

Description

Internal double-technology movement detection sensor (PIR+,MW), with animal immunity function and output adjustable up to 12 metres. Fitted with invisible lenses thanks to use of the materials of the lens itself for the design of the entire front.

Certification: EN 50131 Index 2 Environmental Class II

Related items

4273 Swivel fixing hinge for sensors

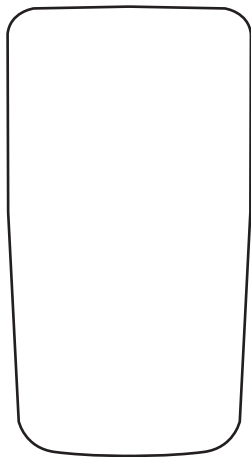
Technical data

IR sensor	two sensitive areas (double components)
Supply voltage	9.6 – 14.5 Vdc
Absorption	25 mA stand-by; 38 mA max
Alarm relay	solid state, 60 V, 50 mA insulation 1500 Vrms
Tamper switch	form A (NC) 50 mA at 30 Vdc
Sensitivity	selectable: 2 or 3 steps
Microwave operating frequency	~10 GHz
Microwave Range	20 – 100% adjustable
Operating temperature	(- 10) – (+ 55) °C
IP index	40

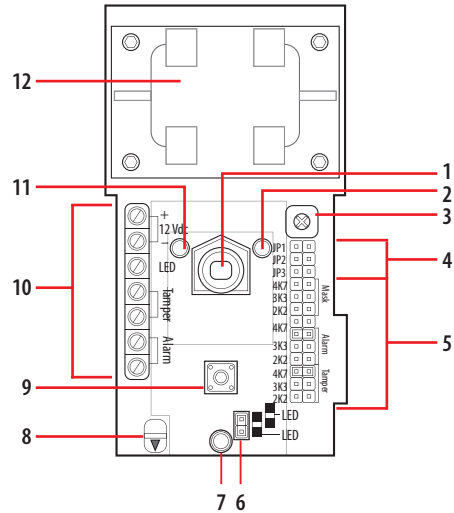
Dimensional data

Size: 113 x 60 x 45 mm (H x L x D)

Front view



Card front view



Legend

1. Infrared sensor
2. Green LED - Test mode

FUNCTION	LED STATUS
Infrared detection	ON
No detection	OFF
3. Microwave Adjustment
Turn clockwise to increase the microwave detection radius
4. Programming jumper
5. End-of-line resistance (double parallel balancing 2x10KΩ);
(when you do not want to use the integrated end-of-line resistances, remove the jumpers)
6. ON/OFF jumper
Connected = it activates the alarm detection LEDs
Disconnected = it deactivates the alarm detection LEDs
7. Red notification LED

FUNCTION	LED STATUS
Switching on phase	ON if the LED is enabled
Alarm in test mode	ON for 5 seconds if the LED is enabled
Alarm	ON for 5 seconds if the LED is enabled
Fault	Flashing if the LED is enabled
Normal	OFF
8. Installation height adjustment pin

