

Introduction

Ceiling mounted passive infrared sensor for wireless control of Casambi luminaires via Bluetooth mesh. Integrated light sensor for daylight harvesting. Adjustable delay time and sensitivity. All configurations are managed through the Casambi app. This sensor is optimal for environments such as classrooms, conference rooms, and similar spaces. The sensor can also be directly connected to a DALI bus and configured as a DALI sensor to control DALI luminaires directly from the sensor.

Casambi technology

The Casambi technology is based on Bluetooth Low Energy technology, where all Casambi products serve as both signal amplifiers and information distributors. This results in a robust system that enables a continuous operation of the system even if one unit fails.

Wireless features

- ▶ Wireless communication
- ▶ On/off and dimming control of Casambi fixtures
- ▶ Grouping of luminaires
- ▶ Adjustable light level
- ▶ Adjustable color temperature
- ▶ Daylight harvesting

Sensor features

- ▶ Detection range of 8,7 diameter at a mounting height of 3m
- ▶ Passive infrared sensor
- ▶ Automatic lighting control via detector or manual control via push-button
- ▶ Adjustable sensitivity
- ▶ Possibility to connect and control DALI luminaires

Installation

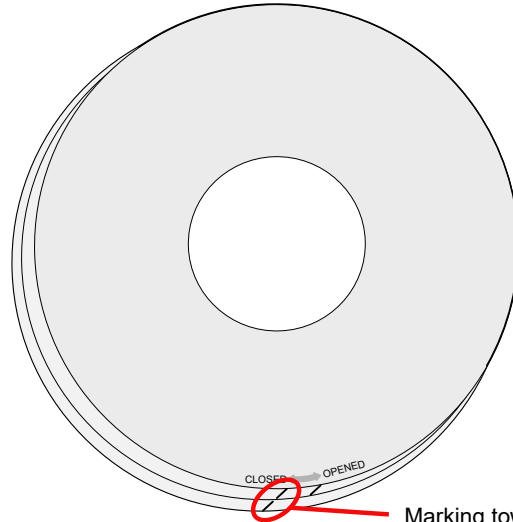
Opening the enclosure

The enclosure is opened by rotating the lens part counterclockwise in relation to the back piece.



Mounting

Due to the elliptical detection area, it is important to mount the sensor in the correct direction in rectangular rooms to achieve the maximum detection coverage. The correct mounting direction is achieved when the sensor is installed on the ceiling with the marking "CLOSED - OPENED" facing one of the long sides of the room.

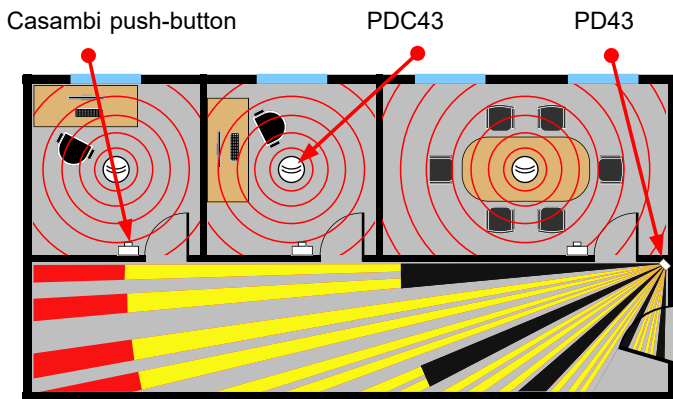
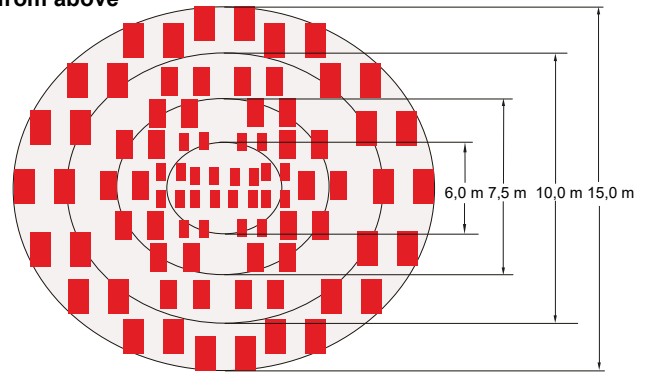


Marking towards the long side of the room.

