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Project: \_\_\_\_\_

Reference Type: \_\_\_\_\_

Item Code: \_\_\_\_\_

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# CUPOWER

NASSR PDS-BAT-CAS

Art. 168392

## Product features

- PIR and ambient light sensor
- Supports presence, presence/absence and absence scenarios
- Ceiling surface mounting
- Battery life up to 5 years; longer runtime possible with latency optimization
- Battery operated, suitable for battery type CR123A
- Built-in magnetic trigger for hands-free pairing and OTA setup



## Product specifications

168392 NASSR PDS-BAT-CAS

Input voltage	Standby current	Detection angle	RF transmit power	Casambi Fixture ID	Dimension Ø x H
2.5...3.3 Vdc	10 µA	110°	+4 dBm	40923	Ø 3.56 in x 1.05 in (Ø 90.5 mm x 26.7 mm)

## Electrical specifications

### Electrical parameter

Operating voltage	2.5...3.3 Vdc
Standby current	10 µA
Battery type	CR123A
RF transmit power	+4 dBm
Wireless protocol	Casambi, 2.4 GHz BLE-based proprietary mesh
Wireless range (line-of-sight, open field)	Up to 50 m

### Sensor specifications

PIR axial distance (mounting height)	2.5...3.6 m
PIR axial coverage angle	110°
PIR tangential coverage angle	360°
Ambient light sensor detection range	0...3000 Lux

### Control and indication

Sensitivity adjustment	4 levels, modified by buttons (see page 4 for details)
Latency adjustment	4 levels, modified by buttons (see page 5 for details)
Orange LED	Identification of devices and set mode indication
Green LED	Setting level indication

### Environmental specifications

Operating temperature	0...+40 °C
Working humidity	0...+95 %

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Work environment	Indoor only
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**Estimated battery life (reference only, no latency optimization)**

Scene	Triggers per day	Estimated battery life (years)
Office corridor	100...300	5.9...10.9
Public entrance	500...2000	1.2...4.0

### Dimensions

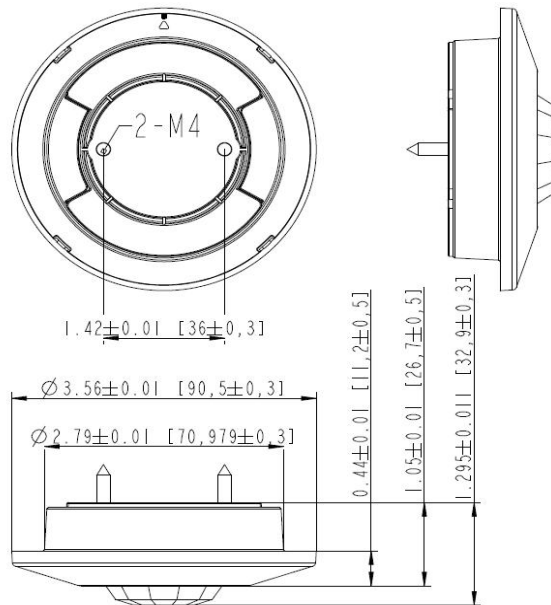
**Housing dimensions**

Diameter	3.56 in (90.5 mm)
Height (H)	1.05 in (26.7 mm)

For all dimensions: values in in (mm)

**Packaging details**

Packing units	24 pcs.
Carton size	12.32 in x 8.50 in x 7.95 in (313 mm x 216 mm x 202 mm)
Carton weight	2.07 kg
Product weight	46 g (battery not included)





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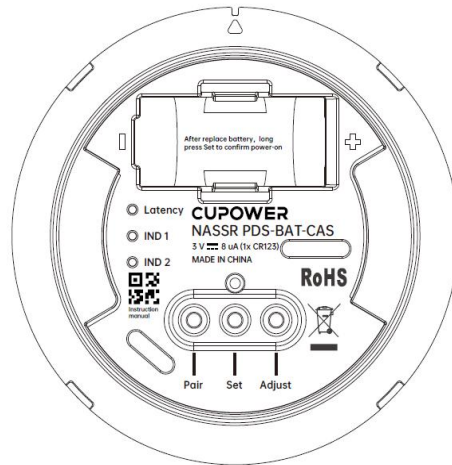
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## Caution

- This product is powered by CR123A battery.
- Start up time is approximately 5 s.
- No wiring required.
- Use at least 1 m away from air-conditioning vents.
- Use at least 30 cm away from luminaires.

