NAT SLIM WS

LOW-CONSUMPTION INDOOR AND OUTDOOR CURTAIN SENSOR

INSTALLATION AND MOUNTING MANUAL VERSION 2.0

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1.Introduction

Congratulations on having purchased a Politec curtain sensor.This appliance guarantees long-lasting and reliable operation if installed correctly.For correct and effective use, it is necessary to read this instruction manual carefully.

⚠️ The system has been designed to detect intrusions and activate the alarm; it is not a device that prevents intrusion.Politec is not responsible for damage, injury or loss caused by accidents, theft, force majeure (including momentary lightning-induced overcurrent), abuse, improper or incorrect use, faulty installation or inadequate maintenance.

2. **Product description**

This curtain sensor has been designed for the protection of entrances (doors and windows) both for outdoor and indoor use.

Thanks to its small size, it is particularly suitable for protecting doors, windows and shop windows and, thanks to the materials used and advanced technology, it can be used in any outdoor installation where it is necessary to protect well-defined areas.

In order to ensure correct performance, it must be installed on the upper part of the window, door, or French window to detect the movement of a stranger through the entrance.

Before installation, check the following conditions:
• the wall must not have depressions or excessive protrusions;
• avoid positioning the detector near heat sources or in direct sunlight;
• avoid the reflection of electromagnetic energy on large surfaces such as, for example, mirrors, metal walls, etc .;
• avoid pointing the detector at fluorescent lamps or placing it in their immediate vicinity.
If installed outdoors it must be sheltered (not completely exposed to the elements).

⚠️ **Warnings**
Mounting, installation of the sensor and connection to the mains must be carried out by expert and qualified personnel, in compliance with rules and regulations applicable to electrical systems.

3.General warnings

This installation manual contains important information regarding safety for installation: it is necessary to read all the instructions before proceeding with the installation.
Keep this manual for future use.
- If you have any questions or doubts during installation, do not carry out any operations and contact the support service.
- Use of these products for purposes other than those specified in these instructions is prohibited.
- You must not make any change to the components of the product unless stated in the manual in order not to void the warranty; such operations can only lead to malfunctions; Politec assumes no liability for malfunctions or damage due to modified products.
- Depending on the specific situation of use, check for the need for additional devices: detectors or signalling devices.
- During installation, mounting and use of the product, make sure no foreign objects (solids, metals or liquids) are able to penetrate inside the open devices.
- Manufacturer's liability:Politec assumes no liability for failures resulting from incorrect installation; lack of maintenance, incorrect assembly or use.
- Politec is also not liable for incorrect or incomplete operation of the product or failure to detect intrusion.
- Warranty (summary of conditions):Politec guarantees its products for a period of 2 years from the production date.The warranty is applied to those purchasing directly from Politec; there is no warranty for the end user who, in the event of breakdowns or faults, must contact the installer or dealer.
- The warranty excludes aesthetic parts as well as parts subject to normal wear and parts subject to normal consumption such as batteries and accumulators.

3.1 Additional warnings for devices powered by mains voltage
This manual is intended only for technical personnel qualified to install such devices.
- Assessing the hazards that may occur during installation and use of the system, in order to achieve complete safety, it is necessary that installation takes place in full compliance with applicable laws, methods, rules and regulations.
- Before accessing the internal terminals of the product, it is necessary to disconnect all the power circuits.
- If automatic circuit breakers or fuses trip, before resetting them it is necessary to identify the fault and repair it.

3.2 Installation warnings
- Check that all the material to be used is in excellent condition and suitable for use.
- Before proceeding with the installation, check the environmental class of the products in the "technical specifications" chapter.
- Check that the sensor is positioned in areas protected against potential impact, in flat areas and on fixed supports to avoid movements.
- Do not place the sensor near strong heat sources.
- Each sensor has its own operating principle: check the instructions for choosing the right position in the respective instruction manual.

