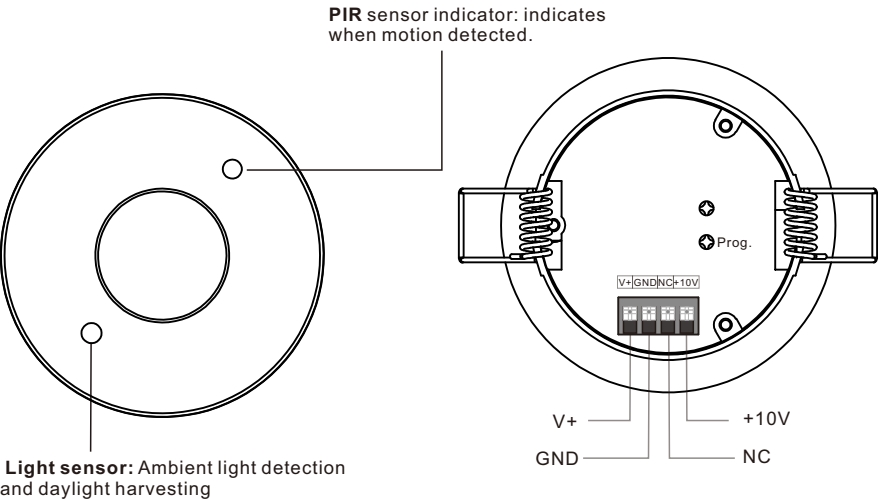


Casambi Wireless Ceiling Mounted PIR Sensor + Light Sensor + 0-10V Dimming



Important: Read All Instructions Prior to Installation

Function introduction



Product Description

The ceiling mounted sensor combines presence sensing, daylight harvesting, 0-10V dimming and Casambi radio technology. The sensor can work with 0-10V dim-to-off LED drivers, and the luminaires just need to be connected to mains power. The result is increased occupant comfort and significant energy savings that meet the most demanding building energy codes.

Casambi Technology Explained

The Casambi technology provides a mesh network where all the intelligence of the system is replicated in every node and, in such a way, creates a system with no single point of failure. In this kind of fully distributed architecture, any unit can go offline and catch up from others when they return back online.

Wireless Features

- Control a large number of fixtures from any point
- Simple to use UI
- Wide range of functionality – Grouping Luminaires, different lighting situations for different occasions, colour temperature, daylight sensor, occupancy sensor and much more.

Product Data

Physical Information

|                     |                |
|---------------------|----------------|
| Dimensions / Weight | See Dimensions |
| Cutting Hole        | 70-73mm        |

|                  |                         |
|------------------|-------------------------|
| Material / Color | ABS / White             |
| Wire Gauge       | 26-16 AWG (0.2-1.3 mm2) |
| Strip Length     | 0.28-0.35 in. / 7-9 mm  |

Electrical Information

|                     |                                     |
|---------------------|-------------------------------------|
| Input Voltage       | 12/24 VDC                           |
| Current Consumption | < 30mA (when dimming method = sink) |
| Dimming Control     | Analog (0-10V)                      |
| Dimming Output      | 4mA (sink) / 20mA (source)          |
| Status Indicators   | Red (motion detection)              |

Wireless Communication

|                       |                              |
|-----------------------|------------------------------|
| Transceiver Frequency | 2.4GHz ISM band              |
| Radio Range           | 164 feet (50m) in open field |
| Radio Certification   | FCC/IC, CE                   |

Lighting Control

|          |                                                                                                                                             |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Features | Continuous dimming , Individual/group addressing, Scene control, Task tuning (0-100%)<br>Autonomous sensor-based control, Scheduler control |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------|

Sensing

|                        |                                           |
|------------------------|-------------------------------------------|
| Occupancy Sensing Type | PIR sensor                                |
| Lux Detection Range    | 0-1000 Lux                                |
| Mounting Height        | Recommended height: 8ft (2.5m)            |
| Detection Angle        | 130°                                      |
| Detection Range        | Up to 5 meters @ 2.5m installation height |

Environment

|                             |                                               |
|-----------------------------|-----------------------------------------------|
| Operating Temperature Range | 32°F to 104°F / 0°C to 40°C (indoor use only) |
| Operating Humidity          | 0-95% (non condensing)                        |
| Safety Certification        | cULus Listed, CE                              |

