PRODUCT DESCRIPTION

The detector is a dual technology detector (MW+IRP) volumetric barrier, for outdoor installations, low current consumption for radio applications on battery power.

It is designed to be combined with commercial battery powered transmitters (TX). The detector must be supplied in any case with a Lithium battery 3.6V. If with the same battery will power the TX is recommended a capacity 2300mAh = >. For ease of installation, the connection and the housing of TX are provided two accessories:

POWER-A Battery holder and Tamper unit for Box-A, with power connections (3,6 e 3V) and signals to the TX;

BOX-A Waterproof box for TX and Power-A

The table below shows a set of configurations TX / Detector with use of uno or two batteries, accessories used, and important features for each configuration.

For wiring connection diagrams and installation, refer to the manuals accessories .

CYLIX DT LAB LINE

Dual technology wireless curtain detector



2 sensitivity settings optimized in conjunction with the Trimmer for the global regulation of the range



8 mt x 140 cm Barrier.



Polycarbonate case IP65,resistant to environmental agents



Environment temperature compensation



Pet immunity (with optinal acessory)



NO/NC Status of the alarm contact selectable by Dip Switch



Delay Alarm: inhibition of detector on two selectable timing

-Selective Optical Filtrer of the infrareds bandwidth

-Ability to wall / wall installation or ceiling / floor installion using the supplied angle bracket and the optional pivot bracket Hub

-Deep optical slot for a high immunity of the infrared section to all of the phenomena/ disturbance that do not show up in its field of detection wiew.

TRANSMITTER (TX)	POWER-A	SUPPLY	TXBATTERY	DETECTOR	FEATURES
TX from 3 V	YES	ONE BATTERY	Lithium 3,6 V da 2300/2500 mAh		Simplification of signal and Power Cables of the sensor
					The LOW BATTERY signal from sensor sent directly from TX
					ANTI-OPENING TAMPER and WALL TAMPER for BOX-A and TAMPER SENSOR already wired and connected into a single output
	YES	DUAL BATTERY	TX with its specific battery	Lithium 3,6 V 2300/2500 mAh	Explanation of signal and Power Cables of the sensor
					The LOW BATTERY signal of detector sent directly from a TX *NOT POSSIBLE*
					Acoustic Low Battery Signal of detector (only in the version with BUZZER)
					ANTI-OPENING and TEAR-PROOF TAMPER for BOX-A and TAMPER SENSOR already wired and certificates into a single output
	NO	DUAL BATTERY	TX with battery specification	Lithium 3, 6 V da 2300/2500 mAh	If the watherproof box is used (BOX-A), inability to have ANTI-OPENING TAMPER and WALL TAMPER
					minor ease of wiring the supply and the signals compared to the use of POWER-A board
					The LOW BATTERY signal from sensor sent directly from a TX NOT POSSIBLE
					Acoustic sensor battery of detector (only in the version with BUZZER)
TX from 3,6 V	YES	ONLY BATTERY	Lithium 3,6 V 2300/2500 mAh		Explanation of signal and Power Cables of the sensor
					Low battery signal to the sensor sent directly from TX
					ANTI-OPENING and TEAR-PROOF TAMPER for BOX-A and TAMPER SENSOR already wired and certificates into a single output
	NO	ONLY BATTERY	Lithium 3,6V of TX		When using the watertight container BOX-A, inability to have TAMPER OPENING AND TAMPER-PROOF
					Less easy to wire the power and signals than using the tab POWER A
					Low battery signal to the sensor sent directly from TX
	NO	DUAL BATTERY	Lithium 3,6 V del TX	Lithium 3,6 V da 2300/2500 mAh	When using the watertight container BOX-A, inability to have TAMPER OPENING AND TAMPER-PROOF
					Less easy to wire the power and signals than using the tab POWER A
					BATTERY for the sensor status signalling via TX NOT POSSIBLE
					Acoustic sensor battery of detector (only in the version with BUZZER)
TX with different powers from 3V or 3.6V (it is essential that levels of logic signals do not exceed 3, 6V Max)	YES	DUAL BATTERY	TX with battery specification	Lithium3,6 V da 2300/2500 mAh	Explanation of signal and Power Cables of the sensor
					BATTERY for the sensor status signalling via TX NOT POSSIBLE
					Acoustic sensor battery of detector (only in the version with BUZZER)
					ANTI-OPENING and TEAR-PROOF TAMPER for BOX-A and TAMPER SENSOR already wired and certificates into a single output
	NO	DUAL BATTERY	TX with battery specification	Lithium 3,6 V da 2300/2500 mAh	Less easy to wire the power and signals than using the tab POWER A
					BATTERY for the sensor status signalling via TX NOT POSSIBLE
					Acoustic sensor low battery of detector (only in the version with BUZZER)