4.List of main components

The package contains the following components and accessories.
When opening the package, check that everything has been included.
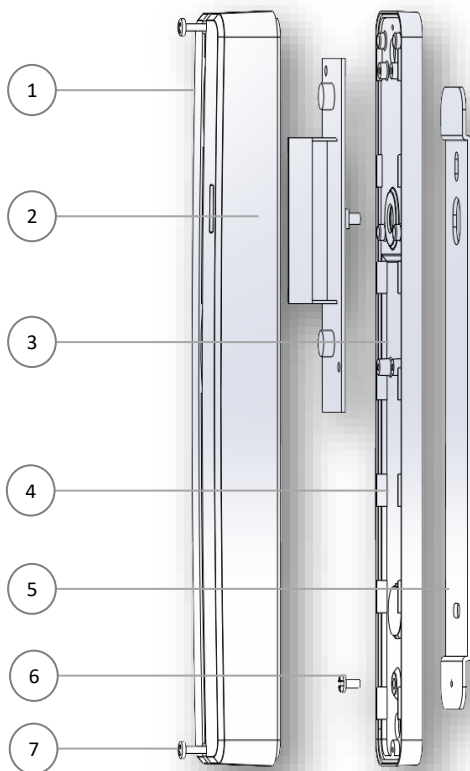
No.	COMPONENT
1	Cover
2	Circuit board
3	Base
4	TX Radio board housing
5	Fixing plate
6	Fixing screws
7	Closing screw

5.Preparation for installation

5.1 Preparation of the sensor parts before installation
Since the communication of the sensors (depending on the family) to the control unit can take place by wire, via wireless, it is advisable to firstly check all the components of the sensors and their possible accessories before beginning the installation.

5.2 It is advisable to carry out:

• device configuration on a table;
• checking device operation
• the permanent fixing of each device;
• the preparation and carrying out of electrical connections.

In order to avoid errors, operating and installation problems, it is advisable to proceed as follows:

a) Place all the products with the package open on a table;
b) For the low consumption sensor version for wireless models with universal circuit board housing, insert and connect the radio transmitter, and connect it to the sensor receiver board
c) Power the sensors and program them
d) Test sensor operation;
e) Place (without fixing) the sensors in the planned points;
f) Place (without fixing) all the other devices at the planned points;
g) Check for each sensor that there is sufficient field for radio communication (for wireless versions);
h) Permanently fix the sensors.

Before proceeding with the installation, it is necessary to check the integrity of the product, the adequacy of the model chosen and the suitability of the environment intended for installation:

• Check that all conditions of use fall within the "limits of use" and in the "Technical specifications of the product".
• Check that the environment chosen for the installation is compatible with the total footprint of the product.
• Check that the surface chosen for the installation of the product is sturdy so as to ensure stable fixing and that it is adequately protected against possible impacts or the elements.
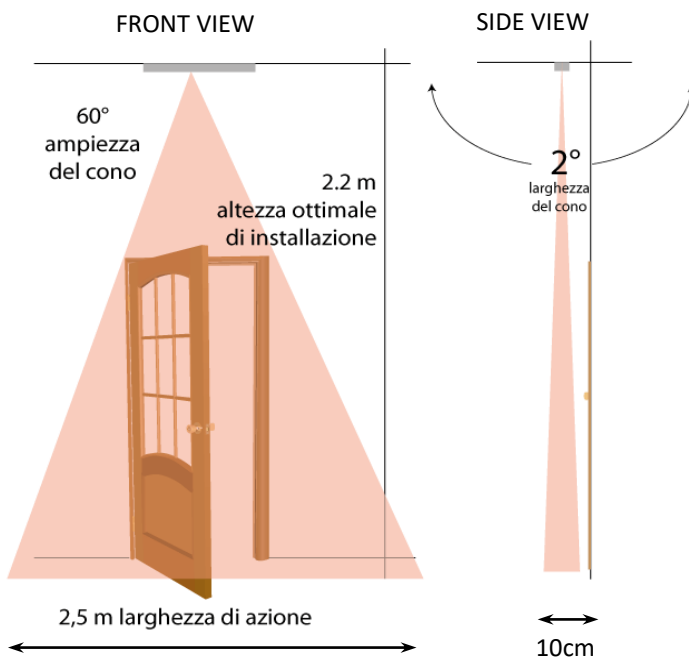
6.Placement and installation

6.1 Placement and installation height

Position the sensor considering the type of surrounding environment and the protection distance for correct and effective operation.