Key Features

- PIR motion detection
- Daylight harvesting
- Works with 0-10V dim-to-off LED drivers
- Autonomous sensor-based control
- Can be use for indoor applications

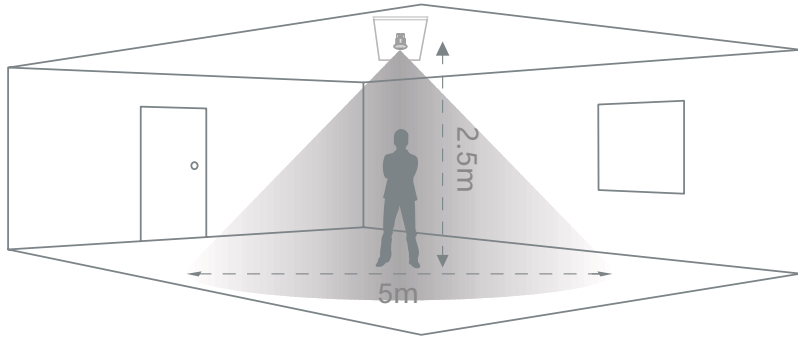
Applications

- Residences
- Offices
- Meeting rooms
- Corridors

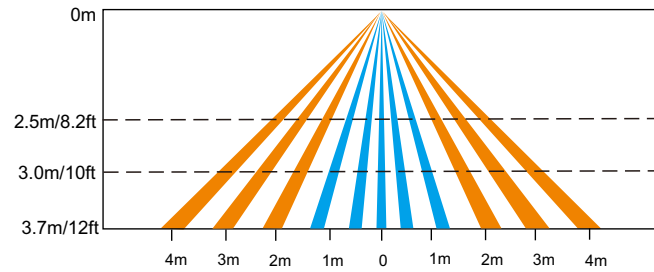
Benefits

- Cost-effective solution for energy savings
- Energy code compliance
- Robust mesh network

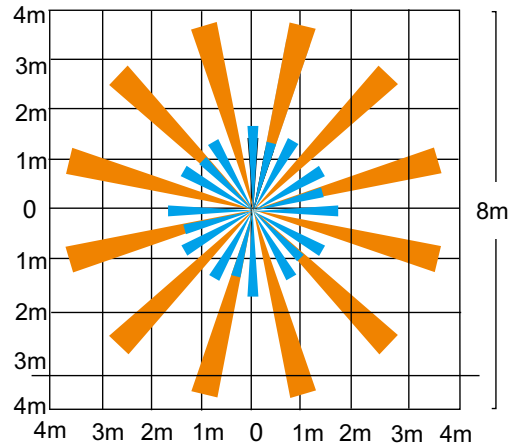
## Detection Pattern



## Coverage Side View



## Coverage Top View



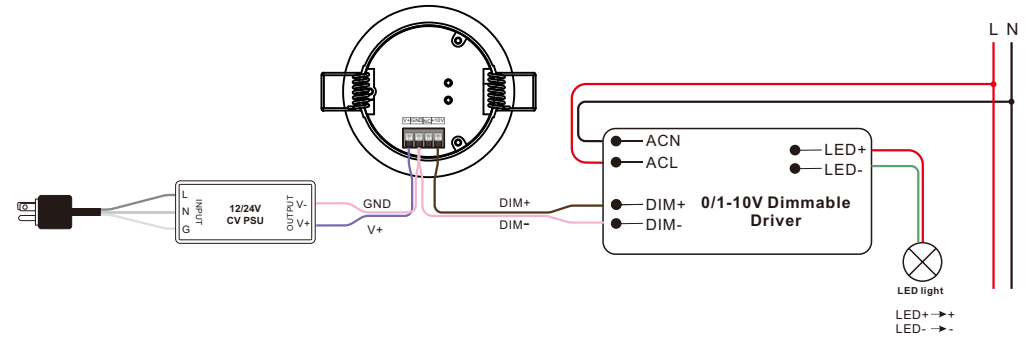
The detection area for movement sensor can be roughly divided into two parts:

- Slow movement (person moving  $< 1.0'/s$  or  $0.3m/s$ )
- Quick movement (person moving  $> 1.3'/s$  or  $0.4m/s$ )

## Wiring Diagram

### Wire Code

- Violet: 12/24VDC Power V+
- Pink: 12/24VDC Power GND & 0/1-10 Dim-
- Brown: 0/1-10V Dim+



## Product Dimension

