HILTRON security

DT7 ATEND

Made in Italy
BT2014/35/UE
EMC2014/30/UE

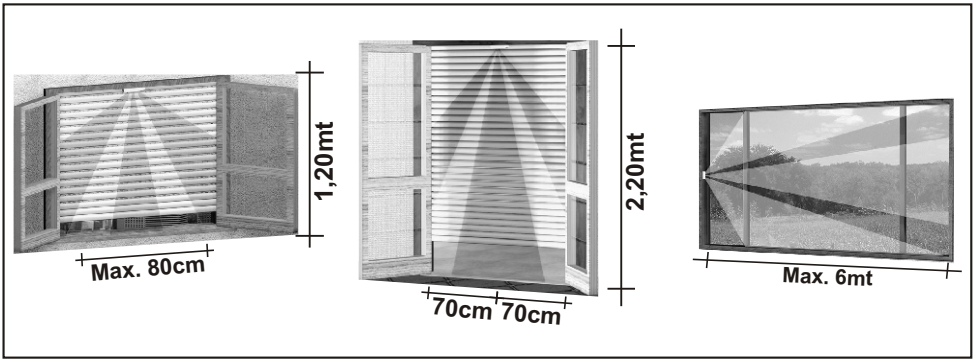
RAEE

"ATEND" mini detector with double technology curtain for doors and windows

FEATURES

- Dual element digital sensor: 1
- Microwave sensor: 24,125GHz
- High immunity: 30Vm
- Nominal supply voltage: 12V±10%
- Maximum absorption: 30mA
- Coverage: 6mt
- Coverage angle: L: 50°; V: 10°
- Signaling LED: escludible
- Degree of security: 1
- Environmental class: 2
- Dimensions (L): 100mm
- Dimensions (H): 21mm
- Dimensions (P): 31mm

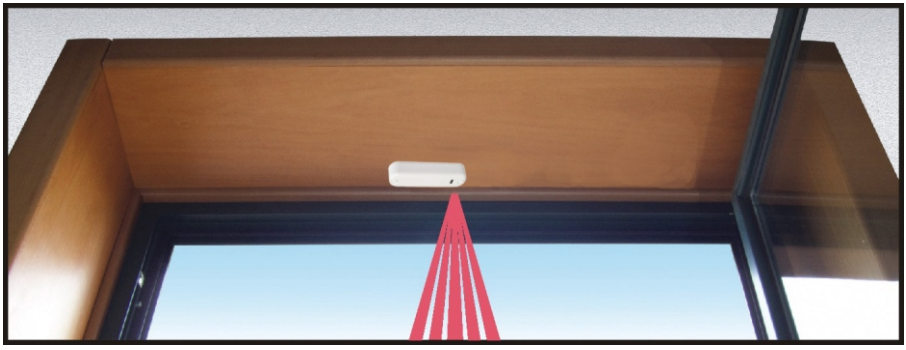
RECOMMENDED INSTALLATION



The volumetric detector is equipped with a circuitry made in SMT technology to ensure greater stability during use and greater immunity to electromagnetic disturbances.
The sensitivity adjustment allows it to be installed on doors and windows up to a maximum size of 6mt.
The "Alarm Memory" function, which allows you to check whether the sensor has gone into alarm during an arming period, is activated and reset by connecting to the "+12 int" terminal of our burglar alarm units.

INSTALLATION

- Install inside the frame and mount it at the top center of the frame (see figure), with the lens facing down.
- Secure the sensor base with two plugs, or use the double-sided adhesive strip supplied.
- Make connections to the control unit, as shown in the figure.
- Close the lid and tighten the screws that secure the lid fastening.
- Insert the supplied screw caps.
- Also avoid the installation between the shutter and the internal frame.



Terminal **M** can be connected to the + INT of the burglar-alarm control unit if you want to activate the alarm memory function, otherwise it must be left unconnected.

ATTENTION: Do not touch the pyroelectric sensor with your fingers!

OPERATING

The detector works in "dual technology"; this means that only if both technologies are alarmed (typical **AND operation**) is a real intrusion detected and the alarm is given with the opening of the NC contacts. This allows you to discriminate false alarms due to the activation of the infrared sensor only (sometimes caused, for example, by the sun's rays) or of the microwave sensor only.
To increase immunity to disturbances, the pulse counter function has been added to the detector which, once added up to a maximum of 4 activations of both technologies, with a pause between one event and the next of less than 15 seconds.

- **POWER ON**
  By applying the power supply voltage, the **RED LED** flashes for 30 seconds, during the stabilization phase of the circuit.
- **IR SECTION**
  At each signal from the IR SECTION the **YELLOW LED** lights up.
- **MICROWAVE SECTION**
  At each signal of the *MICROWAVE SECTION* the **GREEN LED** lights up.

  ☞ *NOTE: By turning the trimmer it is possible to adjust the sensitivity for both technologies.*
- **"AND" OPERATION**
  An intrusion is signaled only if both the infrared sensor and the microwave sensor are activated. (the red LED lights up and the NC contact opens).

SW3=**OFF** (Only*AND*)

- **"AND with automatic OR" OPERATION**
  By activating this function (**SW3 = ON)**, the detector signals the alarm when both technologies are simultaneously alarmed or when only one of the sensors repeatedly detects movements within about 30 seconds (with the other sensor not alarmed).

SW3=**ON** (*OR automatic*)

This feature prevents the sensor from being disabled by masking only one of the two motion detection technologies.

PULSE COUNTERI

- If the number of pulses is programmed to one, the detector immediately activates the output as well (opening of the NC contacts) and signals the detection to the burglar-alarm central unit.
- If the number of programmed pulses is greater than one, the red LED signals each detection with a flash and then remains off for about two seconds.
- If the motion detection state persists for more than 2 seconds, the red LED repeats the signal and the sensor counts a new pulse.
- **When the number of pulse signals reaches the programmed number, the red LED turns on steadily and the OUT contact is opened to signal the alarm to the burglar-alarm central unit.**

NOTE: Approximately 15 seconds after a detection, the pulse counter is reset.

1 Pulses
SW1=**OFF**
SW2=**OFF**

2 Pulses
SW1=**OFF**
SW2=**ON**

3 Pulses
SW1=**ON**
SW2=**OFF**

4 Pulses
SW1=**ON**
SW2=**ON**

SWITCH1/SWITCH2 Posizionare i dip-switch secondo il valore desiderato:

SW4=**ON** (exclusion activated)

SW4=**OFF** (disabled exclusion)

- **SIGNAL LED EXCLUSION**

By setting dip switch 4 to ON (**SW = ON)**, the detection and alarm signals of the LEDs are disabled. The only signals still active are the initial flashing when the detector is switched on and the flashing to activate the memory input.

- **ALARM MEMORY**

This function allows you to identify which detector has generated an alarm.
To activate the alarm memory, connect the **"M"** input to the **"+12 INT"** output of the burglar central unit.

NOTE: When the control unit is re-armed, the LED flashes for 5 seconds after which the alarm memory is cleared.

- **SUMMARY OF LED OPERATION**
  - **Red LED:** when the supply voltage is applied, it flashes for about 30 seconds during the stabilization phase of the circuit.
    - **Slow flashing (5 sec.):** Arming of the burglar-alarm central unit.
    - **Fast flashing:** signaling of sensor detection with active *alarm memory*.
    - **Steady on:** sensor detection signal without active *alarm memory*.
  - **Yellow LED:** lights up to signal the infrared detection activity.
  - **Green LED:** lights up to signal the detection activity of the microwave section.