Position it in such a way that there are no obstacles in its range of action (trees/plants or objects that can swing or move with the wind or rain if installed outside).

Position the sensor so that sunlight does not hit the sensor directly or by reflection.

FRONT VIEW   SIDE VIEW

60°
ampiezza
del cono

2.2 m
altezza ottimale
di installazione

2°
larghezza
del cono

2,5 m larghezza di azione

10cm

| INSTALLATION HEIGHT	DETECTION WIDTH
2 m	2.3 m
2.5 m	2.8 m
3 m	3.5 m
4 m	4.5 m

6.2 Placement and mounting

However, it is necessary to take into consideration the specific beam diffusion of each model, to avoid reflection of the rays caused by the ground or by adjacent objects.

1.Position the fixing plate in the centre of the upper jamb of the window or door to be protected and mark the position of the fixing holes.Once you have made the holes, attach the fixing plate.Tighten the screws firmly to prevent the device from moving.
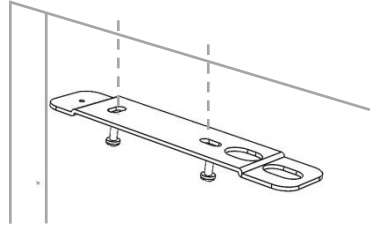
2.When the fixing plate is fixed, insert the side of the base with the stopper placed inside the base of the sensor being careful not to push too deeply to avoid breaking the stopper.
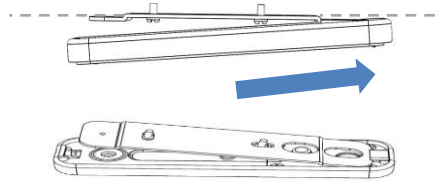
3.Once inserted and securely positioned, return the base of the sensor to a horizontal position making it match the fixing plate.
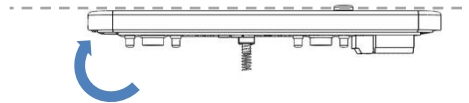
4.When mounted correctly you should see the sensor base positioned horizontally as shown in the figure.Make sure it is secure, position the cover fitting it with slight upward pressure.Secure the cover with the screws.
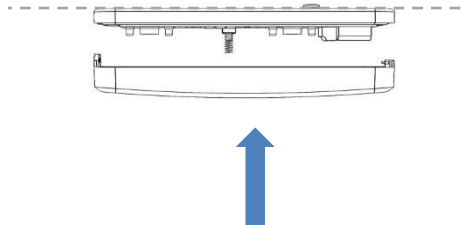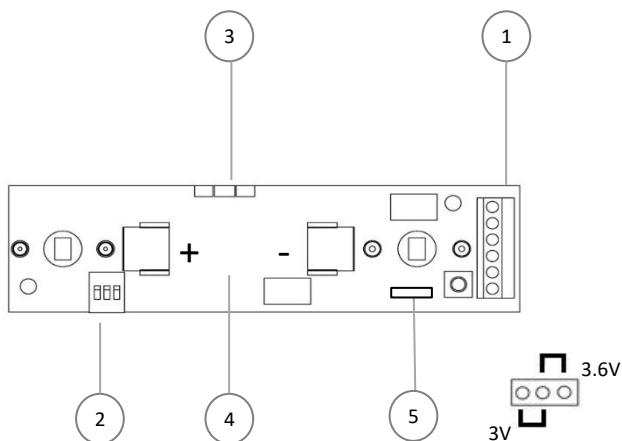
WARNING:
Product warranty is invalid if there is any hole in the sensor or any component

7.Circuit board

		1 2	A / A	NC alarm
1	TERMINAL BOARD	3 4	T / T	NC tamper
		5 6	- +	OUTPUT power supply for 3V / 3.6V radio transmitter
2	CONFIGURATION DIP			
3	LED INDICATOR			
4	BATTERY COMPARTMENT			
5	3V / 3.6V RADIO TRANSMITTER POWER SUPPLY JUMPER			

8.Description of components and configurations

1.TERMINAL BOARD:
Tamper and alarm outputs with NC free contacts, with the possibility of balancing on the terminal board.The anti-masking output is in series with the tamper output

2.CONFIGURATION DIP

1	2	RANGE
OFF	OFF	0.5 m
OFF	ON	1.5 m
ON	OFF	2.5 m
ON	ON	4 m

DIP 3:ON to activate the anti-masking function.