INSTALLATION

Open the detector by unscrewing the closing screw.

Remove all, intermediate Plastic Bottom and Circuit Board,from the Plastic Bottom.

If the BOX-Ais used skip the next two chapters and refer directly to chapter CONNETING and SETTING

Wall mounting or with angle bracket

Cut the Locations A and B on the Plastic Bottom

Pass the cable trough the Cable Entry on the Plastic Bottom.

For direct mounting to the wall,fix the Plastic Bottomwith the screws through the locations A and B.

For installation with Bracket Angle*, attach first the bracket to the wall with the screw and then attach the Plastic Bottom to the bracket through locations A and B with the Angle Bracket screws.

Pass the cable trough the Rubber on the Intermediate Plastic Bottom and replace the all, Intermediate Plastic Bottom and Circuit Board, on the Plastic Bottom.

Proceed with the cable connection.

**The Angle Bracket can be mounted either left or right handed.*

With Swivel Bracket Hub (Grey Polycarbonate version)

The Swivel Bracket HUB-P will be applied in a horizontal manner, or directly to the wall with screws and dowels, or on the support HUB-CP trough the Angle Bracket screws.

The HUB-P allows orientation of +/-45 ° vertically, and +30° in the opposite detection to that of the “Guidance Arrows”, in the horizontal plane.

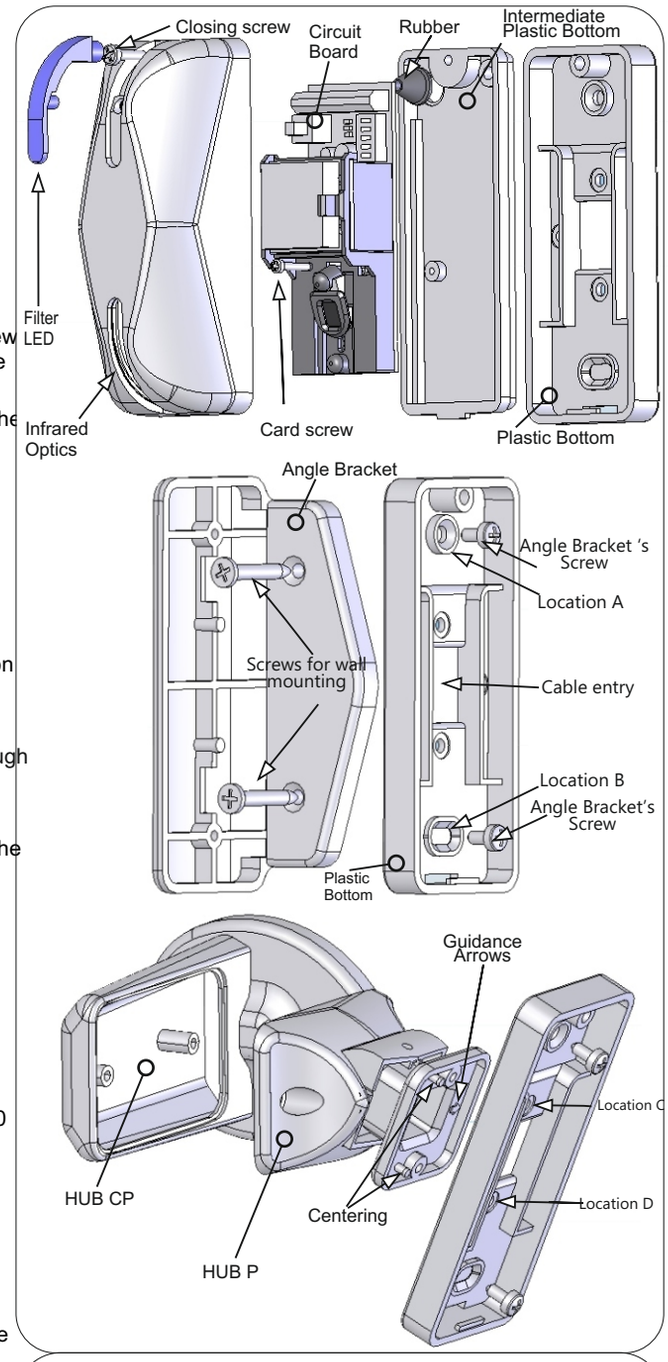
Pass the cable tough the Swivel Bracket and the Cable Entry

