



# CP electronics GESM Green-i Surface Mounted PIR Movement Sensor Installation Guide

[Home](#) » [CP electronics](#) » CP electronics GESM Green-i Surface Mounted PIR Movement Sensor Installation Guide 

## Contents

- [1 CP electronics GESM Green-i Surface Mounted PIR Movement Sensor](#)
- [2 Product Information](#)
- [3 GESM](#)
- [4 Dimensions \(mm\)](#)
- [5 Detection pattern](#)
- [6 Wiring](#)
- [7 Installation](#)
- [8 Testing](#)
- [9 Programming with push buttons](#)
- [10 Technical Data](#)
- [11 Documents / Resources](#)
  - [11.1 References](#)
- [12 Related Posts](#)



**CP electronics GESM Green-i Surface Mounted PIR Movement Sensor**



## Product Information

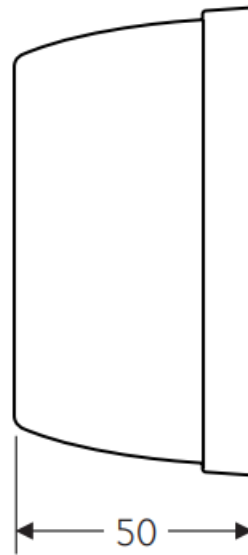
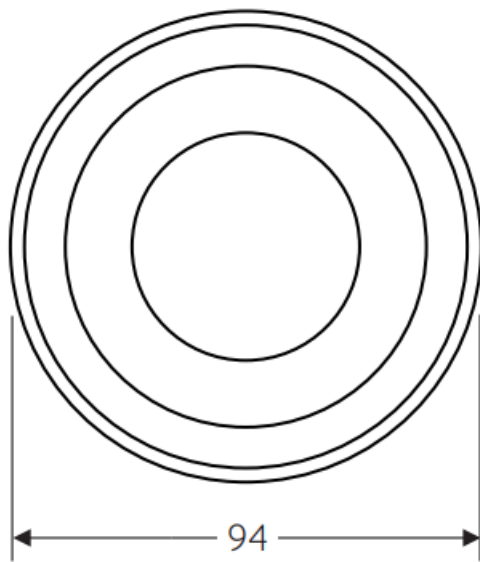
The WD501 is a high sensitivity low device designed to be surface ceiling-mounted. The device is equipped with a mounting plate and an optional gasket that can be used for installation. It features five terminals for wiring, including Neutral, Live, 10A circuit protection (if required), Load, and Earth. The device should be installed by a qualified electrician in accordance with the latest edition of the IET wiring regulations.

## GESM

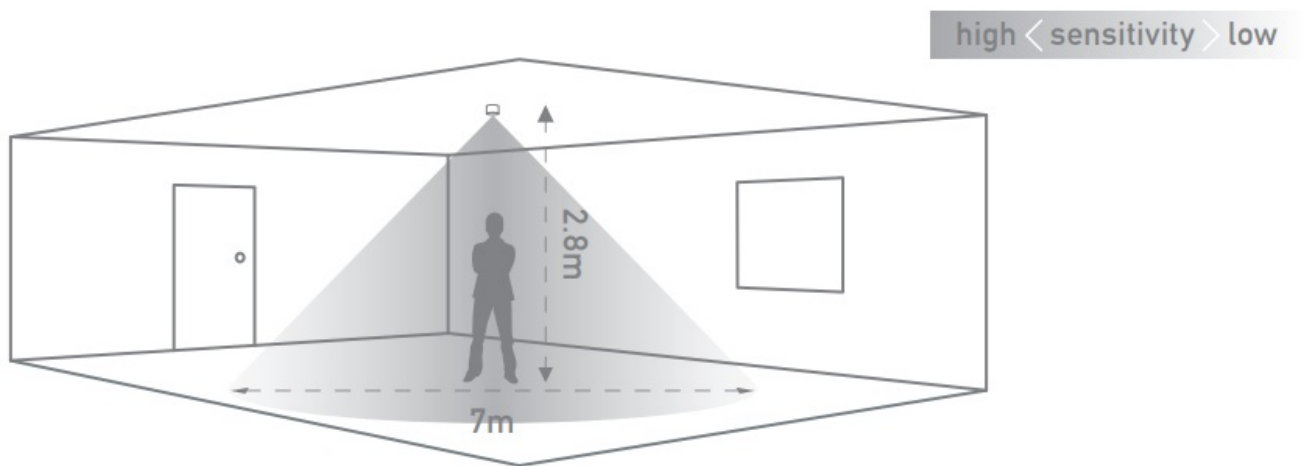
Basic switching, push button, IP54, ceiling, surface mounted, PIR, occupancy sensor

**Warning:** This device should be installed by a qualified electrician in accordance with the latest edition of the IET wiring regulations.

