## Casambi Wireless Fixture Mounted Microwave Sensor + Light Sensor + 0-10V Dimming



Important: Read All Instructions Prior to Installation

## **Function introduction**



#### **Product Description**

The fixture-Integrated sensor combines presence sensing, daylight harvesting, 0-10V dimming and Casambi radio technology into a small package that fits into various luminaires. When used with 0-10V dim-to-off LED drivers, it enables any lighting manufacturer to deliver wirelessly-controllable and sensor-equipped fixtures with minimal engineering effort. The sensor-equipped 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 / 12.3g (without locknut) / 21.3g (with locknut) |
|---------------------------|---|
| Mounting (Luminaire Hole) | 1/2" trade size knockout (22.2-22.3mm)                          |
| Material / Color          | ABS / White   |
| Connectors / Wire Gauge   | 3 pin connectors / 24-18 AWG (0.2-0.75 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 (occupancy detection)           |

#### **Wireless Communication**

| Transceiver Frequency | 2.4GHz ISM band              |
|-----------------------|------------------------------|
| Radio Range           | 269 feet (82m) in open field |
| Radio Certification   | FCC/IC, CE                   |

#### Lighting Control

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

## Sensing

| Occupancy Sensing Type   | Microwave sensor                        |
|--------------------------|---|
| Microwave High Frequency | 5.8 GHz ±75 MHz ISM band                |
| Lux Detection Range      | 0-1000 Lux                              |
| Mounting Height          | Recommended height: 10ft (3m)           |
| Detection Angle          | 150° (wall), 360° (ceiling)             |
| Detection Range          | Up to 8 meters @ 3m 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**

- Microwave motion detection
- Daylight harvesting
- Task tuning
- · Compact form factor
- Works with 0-10V dim-to-off LED drivers
- Autonomous sensor-based control

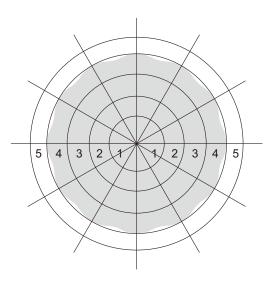
## Benefits

- · Cost-effective solution for energy savings
- Energy code compliance
- Fits into existing and new-design luminaires
- · Robust mesh network

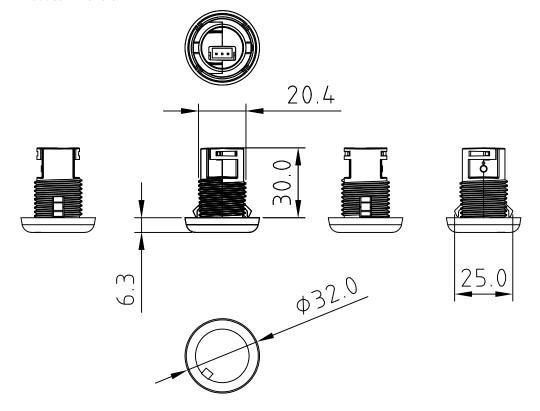
## Applications

- · Open offices
- · Individual offices
- Conference rooms
- Classrooms
- Retail stores
- Hospitals
- Lobbies

# Ceiling Pattern (Unit: m) Installation Height: 3m



# **Product Dimension**



# Wiring Diagram

## Wire Code

• Brown: 12/24VDC Power V+

• Pink: 12/24VDC Power GND & 0-10 Dim-

• Violet: 0-10V Dim+