Place the Plastic Bottom on the Swivel Bracket with the Angle Bracket screws through the Location C and D

Orient the swivel Bracket and tighten the locking screw trough the Cable Entry.

Pass the cable trough the Rubber on the Intermediate Plastic Bottom and replace the all, Intermediate Plastic Bottom and Circuit Board, on the Plastic Bottom

Proceed with connection cables and the setting.



CONNECTION SETTING

Connect the cable to the Terminal * according to the scheme shown in Figure «TERMINAL»

If the optional equipment Power-A is used, refer to specific manual.

Insert the battery only after completing the connections.

Warm Up. The detector will remain in this condition in which the LED flashing for 60 sec

This condition is automatically activated when the power is applied and every time you open/close the plastic front.

If it is necessary, performthe setting of operating. (see chapter settings)

Adjust the range through the trimmer (see chapter settings)

Apply the Plastic Front.

Walk Test. The Detector will maintain this condition (after Warm Up next the closure of the front) for about 4 min.

In this condition is excluded the Delay Time Alarm and the led of Alarm is automatically enabled.

Testing the detection checking the alarms by the Led lights up

After the Walk Test time the sensor will automatically go into the operating condition. If the front panel is opened again, to make additional settings, It will automatically restarted the time Walk Test..

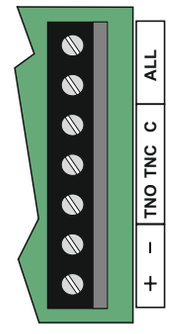
Tighten the closing screw.

Apply the Filter Led This element has a dual function:

-Allows you to leaveON the LEDs so that they can not be seen at a distance by an intruder, but allowing the verification of operation only in the immediate vicinity of the sensor by the user;

- Hide aesthetically the closing **screw** of the detector.

TERMINAL



Alarm Relay
(see Dip Switch n°4)

Tamper contact:
C Common
TNC Normally Closed
TNO Normally Open

Supply input 3,6V

SETTINGS

Trough the positioning of the 5 Dip Switches is possible to adpt the sensor working to the your installing needs.

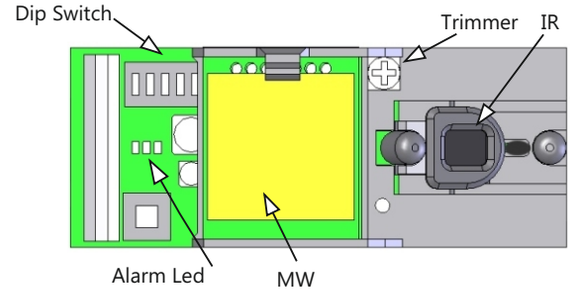
SENSITIVITY *DipSwitch N°1*

NORMAL Suitable for most outdoor installations-

HIGH *Suitable for outdoor installations where you need a higher detection rate.*

NORMAL *DipSwitch N°1 in pos. OFF*

HIGH *DipSwitch N°1 in pos. ON*



ALARM DELAY Dip Switch N° 2

Several successive alarms cause temporary inhibition of the sensor to generate additional alarms (Alarm Delay). During the delay alarm whenever movement is detected.
by the sensor will be re-initialize the inhibition time. That is useful to preserve the life of the battery.