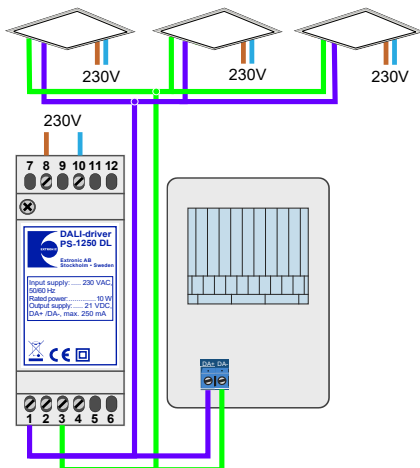
Office Spaces

In office spaces with various types of rooms and corridors, the choice of sensors depends on the layout of the rooms. In offices and conference rooms, the ceiling sensor PDC43 is optimal, while in corridors the corner-mounted sensor PD43 is preferred.

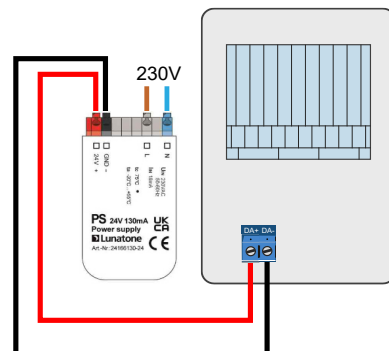
Detection area from above



DALI connection via PS1250



24VDC connection via 130mA Lunatone Power



Light Sensor

The light level (1-4000 lux) of the light sensor is displayed in the Casambi app. Transfer curves can be created in the Casambi app to determine lighting levels from different lux values.

The lux level can be calibrated in the Casambi app to compensate for the sensors location.

Semiconductor Relay

When presence is detected, a semiconductor relay is activated through a C, NO connection. The relay is closed when there is no presence and the timer runs out. The timer is set in the Casambi app.

In some Casambi profiles, the relay can also be controlled from the Casambi system as a luminaire.

In this case, the relay must be set in the Casambi app to [relay → relay as lamp].

Power Supply and DALI Connection

The sensor can be powered with 12-24VDC or 12VAC, as well as with a DALI power supply. If the sensor is connected to a DALI bus, DALI-luminaries can be controlled from the sensor. E.g. Profile "PDC43 Dali BC".

Create a Network

- Download the Casambi app for iOS or Android
 - Start the app
 - Create a new network
 - Choose firmware (*our products are compatible with both versions*)
 - Classic
 - Evolution (*Always choose Evolution in new projects*)
 - Mandatory fields
 - Name
 - Email
 - Sharing

After the network is created

- Network
 - Control hierarchy ON
 - Timers at start ON

Add devices to the network

- More
 - Nearby devices
 - Press the device
 - Optional profile change (*can only be changed when the device is not in a network*)
 - Add to network

Create a Scene

- Scenes
 - Add a scene
 - Enter scene name
 - Choose which luminaire the scene will control

Sensor settings

(A scene must be created before these settings)

- More
 - Sensors
 - Press the sensor
 - Press "not in use under" Presence Sensor
 - Presence
 - Presence Scenes
 - Choose scene
 - Set delay time
 - Set dimming time

Technical Specification

Mechanical Data

| | |
|--------------------|-----------------------------|
| Dimensions (L+W+H) | 102 x 50 x 70 |
| Weight | 95 g |
| Finish/Color | Semi-matte / White RAL 9003 |
| IP rating | IP42 |

Power

| | |
|-------------------|----------------------------------|
| Operating voltage | 12-24 VDC, 12 VAC, DALI |
| Power consumption | 22 mA |
| Start-up time | 2 min |
| LED-indication | Yes, on motion and location mode |

Sensor

| | |
|-----------------|------------------------|
| Detection range | 360° 7-17,5 m |
| Sensor type | Passive infrared (PIR) |

Wire terminals

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|----------|--------------------------|
| Stranded | 0,327- 2 mm ² |
| Solid | 0,327- 2 mm ² |

Operating and storage conditions

| | |
|---------------------|--------------------------|
| Ambient temperature | -40 °C till +70°C |
| Storage temperature | -40 °C till +85°C |
| Humidity | Max 90% , non-condensing |

Compliance and Standards

| | |
|-------------|---|
| Environment | Complies with the REACH and RoHS directives |
|-------------|---|

| | |
|------------------------|--------------------------------|
| Software compatibility | Classic/ Evolution/ Long range |
|------------------------|--------------------------------|