

# Surface-Mount PIR Switching Sensor (SS-PIR-SW-01)

The SS-PIR-SW-01 is a PIR-triggered switch suitable for mounting onto a back box or solid surface. It allows simple selection of presence or absence detection to control both lighting and nonlighting loads.

Configurable for any room occupancy style, it switches on the connected load if the area is occupied and the illuminance is lower than the specified level (with the photocell activated). Similarly, it switches off the load if the area is unoccupied for the set time.

In absence mode, the unit can also be operated from a mains-rated retractive wall switch.

The SS-PIR-SW-01 has the following main elements:

- A mode selector with the following options:
  - Presence: auto on, auto off
  - Absence: manual on, auto off
- An illuminance adjuster (10 lx to 1000 lx)
- A time adjuster (up to 40 min).

By setting the illuminance adjuster to the maximum point, the unit is also suitable for nonlighting loads.

## Key Features

- Easily selectable presence or absence detection.
- Provides load control in response to changes in room occupancy and illuminance.
- Simple out-of-the-box operation.
- Energy saving.

## Operation

### Presence Mode (Default Mode)

Out of the box, the time-out adjuster is set to 10 s, and the illuminance adjuster is set to maximum (photocell inactive). With the illuminance adjuster set to maximum, the sensor will always switch on the connected load when movement is detected. There are nine time periods available from the time-out adjuster (from 10 s to 40 min).

Multiple sensors can be connected to the same load in order to extend the detection zone (see 'Multiple sensors' on page 2).

### Absence Mode

With the mode selector set to absence detection mode, pressing a retractive switch connected to the sensor will switch on the connected load. Then, if no presence is detected for the selected time period, or if the retractive switch is pressed shortly, the load will be switched off.

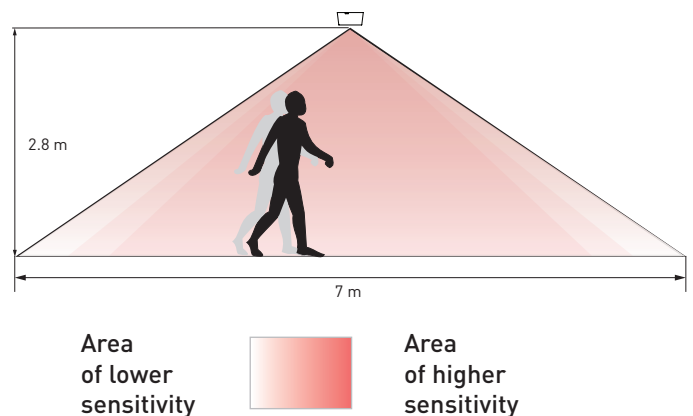
Presence/Absence mode selector



Time selector

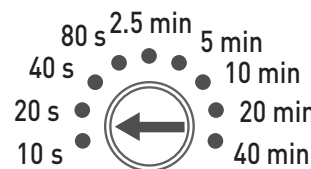
Illuminance selector

## Detection Pattern



## Illuminance and Time Settings

### Time Settings



### Illuminance Settings



## Technical Data

### Electrical data

<b>External power:</b>	Terminal block Wire size: 0.5 mm <sup>2</sup> – 2.5 mm <sup>2</sup> , solid or stranded
<b>Cable rating:</b>	All cables must be mains rated.
<b>Mains supply:</b>	230 VAC, 50Hz
<b>Loads</b>	6 A resistive (e.g. heater) 4 A incandescent 3 A fluorescent ballast / LED driver 1 A inductive (e.g. fan/motor) Mains LED lamps: Equivalent to 1000 W halogen light output Min. load: 2 W resistive, suitable for most energy saving lamps, LEDs and emergency fittings.
<b>External protection:</b>	6 A maximum (MCB or fuse)
<b>Illuminance:</b>	10 lx to 1000 lx or photocell inactive.