This feature is not enabled during Walk Test.
You can choose from two Alarm Delay times

Dip Switch n° 2 in pos. OFF	*4min*
Dip Switch n° 2 in pos. ON	*8min*

LED ON *DipSwitch N°3*

The led indicates the sensor alarms.
The Led Walk Test mode enabled automatically, and automatically disabled in operating condition.
You can enable the led also operational at the expense of battery life.

Dip Switch n° 3 in pos. OFF	*Led disabled*
Dip Switch n° 3 in pos. ON	*Led enabled*

ALARM RELAY *DipSwitch N°4*

You have the option you choose the resting state of alarm relay.

Dip Switch n° 4 in pos. OFF	*Normally closed*
Dip Switch n° 4 in pos. ON	*Normally open*

NB: *DipSwitch N°5 not enabled*

TRIMMER

Adjusts the range of the sensor. (turning the trimmer clockwise increases the scope of the detector).
To the adjusting to keep as a reference the range determined by microwave (MW). The sensor will automatically adjust operation of the infrared (IR) to this adjustment .

Note:contrary to the microwave, for which it is possible to determine with sufficient precision its limit of detection, for the infrared this condition is not applicable.
This because the infrared detection is affected by ambient temperature, from clothing of the intruder, the presence/absence of wind,etc..

The trimmer thus automatically adjusts the detection capability of the Infrared as a function of themicrowave range selected, without necessarily delimit
its field of action as that of themicrowave (the Infraredwill be automatically configured for themost adverse conditions at that range).
You can so have infrared detections even to greater distance than that defined by the trimmerwithout compromising the reliability of the sensor.
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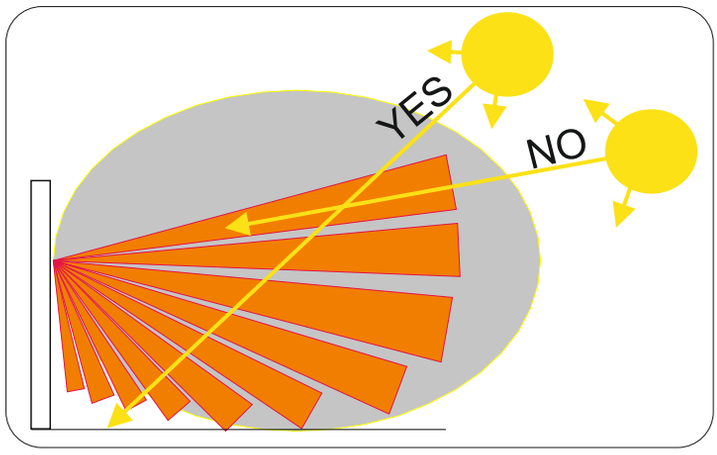
TIP FOR INSTALLATION

In indoor installations, prefer placement of the sensor toward the inside of the room and away from operating machinery and heat sources.

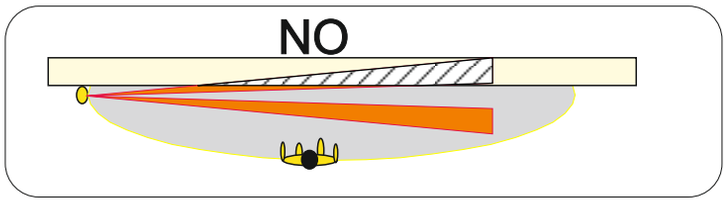
Avoid to direct it toward the windows exposed to the sunny.

In outdoor installations, prevent that the sun's rays, especially during the hottest hours of the day, come directly to the infrared sensing element.

Note: be careful not to obscure, even partially, the detector field of view.



For protection of walls, avoid that a sensitive area of infrared in in contact with the wall, in order to don't cancel the benefit of the dual-element infrared sensor.



