

Wireless dual technology outdoor sensor

Thank you for purchasing this outdoor dual technology curtain sensor with accelerometer-based displacement sensor.

Thanks to its small size, it is particularly suitable for the protection of doors, windows and showcases, and thanks to the materials used and the advanced technology its perfect to protect defined areas and it be used in any installation.

It creates a small curtain curtain (about 7.5 °) and has an adjustable range of up to 12 m.

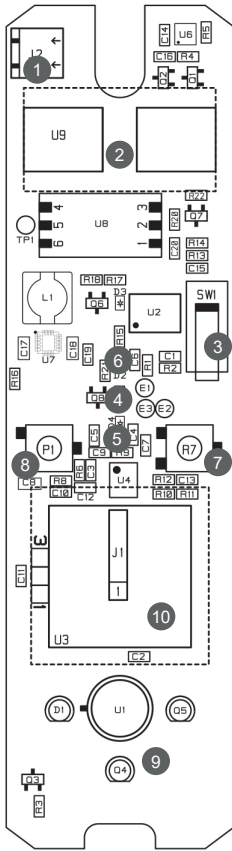
It is made with materials resistant to external agents. In addition, the electronics are subjected to a tropicalization process to ensure correct operation in all conditions of humidity and temperature, this makes a sensor stable and immune to false alarms.



GENERAL FEATURES

- ✓ Dual technology sensor (digital infrared + microwave)
- ✓ Indoor and outdoor use
- ✓ Infrared with curtain barrier (about 7.5 °)
- ✓ 24 GHz miniaturized microwave
- ✓ Led display in "Test" mode
- ✓ Adjustable digital infrared range
- ✓ Adjustable microwave flow
- ✓ Self-compensation in temperature
- ✓ Digital microwave signal analysis
- ✓ Digital anti-displacement sensor
- ✓ High immunity to false alarms
- ✓ RF immunity up to 2 GHz
- ✓ Low consumption (< 10 µA)
- ✓ 3.6V lithium battery size 1/2 AA
- ✓ Battery life 3 years
- ✓ Reverse polarity protection
- ✓ Radio frequency 868.3 MHz FSK
- ✓ Configurable supervision
- ✓ Max IR range: 12m
- ✓ Max MW range: 12m

DEVICE DESCRIPTION



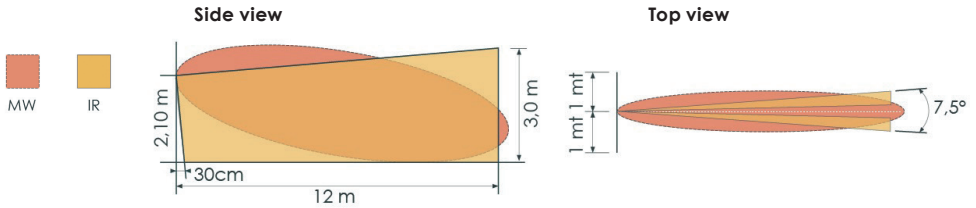
- 1 Contact**
Contact configurable as NC, NO or count pulses. If not used, leave it open, excluding the contact during "Config Mode", thus obtaining less current consumption and therefore greater autonomy.
- 2 Battery**
Power supply battery. Insert respecting the polarity; the circuit is protected against polarity reversals. Use only 3.6V lithium batteries ½ AA size
- 3 Tamper / Test / Configuration button**
In "Normal Mode" operation, its opening transmits the sabotage and then puts the device in "Test Mode". In "Config Mode" it allows the setting of some parameters.
- 4 Red led**
In "Test Mode" it signals the transmission of a generic alarm, in "Config Mode" it shows the setting of some parameters.
- 5 Yellow led**
In "Test Mode" it signals the microwave intervention, in "Config Mode" it shows the setting of some parameters.
- 6 Green led**
In "Test Mode" it signals the infrared intervention, in "Config Mode" it shows the setting of some parameters.
- 7 Infrared range**
Adjusts the pyroelectric flow rate
- 8 Microwave flow rate**
Adjusts the microwave flow rate
- 9 Pyroelectric**
Pyroelectric element. Do not touch the sensitive area and keep it free of obstacles. If necessary, clean with a alcohol soaked cloth.
- 10 Microwave**
24 GHz microwave motion detection sensor.

CONFIGURATION AND FACTORY SETTING

Remove the battery for few seconds. Insert the battery keeping the Tamper pressed. The simultaneous flashing of the three LEDs indicates the entry in the "Configuration mode". In this state, the single LED displays the setting of a parameter. By briefly pressing the Tamper, the settings are displayed cyclically on the individual LEDs. A long press on the Tamper (about 5 sec.) to change the setting of a parameter according to the table on the side. The relative LED changes from flashing to steady and vice versa. After about 20 seconds of inactivity (Tamper not activated) the sensor exits by the "Configuration mode" to continue with the initialisation. The settings with an asterisk * correspond to the factory settings. Supervision is disabled to increase battery life by approximately 6%.