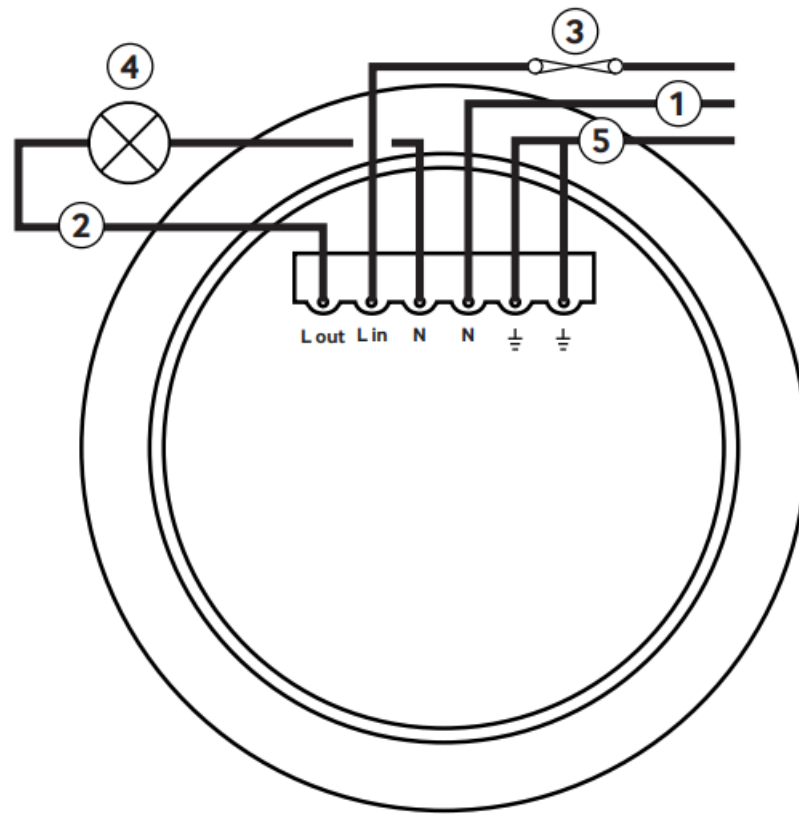
## Dimensions (mm)