Overcome this by mounting the sensor detached from the wall (see table),

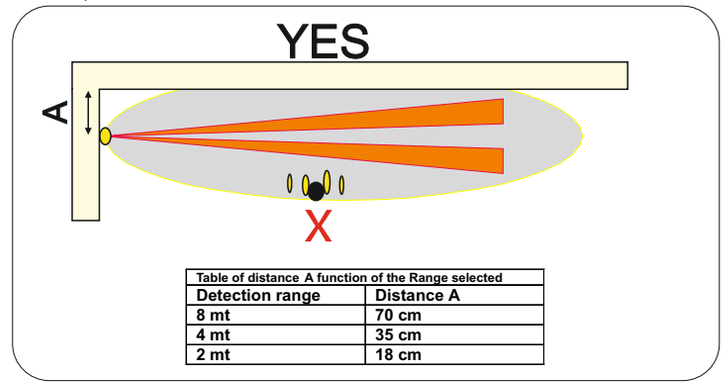
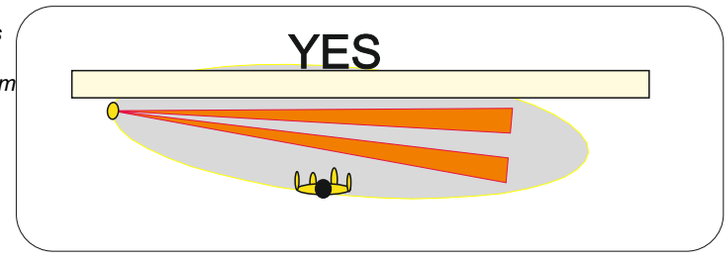


Table of distance A function of the Range selected

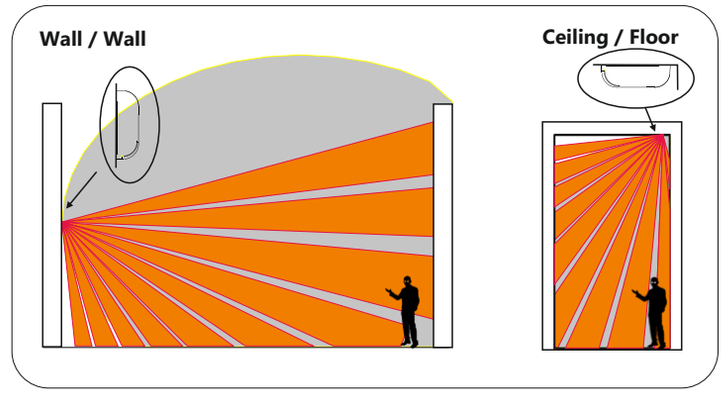
Detection range	Distance A
8 mt	70 cm
4 mt	35 cm
2 mt	18 cm

or orienting the sensor of a few degree (< 10°) using the optional accessory Swivel Bracket HUB-HUB-Hub P + CP.

To increase the effectiveness of the survey can also increase beyond 10 ° opening of the detector from the wall, but take care not to point the detector towards areas with probable causes of false alarms (steps of means or persons, the presence of unstable objects or vegetation canopy).

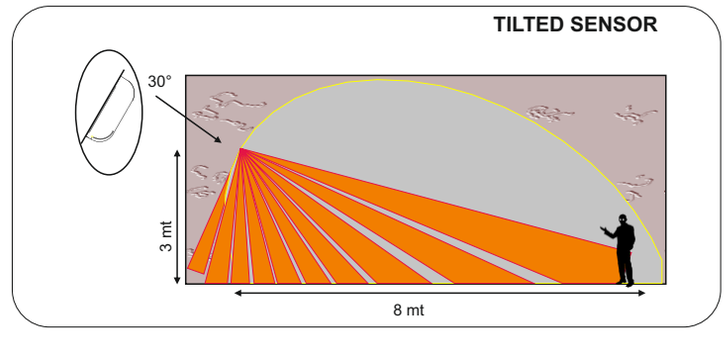


To prefer for installations where there is a wall/floor to delimit the field of detection of the sensor. Do not point the sensor in a vacuum space.



**Note: The sensor range is set by trimmer according to the mass of a human body. Large animals (horses, cows) or large mass of moving objects (cars) can be detected at greater distances.*

Where it is not possible to an installation Wall/Wall or Ceiling/Floor, to prefer the tilted sensor installation.



