## GATE/OUTGATE ANTI-MASK V4

GATE/OUTGATE ANTI-MASK V4 are dual technology indoor/outdoor barrier detectors in the

24.125GHz k band. Unlike the Gate Control, the Outgate is equipped with a 90° joint with a through hole for connecting the cables.

Both detectors use a special Fresnel lens produced by us which facilitates - jointly with the circuit - the fitter's work (once the detector is fixed, allows the performance of coverage and calibration tests, without removing and/or replacing the detector cover).

Furthermore, the lens offers perfect isolation of the IR sensor, preserving it from atmospheric agents, dust, etc, which underlie most false alarms. Two O-rings protect the sensor and the lens from water and humidity infiltrations.

#### Main functions:

- **AND mode** - the alarm is triggered if both microwave and infrared sensors detect movement. In the **OR mode**, however, the alarm is triggered if any sensor detects movement.

- **INTELLIGENT OR mode** - if one of both sensors (either microwave or infrared) provides 10 detections in 30 seconds, it triggers an alarm even if configured in AND mode. Activate only in stable environmental conditions.

- **ANTI-MASK IR** - two infrared sensors active inside the lens guarantee the detection of intentional masking attempts (the alarm is triggered 60 seconds after masking).

- **ANTI-MASK MW** - the microwave, through software, immediately detects the presence of an object placed in front at a maximum distance of 5-10 cm (the distance depends on the type of object and the alarm duration is 20 seconds). Activate only in stable environmental conditions.

## All functions can be individually configured via DIP switches.

#### **CONNECTIONS:**

+ = Positive 12V power supply

- = Negative 12V power supply

**TAMPER** = 24H protection contact

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MASK = Output relay dedicated to the anti-masking function

BL = Microwave emission blocking input. The presence of a positive 12V signal blocks the microwave emissions. NB: in this case, the microwave section and consequently the ANTI-MASK MW will not work.

## **Technical Specifications:**

12Vdc power supply

Absorption in idle status: about 27mA

Absorption in alarm status: max 36mA.

Working temperature range: -20°C to 50°C

Compartment for anti-tear contact on the joint (OUT-GATE version only)

Movement alarm discrimination controlled by integrated microprocessor.

High immunity to microphone effects and transients.

TRIMMER MW-RANGE: used to set the microwave range.

**TRIMMER MW-DELAY:** used to set the microwave delay.

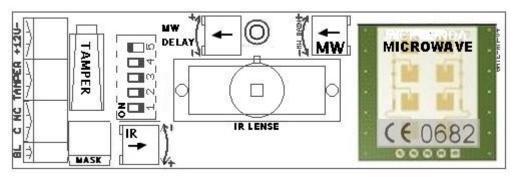
**TRIMMER IR-GAIN** : used to set the infrared gain.

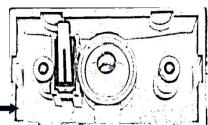
Block Input (green line) of the microwave emission with the system disarmed.

Output relay, dedicated to the anti-masking function

Tamper protection against opening of the detector cover.

**Microwave EIRP** = 15dBm output power



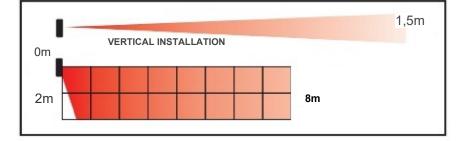


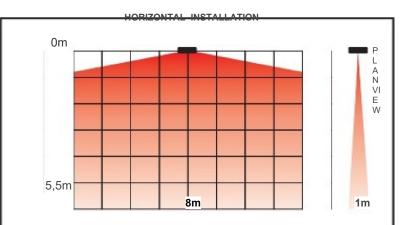
# N.B. For correct operation of ANTIMASK IR function, at the end of settings, it is right to disconnect the power supply for about 20" to recalibrate the sensor.

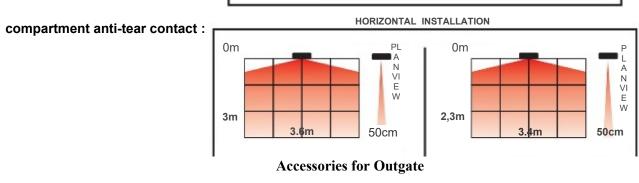
#### **SETTINGS:**

TRIMMER IR-GAIN	INFRARED GAIN SETTING (red led)
TRIMMER MW-RANGE	MICROWAVE RANGE SETTING (blue led)
TRIMMER MW-DELAY	MICROWAVE HALTING DELAY SETTING
DIP-SWITCH 1	ON =MW MASK DISABLED (DEFAULT) OFF = MW MASK ENABLED
DIP-SWITCH 2	ON = OR OPERATION OFF = AND OPERATION (DEFAULT)
DIP-SWITCH 3	ON = AUTOMATIC OR FUNCTION DISABLED (DEFAULT) OFF = AUTOMATIC OR FUNCTION ENABLED
DIP-SWITCH 4	ON = IR MASK DISABLED OFF = IR MASK ENABLED (DEFAULT)
DIP-SWITCH 5	ON = LED ON (DEFAULT) OFF = LED OFF
L	PLAN VIEW

#### **COVERAGE DIAGRAM:**









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