	Fisso	Lampeggiante
Yellow led	Supervision OFF *	Supervision ON
Red led	NO Contact *	NC Contact/Shade
Green led	5 pulses *	10 pulses
Yellow - Red led	Not used	Not used
Green - Yellow led	Red led on alarm off *	Red led on active alarm

COVERAGE AREA



SENSOR SELF-LEARNING

To the learning process follow the following procedure: put the receiver in learning (read the receiver instructions for this step), insert the battery in the sensor, after an initial pause the red LED lights up briefly, indicating that the transmission has taken place, to this point, the receiver signals that learning process has taken place. It should be noted that the transmission of the learning frame by the sensor occurs only during the subsequent instants of the insertion of the battery.

SWITCHING ON AND COMMISSIONING

Insert the battery and close the cover, then the three LEDs flash alternately for about 60 s. At the end the sensor enters service ("Normal mode") by deactivating the LEDs, placing itself in low consumption and waiting for an event, for example the intervention of the infrared, to awaken the sensor. In the latter case, the microwave is activated, which if it detects movement, transmits an alarm, otherwise it restores the sensor to low consumption. In the event that an alarm has been transmitted, the sensor can make a maximum of 2 consecutive detections within 1 minute, after which it will inhibit for 4 minutes.

FLOW TESTS IN TEST MODE

To check the functioning and the flow rate of the sensor put the device in "Test mode" by opening the cover allowing the Tamper to rise. After the transmission of the sabotage event, the simultaneous flashing of the 3 LEDs signals the start of the "Test mode". In this phase the leds are enabled and the sensor is never inhibited for a time equal to 3 minutes. Once this time has elapsed, signaled by the simultaneous flashing of the three LEDs, the sensor returns to "Normal mode".

LOW BATTERY

The transmission of this information takes place in association with another event (alarm, sabotage, supervision, contact). If the receiver signals low battery, replace the battery as soon as possible, as the sensor may have wrong behavior.

TAMPER, CONTACT AND PULSE COUNTER

The sensor reacts immediately to the Tamper stimulus by transmitting the sabotage information. If it is in "Test mode" this is signaled by the red LED lighting up, in "Normal mode" the opening of the Tamper allows to entry into the "Test mode". The on-board terminal block allows the connection and management of an NC, NO or pulse counter for roller shutter near the sensor. The contact, if enabled, is managed immediately and if in "Test mode" the transmission of this information is signaled by the lighting up of the red LED. By factory setting, the sensor is supplied with the contact disabled so as not to affect battery autonomy (which otherwise would be approximately 10% of the battery capacity). If not used, leave it open otherwise enable the function by reading the section "Factory configuration and settings".

SUPERVISION

It should be noted that this situation negatively affects the autonomy of the system (about 6% of the battery capacity). See the section "Configuration and factory settings" to set this feature. If supervision is not required, leave the function disabled. This increases the autonomy of the system.

CHECK-IN AND SYNCHRONIZATION

The synchronization of the messages takes place at the same time as the learning phase. If the radio connection is interrupted (for example, due to range problems, receiver and / or sensor shutdown, etc.), the synchronization between the sensor and the receiver could be lost, causing the latter to ignore any subsequent communication by the sensor. To restore synchronization, simply remove the battery from the sensor for a few seconds and reposition it; the communication sent contains the information necessary for synchronization.

ELECTRIC AND MECHANICAL PARAMETERS

PARAMETER	CONDITION	VALUE
Battery		Lithium 3,6V 1,1 Ah size ½ AA
Battery life	average 40 alarm / day, no Supv, no N.C.	3 years
Inhibition time between alarms		4 minutes
IR range max	Ambient temperature 25 ° C	12 m
Flow rate MW max		12 m
Radio range	Free area	250 m
Radio frequency		868,3 MHz
Modulation type		FSK (868,3)
Encoding		56 bit synch. Rolling code anti-grabbing
Number addressable devices		32.767
Supervision	Selectable during configuration	Yes
Contact on board		Yes
Counters		Yes
Contact type		N.O. or N.C.
Contact exclusion	Selectable during configuration	Yes
Low battery signal		Yes
Test functionality	Activated at tamper opening	Yes
Test function duration		3 minutes
MW frequency		24,125 GHz
Vertical lobe MW		80°
Horizontal lobe MW		32°
Vertical lobe IR		90°
Horizontal lobe IR		7,5°
Tent width at 2m, 10m		24 cm, 130 cm
Warm-up time		60 s
Operating temperature		-25/+60 °C
Weight	Sensor packed	131 g
IP grade protection		IP55
Dimensions		H 129, L 43, P90 mm

DIRECTIVES

Low tension (LVD):2014/35/EU
 Electromagnetic compatibility (EMC):.....2014/30/EU

GENERIC RULES

Electrical safety:.....EN60335-1
 EMC - Immunity:.....EN61000-6-1
 EMC - Emissions:.....61000-6-3

SPECIFIC PRODUCT RULES

Intrusion alarm systems - passive infrared and microwave combined detectors:.....EN50131-2-4
 Security level:.....2
 Environmental class:.....IV

Warranty conditions on the website www.essegibisicurezza.it



The product must be disposed of in compliance with local laws and regulations. To obtain information on the correct disposal of the product at the end of its life cycle, consult the European Union: Information on disposal.



Device compliant with essential requirements and other relevant provisions established by directive 1999/5 / EC

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