### Detection pattern



### Wiring



## Key

1. Neutral
2. Live
3. 10A circuit protection if required
4. Load
5. Earth

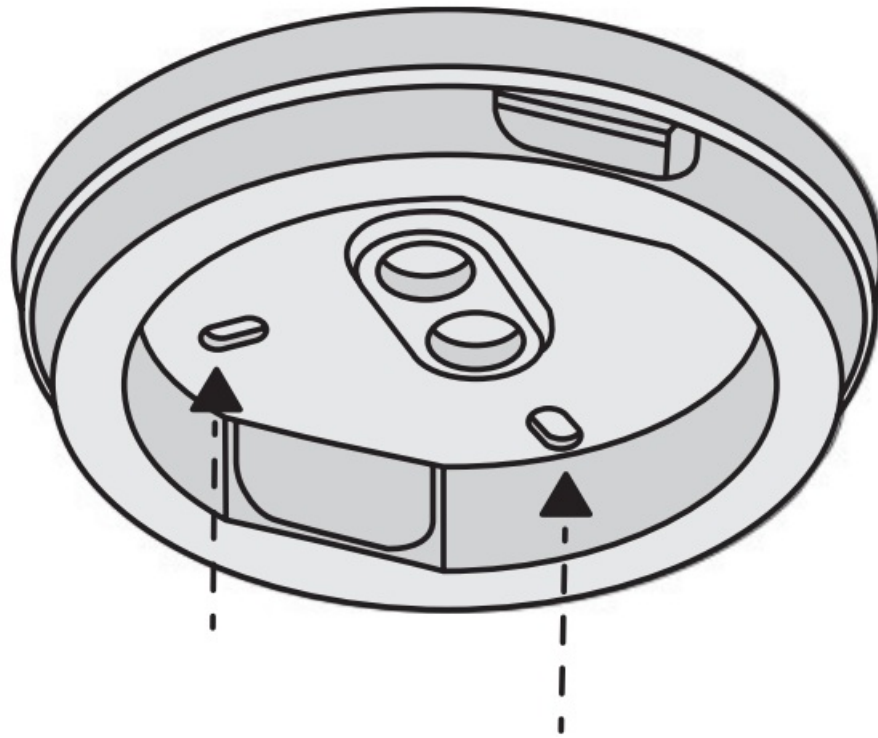
## Installation

This device is designed to be surface ceiling-mounted.

- Do not site the unit where direct sunlight might enter the sensor.
- Do not site the sensor within 1m of any lighting, forced air heating or ventilation.
- Do not fix the sensor to an unstable or vibrating surface.

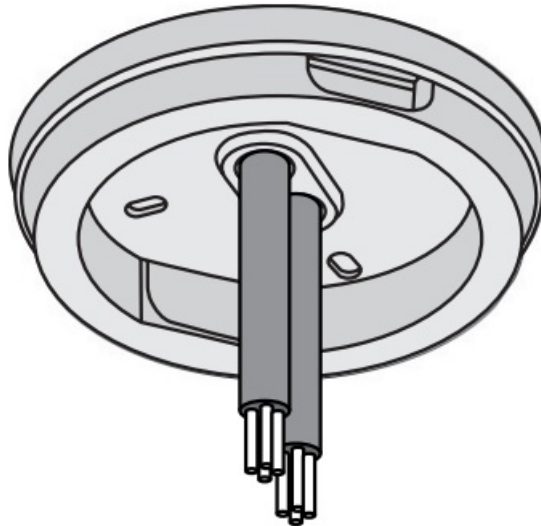
1. **Install mounting plate:** Screw the Mounting plate and optional Gasket to the ceiling via the four mounting holes.

1

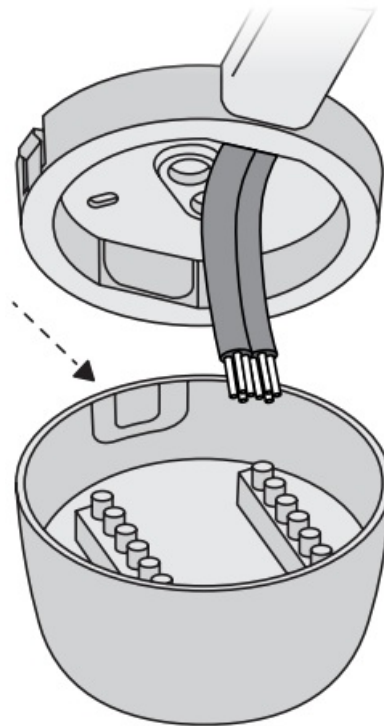


**Note:** Two holes are suitable for BESA boxes, two are suitable for UK or EU 60mm fixing backboxes.

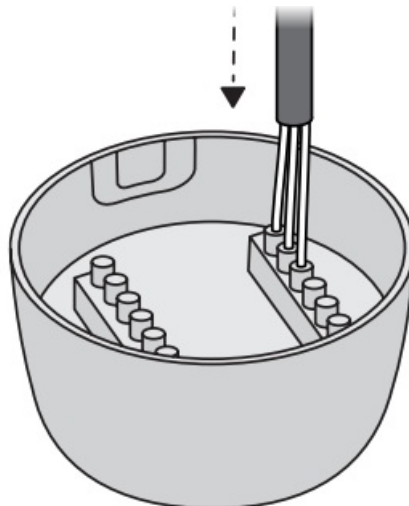
2. **Wire location – Rear entry:** Pass cable through gasket (optional) and mounting plate.