2,3 m / 3 m 180°
9. Anti-tamper
10. Connection clamps
11. Yellow LED - Test mode

FUNCTION	LED STATUS
Microwave Detection	ON
No detection	OFF
12. Microwave Sensor

Programming jumper

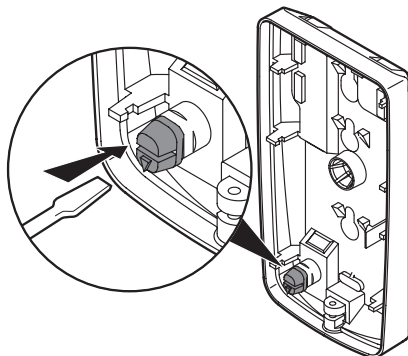
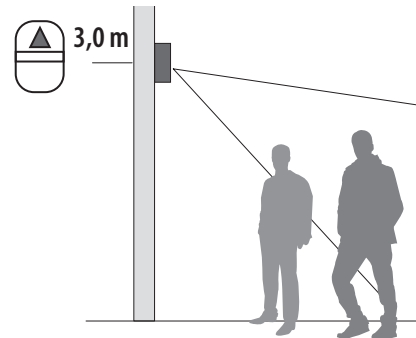
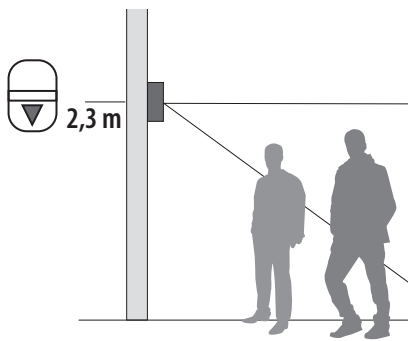
The sensitivity should be set on HIGH when the sensor covers a very narrow area (e.g. a corridor which can be crossed on the short side) or for critical applications, otherwise leave the sensitivity on LOW. As default all the jumpers are in the ON position.

Function	JP	ON Connected	OFF Disconnected
PIR / MW LED	1	Enabled	Disabled *
No. of steps	2	3 – 5	1 – 3
Sensitivity	3	Low	High
Alarm LED	–	Enabled	Disabled

* Using this setting you can manage the switching on of the LED remotely with the "LED EN" terminal. Applying a 12Vdc voltage (system on) the LED will signal the alarm detection.

Installation rules

The sensor has been designed to be installed at height of 2.3 or 3 metres.
Turn the adjustment pin with a screwdriver to set the height required.
Remember to check the sensor output with the walk-test function.



Operation

Supervision

The supervision functions of the 4271 movement detector include the following test:

- room temperature inside the operating range;
- electronic detector working;
- supply voltage between 9.6 - 14.5Vdc.

In case of fault detection

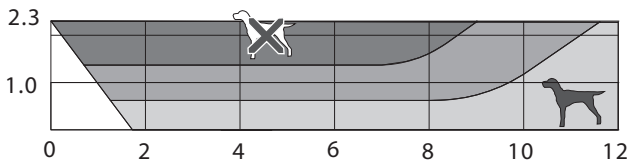
- the alarm red LED starts flashing.
- The alarm relay does not close after an alarm signal. To reactive it insert it again (only if the LED terminal is correctly wired).

Note: the detector does NOT activate an alarm (output and/or siren) when there is a fault.

Pet immunity

The 4271 movement detector is designed to allow the presence of small domestic animals (up to 10 Kg) in the controlled room without an alarm being given.

The diagram below shows the zones of greatest discrimination between human being and domestic animal. 4271 must be installed so that domestic animals only move in the spaces with lighter colouring.



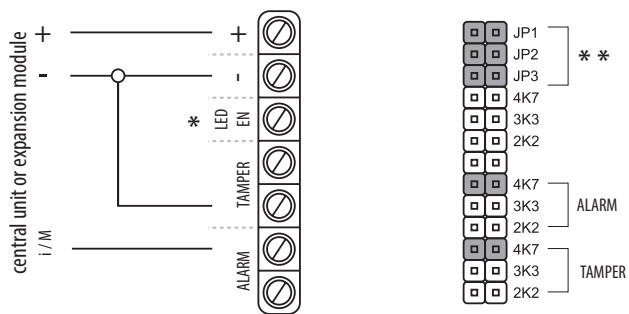
Note

Note: the size datum is purely indicative because the animal's behaviour could also cause an alarm to be given.

In any case we recommend that you check with an animal present that it does not activate the alarm.

Wiring

Sensor wiring diagram to the central unit or expansion module and jumper setting for double balance.



Notes

* To enable/disable the LED connect to a correctly programmed output (+12Vdc enabled 0Vdc disabled).

** See the jumper programming table.

It is necessary to set the double parallel balance (2x10kΩ) in the relevant zone using the TiAlarm software.