Curtain DT radio sensor   4282

Description

External double-technology movement detection sensor (868MHz/two direction) (PIR+MW), with blanket coverage.
It is recommended for the protection of doors, windows and display cases or more in general in any open-air installation, where the coverage of well-defined areas is needed. It can in fact create a blanket coverage with angle of 7.5 ° and with an adjustable output up to 12 metres.
The 4272 sensor has a station with accelerometer for tear-off prevention and a microswitch against the opening of the front and infrared LED for antimasking analysis.
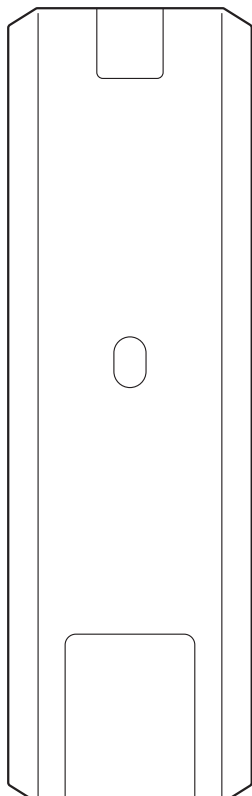
Technical data

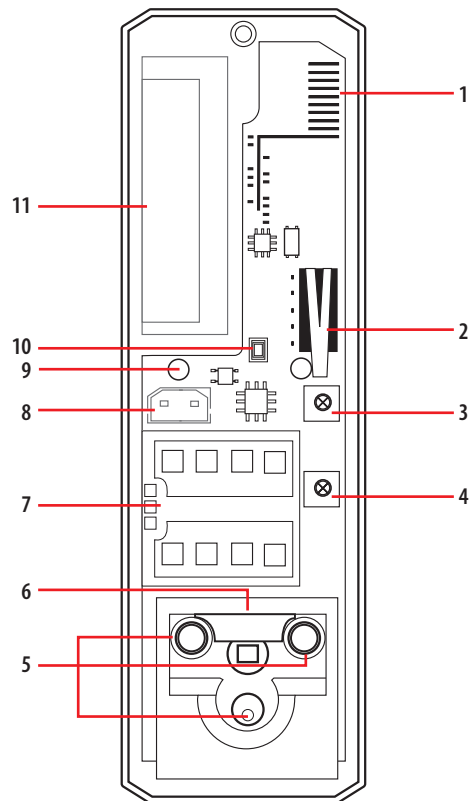|	
IR sensor	two sensitive areas (double components)
Supply voltage	No. 1 lithium battery 3.6 V – 2700 mAh
Battery life	max. 2 years
Microwave operating frequency	24,125 GHz; range 12 m
Radio range	400 mt in free field
	(the signal quality is influenced by various factors, check the measurement with the TiAlarm software)
Operating temperature	(- 20) – (+ 55) °C
IP index	54

Dimensional data

Size	130 x 40 x 40mm (H x L x D)
- with wall bracket	130 x 40 x 45mm (H x L x D)
- with angular bracket	130 x 45 x 45mm (H x L x D)

Front view without cover

Front view

Legend

1. RF aerial
2. Front micro-switch
3. Microwave adjustment trimmer
   Turn to the right to increase the sensitivity.
   Turn to the left to decrease the sensitivity.
4. Infrared adjustment trimmer.
   Turn to the right to increase the sensitivity.
   Turn to the left to decrease the sensitivity.
5. Infrared LED for anti-masking analysis
6. Infrared sensor
7. Microwave sensor
8. Battery connector
9. Logical card fixing holes
10. RGB notification LED with 5 colours *:
    GREEN steady ON IR detection without alarm-RF signal power in the standard
    BLUE steady ON MV detection without alarm
    BLU flashing Masking detection
    RED steady ON Alarm detection (IR & MW)
    PURPLE steady ON RF signal power not optimum
    WHITE flashing Heating / calibration phase
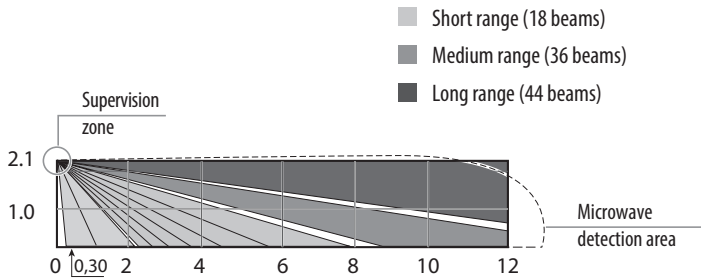11. Lithium battery 3.6V; 2700mAh provided.

* Note
The LED is lit up to signal the various states only during the Walk Test or when the central unit logic considers it to be suitable.
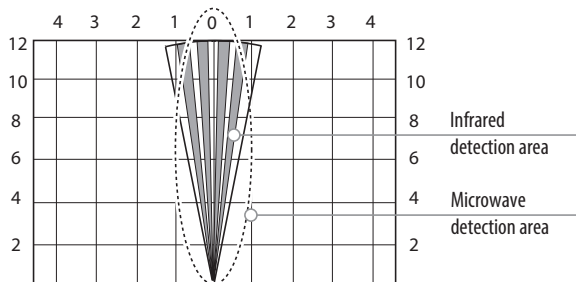
Technical specifications

Coverage graphs detected with sensor mounted vertically

Covering diagram side view in metres

Short range (18 beams)

Medium range (36 beams)

Long range (44 beams)

Supervision zone

Microwave detection area

- Detection distance: from 0.30m to 12m
- Installation height: 2.10 m on the wall, or inside the recess frame
- Vertical covering: IR 90°, MW 80°

Covering diagram upper view in metres

Infrared detection area

Microwave detection area

- Detection zone: single blanket (7.5° angle)
- Blanket width: at 2m – 25 cm; at 10 m – 130 cm
- Horizontal covering: IR 7,5° , MW 32°

Operation

Operation of the anti-masking analysis

It can be activated with TiAlarm software and the anti-masking speed of execution can be selected:

- fast (masking signalled after about 180 seconds);

- slow (masking signalled after about 8 minutes).

Note: during the test (walk test) mode the analysis is performed in quick mode and if a masking situation is detected it is signalled by the flashing blue led..
Exit a masking situation if and only if:
- if IR active, the first time the PIR is detected;
- if IR is NOT active, after a time equal to the "no longer masked" signalling time.

Operation of the anti-tear off analysis

The analysis can be enabled with TiAlarm software. An act of sabotage sends a sensor tear-off signal to the central unit.

Note: during the test (walk test) mode this status is signalled by the yellow led.