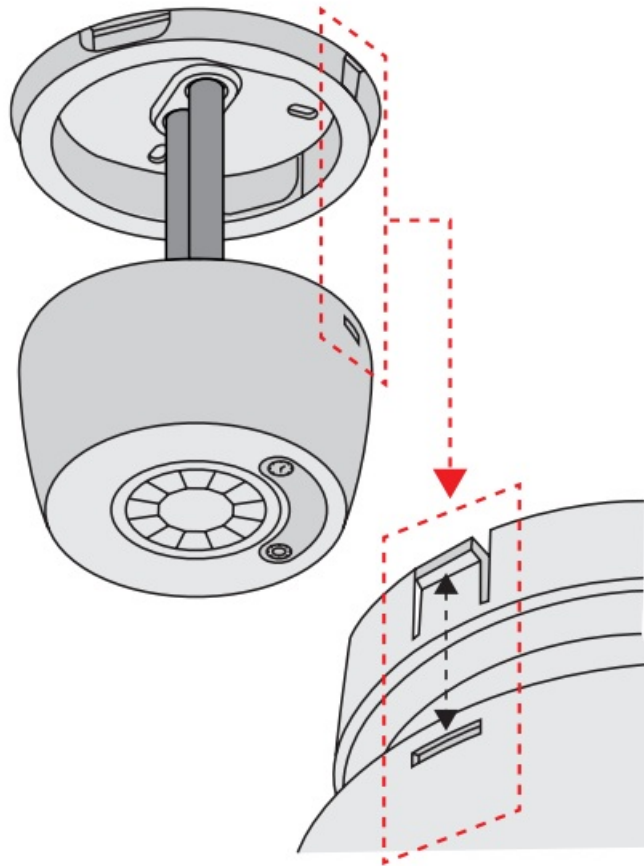
3. **Wire location – Side entry:** Pass cable through either of the two side entry points in the mounting plate. Knock-outs are on the sensor head to allow for clearing side entry of conduit and / or cables.



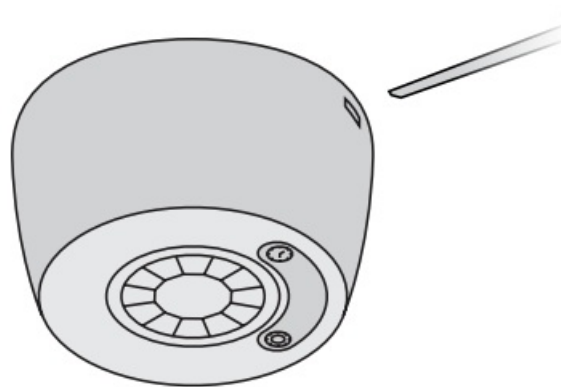
4. **Wire in terminals:** Wire cables into terminals using required wiring diagram.



5. **Attach sensor to plate:** Push the sensor head onto the mounting plate and align clips with slots on sensor head.



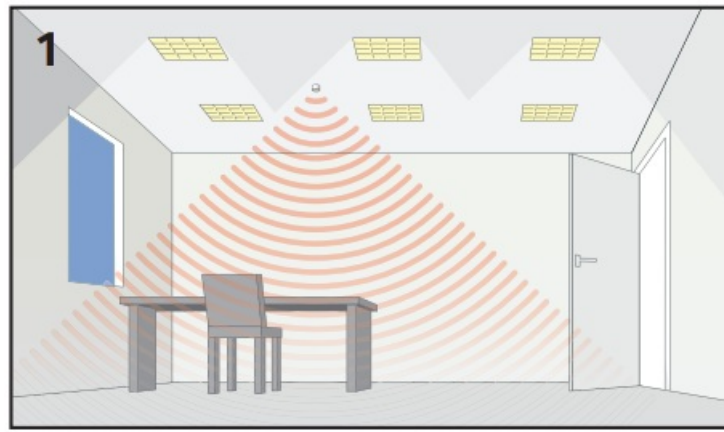
6. **Removing sensor head:** To remove the sensor head, use a flat head screwdriver to prise it off the mounting plate.