## Setting options



## Button definition

Button	Action	Function
Pair	Enter setup mode and short press the "Pair" button (0.5 s)	Pair/Unpair
	Press and hold for 1 s	Enter or exit setup mode.
Set	Short press	Switch between sensitivity and latency settings.
	Short press	Change the level of the selected setting.

Note: See page 4 and 5 for sensitivity and latency adjustment details.



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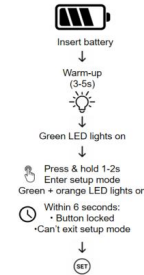
## NASSR PDS-BAT-CAS

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### Set on sensor

#### 1. Power on

- Insert the battery into the battery compartment. The sensor will start up. The green LED light will turn on for 3 to 5 s.
- To enter setup mode wait for start up mode to complete. Then press the "Set" button for 1 to 2 s and release it. You will see the green LED and orange LED indicators light or flash.



#### 2. Sensitivity adjustment

- Short press the "Adjust" button to set the sensor sensitivity or use the default levels.

Note: Your settings will not be lost after power off.

Level	Description	Indicate	Note	Maximum ground coverage radius
1	IND2 blinking; Low sensitivity; Smaller detection range		By reducing the response sensitivity, interference in complex environments can be eliminated and false triggering can be avoided.	11.48 ft (3.5 m)
2	IND2 always on; High sensitivity; Smaller detection range		Smaller detection range, but fast response time, suitable for small space and frequent movement of people environment	13.12 ft (4 m)
3	IND2 always on; IND1 blinking; Low sensitivity; Full detection range		Large detection range but slow response time for complex office environments	13.12 ft (4 m)
4	<b>[Factory default]</b> IND2 always on; IND1 always on; High sensitivity; Full detection range		Large detection range and fast response time for office environments without sources of interference	16.40 ft (5 m)



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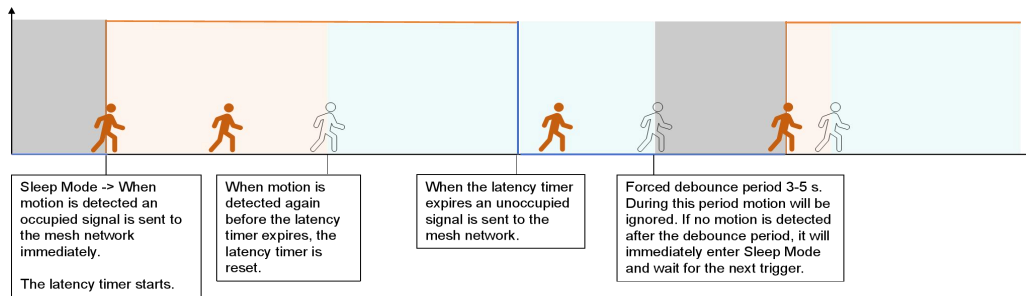
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### 3. Latency adjustment

- When the sensitivity setting is complete, short press the "Set" button to switch to the Latency setting mode and press the "Adjust" button to set the Latency.



**Note:**

The latency setting reduces the frequency of BLE communication in unoccupied states, contributing to lower power consumption.

This parameter is independent of the **Linger time** defined in the Casambi APP:

- Latency time:** Delay before the sensor sends a "no presence" signal after motion stops
- Linger time:** Duration the light output remains ON after the "no presence" signal is sent

The effective delay after presence ends = **Latency time + Linger time**.

All configuration settings are retained after power loss.

