

# Casambi Mesh Passive Infrared Sensor-Controller

#### **Overview**

- Casambi Wireless Mesh
- 1-Channel 0-10VDC Dimming
- Mounts On Fixture
- PIR Sensor Mounting Height Up To 40 ft (12.2 m)
- Photocell
- High-End Trim, Zoning, Continuous Dimming
- Z10 0-10V Base

- Active high 3.6W
- IP-65 Rated for Indoor Applications
- Quick Connector For Easy Installation
- Powered by12-24VDC

For Indoor Only Receptacle Sold Separately





## **Applications**

The PSC-ZKV-I-31H products are a series of 1-Channel Wireless Fixture Controllers and use PIR motion detection architecture and passive infrared (PIR) technology for improved detection coverage. The models have active high outputs for relay control.

The controllers are IP65 rated for interior use. They are suitable for a variety of indoor applications in temperatures ranging from –20° to 45°C. The models also have an integral photosensor.

These devices are controlled wirelessly via Casambi Mesh technology allowing for wireless dimming of luminaires. The compact size allows for seamless integration to the fixture.

The PSC-ZKV-I-31H sensor-controllers

require 12-24 VDC power to operate. See the Wiring Table for designation of wiring

### **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.

**1-Channel:** Outputs 0-10 dimming channel for driver control.

Relay Control: 3.6W active high

**Photosensor:** An integral photosensor provides ambient light level sensing for automatic control of daytime or nighttime designated scenarios.

**Quick Connector:** The controller mounts to a Z10 0-10V receptacle (mwConnect part# ZKV-R1L) . One receptacle is required for mounting each controller.

## Summary

Product Type: 1-Channel PIR Sensor and Controller

Input Voltage | Current Consumption: 12-24 VDC | 20 mA max

0-10VDC Output: 12 mA

Mounting Heights: High Bay 20-40ft (6.1-12-2m)

Max Sensor Range: High Bay 80ft (24.4m) diameter

Active High: 3.6W

Fixture Mount: Quick-Connect receptacle, sold separately

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

Operating Temperature: -20°C to 45°C

Storage Temperature: -40°C to 85°C

Relative Humidity: 90-95% non-condensing at 30°C

Color: Black, White

Warranty: 5 years

#### Note:

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

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

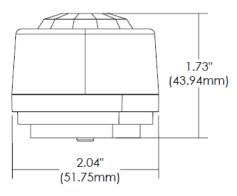


**Accessories** 

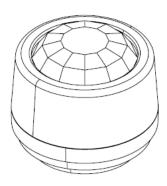
tabs/slots.



# **Physical Dimensions**

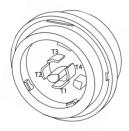






Drawing Are Not To Scale

# Product Wiring—Z10 0-10V Base (-10 & -11) Models







View of Z10 0-10V Device Receptacle

| Tab/Slot | Designation                                    | Notes  |  |  |
|----------|--|--|--|--|
| T1       | 12-24VDC+ Power to<br>Sensor-Controller        | Red Wire<br>(ZKV-R1L Receptacle)             |  |  |
| T2       | 12-24VDC- Power and 0-10VDC-/Common            | Black Wire<br>(ZKV-R1L Receptacle)           |  |  |
| Т3       | 0-10VDC+ Control Signal from Sensor-Controller | Purple (Violet) Wire<br>(ZKV-R1L Receptacle) |  |  |
| T4       | 3.6W Load Control<br>(Active High)             | Yellow Wire<br>(ZKV-R1L Receptacle)          |  |  |

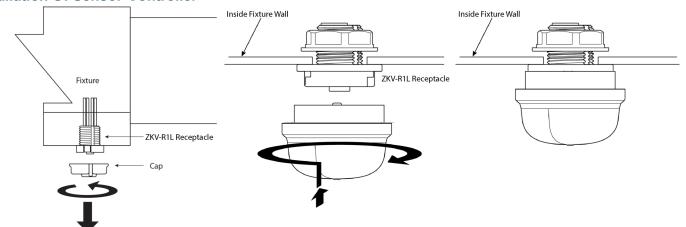
For Wiring Diagrams featuring the PSC-ZKV product series, visit the following link:

http://mwconnect.us/wiring/PSC-ZKV





### **Installation Of Sensor-Controller**

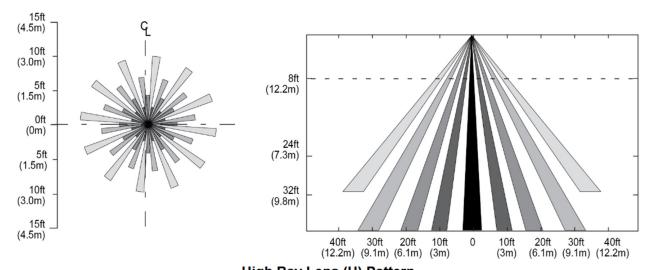


To install a ZKV device, first remove the protective cap on the ZKV-1RL by pushing up and rotating counterclockwise.

To install ZKV devices insert, push in and rotate clockwise to lock. No tools are required. Luminaires can be easily and quickly upgraded.

The receptacle for ZKV devices is typically installed by luminaire manufacturer and is shipped to job site with a protective cap.

#### **Sensor Patterns**



## High Bay Lens (H) Pattern

## **Model Number Matrix**

| PSC | ZKV                    | 1                                | 31                             | Н                        | BLE      | СВ                         |              |
|-----|------------------------|----------------------------------|--------------------------------|--------------------------|----------|----------------------------|--------------|
| PSC | ZKV                    | I                                | 31                             | Н                        | BLE      | СВ                         | вк           |
|     | 0-10V Indoor<br>Device | Passive Infrared<br>(PIR) Sensor | Z10 0-10V Base<br>Photo Sensor | High Bay Lens<br>Pattern | Wireless | Casambi Mesh<br>Compatible | Black Finish |
|     |                        |                                  |                                |                          |          |                            | WT           |

Example:

PSC-ZKV-I-31H-BLE-CB-BK



White Finish