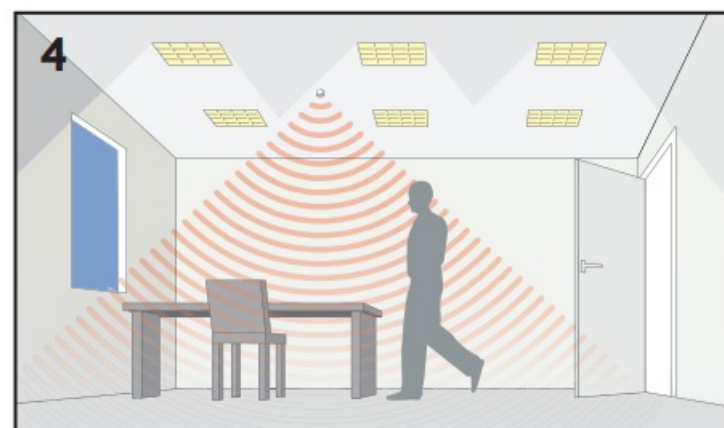
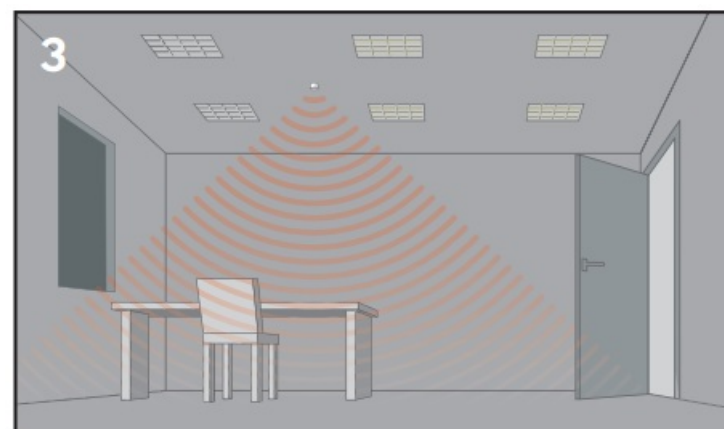
## Testing

### Presence Detection

1. Power up the sensor. The load should come on immediately.
2. Press the Lux button quickly 5 times to set once to set it to minimum.




3. Vacate the room or remain very still and wait for the load to switch off (this should take less than 2 minutes).
4. Enter the room or make some movement and check that the load switches on.




## Programming with push buttons

To find the current Lux and Time settings



Press and hold the Lux button  for more than 3 seconds. The number of LED flashes indicates the setting:

# Flashes	Light
1	Minimum
2 – 4	Increasing level
5	Maximum (always on)



Press and hold the Time button  for more than 3 seconds. The number of LED flashes indicates the setting:

# Flashes	Time
1	10 seconds
2	5 minutes
3	10 minutes
4	20 minutes
5	30 minutes

#### To switch lights on when presence detected depending on natural light level

1. Wait until the level of daylight is just low enough that lighting is needed.
2. Press the Lux button once to set it to minimum.
3. If the lights don't come on, press the Lux button twice. Repeat this with 3 or 4 presses until the lights come on.
4. Pressing the button 5 times sets the level to maximum and the lights will always come on with occupancy.

#### To lock the programmed settings

Press and hold either button  or  for more than 10 seconds to toggle between lock and unlock. This locks the sensor if the LED lights up while pressing the button. This unlocks the sensor if the LED doesn't light up but flashes once after 10 seconds.


#### Technical Data

<b>Part code</b>	<b>GESM</b>
<b>Weight</b>	0.150kg
<b>Supply voltage AC</b>	230 VAC +/- 10%
<b>Supply frequency</b>	50Hz
<b>Circuit protection</b>	10A
<b>Power consumption parasitic</b>	670mW
<b>Terminal capacity</b>	2.5mm <sup>2</sup>
<b>Min load</b>	100mA
<b>Max load:</b>	
Incandescent lighting	10A
Fluorescent lighting	6A
Compact fluorescent lighting	3A
LED lighting	3A
Resistive heaters	10A
Fans and ventilation equipment	3A
<b>Time out range</b>	10s–30m
<b>Max power factor correction capacitance</b>	40µF
<b>Working temperature range</b>	0 to +35°C
<b>Humidity</b>	5 to 95% non-condensing
<b>Material (casing)</b>	Flame retardant ABS and PC/ABS
<b>Insulation class</b>	Class 2
<b>IP rating</b>	54
<b>Compliance</b>	<div> <div>CE</div> <div>UK CA</div> </div> EMC-2004/108/EC LVD-2006/95/EC

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Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.

## Documents / Resources

	<p><a href="#">CP electronics GESM Green-i Surface Mounted PIR Movement Sensor</a> [pdf] Installation Guide</p> <p>GESM Green-i Surface Mounted PIR Movement Sensor, GESM, Green-i Surface Mounted PIR Movement Sensor, Surface Mounted PIR Movement Sensor, Mounted PIR Movement Sensor, PIR Movement Sensor, Movement Sensor, Sensor</p>
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## References

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[CP Electronics | Brands | Legrand United Kingdom](#)