Level	Description	Indicate	Note	Battery life
1	[Factory default] Latency always on; Indicator IND2 blinking		Latency is 0 second	More than 0.18 years
2	Latency always on; Indicator IND2 always on		Latency is 60 seconds	More than 1.8 years
3	Latency always on; IND2 always on; IND1 blinking		Latency is 5 minutes	More 6.4 years
4	Latency always on; IND2 always on; IND1 always on		Latency is 15 minutes	More 10 years



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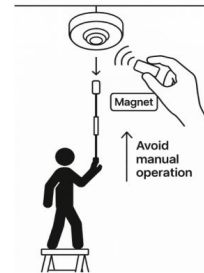
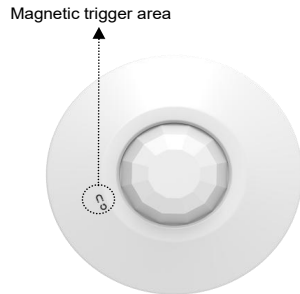
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## Magnetic trigger operation



### Magnetic trigger operation

The magnetic trigger provides a convenient way to re-pair or perform OTA upgrades after installation, eliminating the need to climb up and press physical buttons. Follow the steps below:

1. Attach a magnet to the end of a rod and bring it close to the magnetic trigger area on the sensor surface. Hold the magnet for 1 s, then remove it. The red LED will turn on, and the sensor will enter setup mode.
2. Within 5 s, bring the magnet close to the trigger area again. After the red LED lights up, remove the magnet. Refresh the CASAMBI app, and the option "Unpair Device" will appear.



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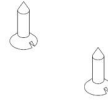
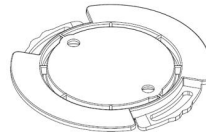
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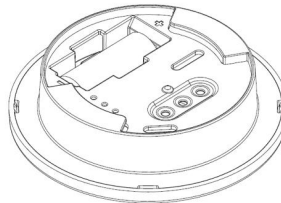
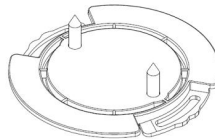
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## Installation

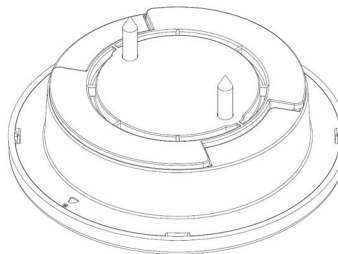
1. Attach the base to the ceiling using matching screws.



2. Install the battery, align the sensor with the base, and turn the sensor clockwise to bind to the base.



3. Installation complete, refer to setup options for sensitivity and latency adjustment.





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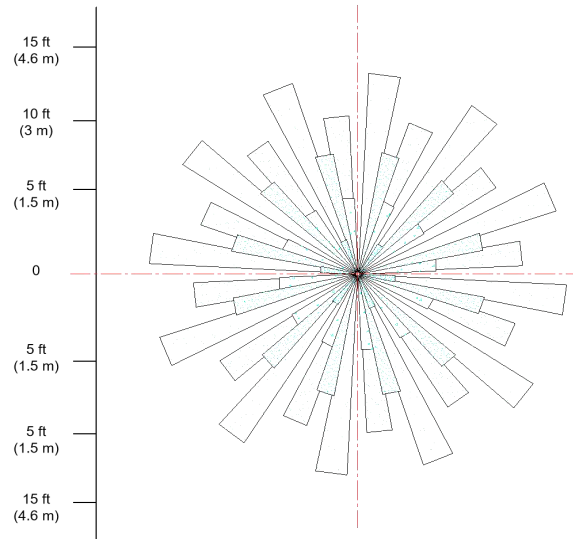
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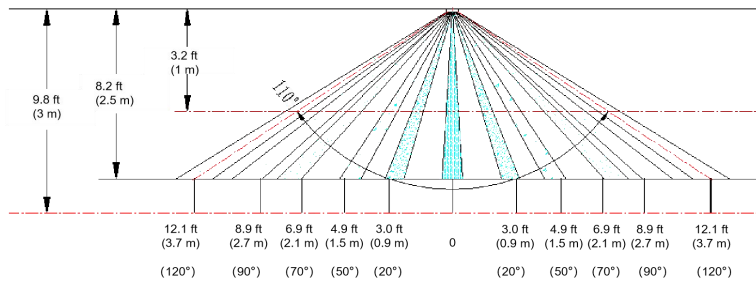
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### Coverage

Installation height	Coverage radius on the ground
6.56 ft (2 m)	9.84 ft (3 m)
8.20 ft (2.5 m)	12.30 ft (3.75 m)
9.84 ft (3 m)	14.76 ft (4.5 m)
11.48 ft (3.5 m)	16.40 ft (5 m)



Top view



Side view