### Sensors

<b>Presence detector:</b>	PIR (Passive InfraRed)
<b>Detection range</b>	360° with up to 7 m diameter when mounted at a 2.8 m ceiling height
<b>Time:</b>	10 s to 40 min

### Mechanical data

<b>Mounting hole diameter:</b>	50 mm
<b>Diameter:</b>	86
<b>Material (casing):</b>	Flame-retardant polycarbonate
<b>Finish / Colour:</b>	Matt / White RAL9003
<b>Weight:</b>	102 g
<b>IP code:</b>	IP20

### Operating conditions

<b>Ambient temperature:</b>	+10 °C to +35 °C <i>Note: The temperature difference between the detection target and the background must be at least 4 °C.</i>
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<b>Relative humidity:</b>	Max. 90 %, noncondensing
<b>Storage temperature:</b>	-10 °C to +70 °C

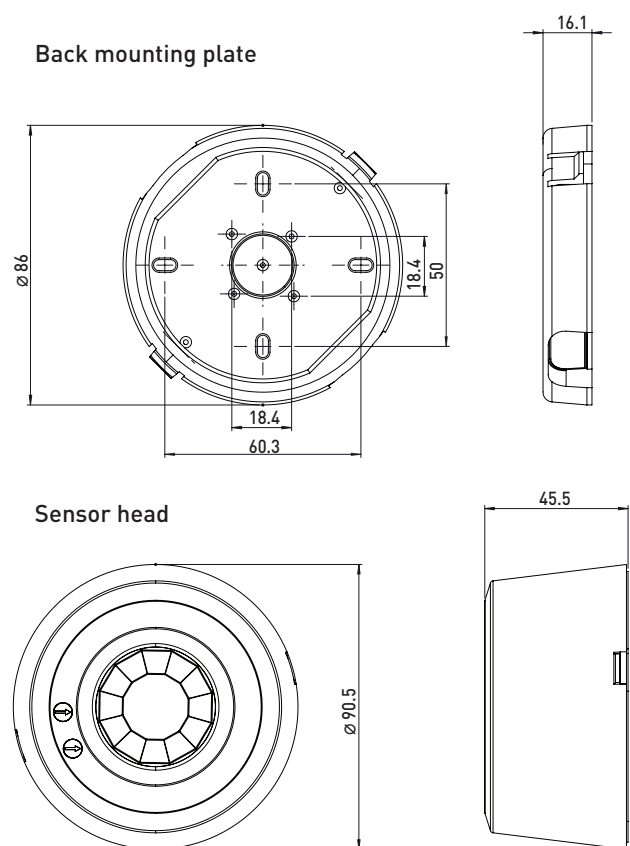
### Conformity and standards

<b>EMC emission:</b>	EN60669-2-1:2004 inc A12:2010
<b>EMC immunity:</b>	EN60669-2-1:2004 inc A12:2010
<b>Safety:</b>	EN60669-2-1:2004 inc A12:2010
<b>Environment:</b>	Complies with WEEE and RoHS directives.

### Version information

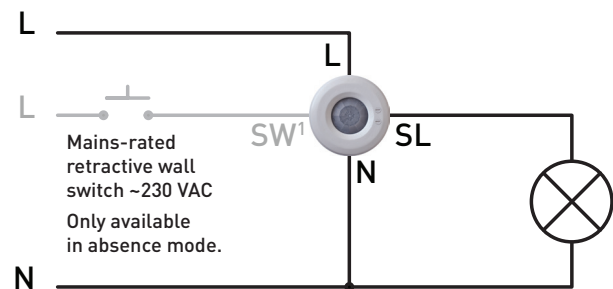
<b>Hardware version:</b>	Rev. 1
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### Dimensions (mm)



### Connections

#### Single sensor



**L:** Live in  
**N:** Neutral in  
**SW<sup>1</sup>:** Switch input (only in absence mode)  
**SL:** Switched live

#### Multiple sensors

(Presence detection mode only)

