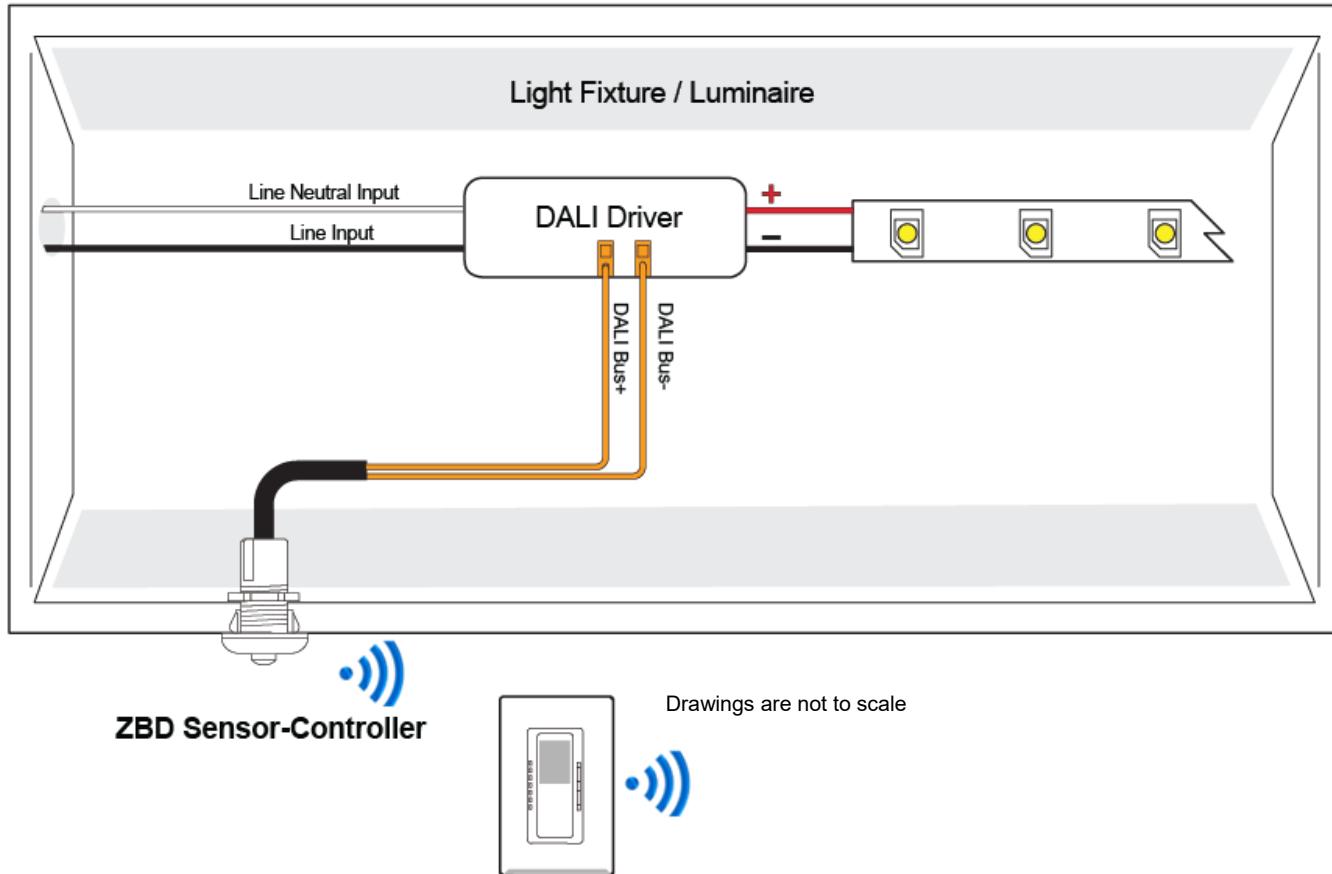


Drawings Are Not To Scale

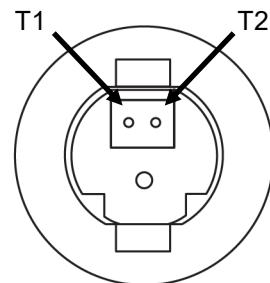


PIR Sensor Pattern



Example Application: Sensor-Controller Installed with DALI Driver

Sensor-Controller Wiring

| Tab/Slot | Designation | Notes |
|----------|----------------------------------|--------------------|
| T1 | DALI Bus (Communication & Power) | Black Wire (22AWG) |
| T2 | DALI Bus (Communication & Power) | Black Wire (22AWG) |



Model Number Matrix

| PSC | ZBD | I | — — | — | BLE | CB | — — — |
|--------------------|-------------------------------|--------------|----------------------|------------------------------------|-------------------------|--|--|
| PSC | ZBD | I | 21 | N | BLE | CB | /1CH |
| DALI Indoor Device | Passive Infrared (PIR) Sensor | Light Sensor | Low Bay Lens Pattern | Wireless | Casambi Mesh Compatible | Single channel dimmer using address #0 | |
| | | | | BAB Wireless Manf in USA | | | /2CH Dual channel dimmer using address #0 and #1 |
| | | | | | | | /2TW Two channel warm and cool mixer |
| | | | | | | | /4CH Four channel dimmer using address #0, 1, 2, and 3 |
| | | | | | | | /D8T DALI DT8 for Tunable White |
| | | | | | | | /D8R DALI DT8 for RGBW |
| | | | | | | | /BRC DALI Broadcast dimmer. No short addressing required |
| | | | | | | | /EMS Single channel dimmer as emergency fixture |
| | | | | | | | /NPS Single channel dimmer as normal power sensor |

Example:
PSC-ZBD-I-21N-BLE-CB/4CH

Design and specifications are subject to change without notice.