3.LED INDICATORS

RED LED	Sensor in ALARM (operation in AND between the two IR)
BLUE LED	Right IR sensor in alarm
YELLOW LED	Left IR sensor in alarm
FLASHING	BLUE-YELLOW simultaneous flashing:Masked sensor (if antimask function active)

4.BATTERY COMPARTMENT

The battery is 3.6V 2.7Ah lithium.Average life 2-3 years

5.RADIO TRANSMITTER POWER OUTPUT

It is possible to power the radio transmitter via the sensor battery.The use of a shielded type cable is required, connecting the braid of the cable to the negative of the sensor power supply.This is in order to eliminate the disturbances generated by the radio tx during transmission.

WARNING:
Product warranty is invalid if there is any hole in the sensor or any component

9.Description of functions

AND Operation
The sensor sends an alarm output signal only if both infrared signals have detected an intrusion signal

ANTI-MASK function
If enabled, the system detects within 20 seconds if even one of the two IR sensors is masked.

Thermal self-compensation
The sensor adjusts its sensitivity dynamically according to the ambient temperature
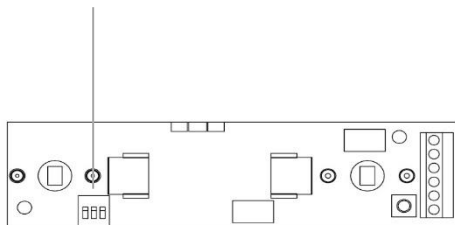
Anti-blindness
The sensor detects sudden changes in light readjusting its sensitivity

Pet Immunity for animals <5kg (with minimum installation height 2.2m)
The sensor performs an analysis of the detected mass in order to identify more precisely the presence of people or animals

10.Calibration

DIP SWITCH

1. Select DIP 1-2 properly according to the installation height
2. Check that the LEDs light up and flash when the sensor is turned on
3. Close the cover
4. Carry out crossing tests
5. After 5 minutes of operation, the LEDs will automatically turn off to reduce consumption

11.Installation examples

Outdoor application on door

Application on industrial door

Outdoor application on door and balcony

12.Technical specifications

MAXIMUM RANGE OF COVERAGE	Adjustable up to 4 m in height
SENSOR CALIBRATION AND PROGRAMMING	On board
LED	3 indicators
OPENING ANGLE	60° horizontal, 2° vertical
POWER SUPPLY	3.6V
AUTONOMY	2/3 Years with 3.6V 2.7Ah lithium battery
CONSUMPTION	0.05 mA at rest/0.8 mA in alarm
OUTPUTS	Alarm (NC) Cover anti-removal tamper (NC) Antimask in series with the tamper
DIMENSIONS (LxWxD)	234 X 39 X 35 mm
MAX TX RADIO DIMENSIONS (WxDxH)	100 x 31 x 24 mm
MATERIAL	Scratch-resistant, UV-resistant black polycarbonate
INGRESS PROTECTION RATING	IP 65
OPERATING TEMPERATURE	-20°C / +55°C
MOUNTING KIT	Includes screws and metal plate
WARRANTY	2 years

13.Product disposal

All components of this sensor are an integral part of the equipment and must be disposed of together with it.

Just as with installation operations, also at the end of life of these products, the dismantling operations must be carried out by qualified personnel.

These products are made up of various types of materials: some can be recycled and others must be disposed of.Find out about available recycling or disposal systems for this category of products governed by regulations in force in your area.

Warning!- Some parts of the products may contain polluting or dangerous substances which, if dispersed in the environment, could result in harmful effects on the environment itself and on human health.

As indicated by the symbol on the side, it is forbidden to throw these products in domestic waste.

Therefore, carry out "separate collection" for disposal, according to the methods stipulated by the regulations in force in your area or return the products to the seller when purchasing a new equivalent product.

Warning!- Local regulations can impose heavy penalties for incorrect disposal of these products.

For technical support, contact your security
systems distributor