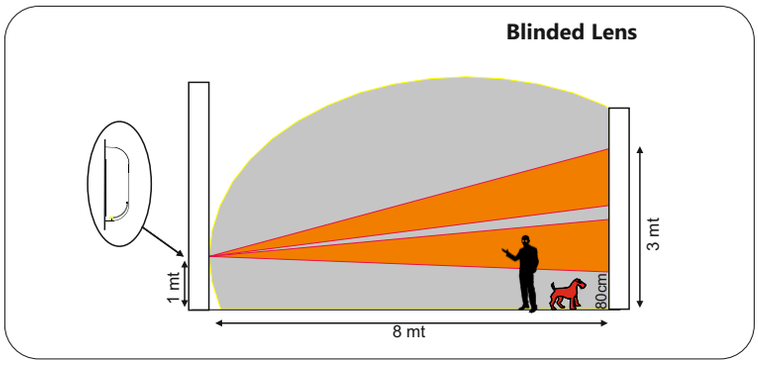
Exclude from the sensor's detection zone any object in motion or oscillating.

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PET IMMUNITY (Optional)

If there is the possibility of transit of pets in the protected zone, use the optional Blinding's lens by applying it*on the lens to leave uncovered only the two upper zones.

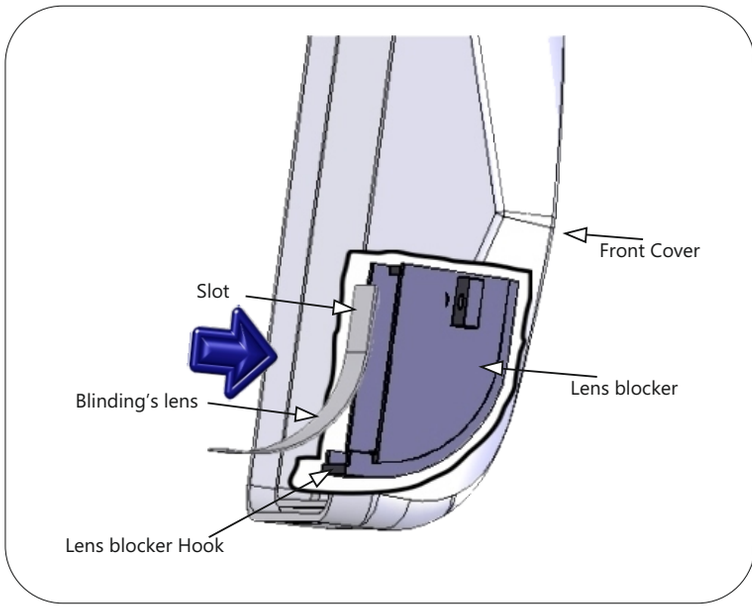
The result is it in the figure below.



Application of Blinding's lens

Insert the «Blinding's lens» with the particular «Lens blocker» already mounted in the inner part of the «Front Cover». The «Blinding's lens» will have to be inserted with the «Slot» facing towards the top of the sensor, and stopped behind the Hook that stops the «Lens blocker».

**Note: To have the Pet immunity effect, the sensor must be installed only on a vertical wall, and a height of 80 cm/ 140 cm from the ground*



DECLARATION OF CONFORMITY

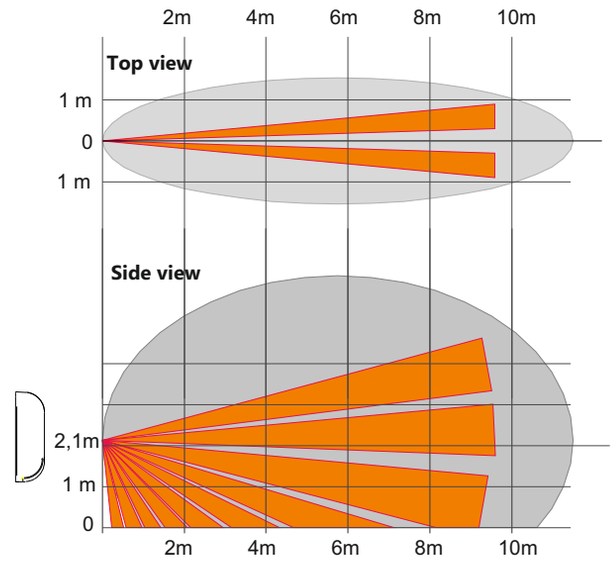
The manufacturer, whose references appear on the packaging and on the label of the product, declares that this radio equipment complies with Directive 2014/53 / UE.
The full text of the UE Declaration of Conformity and the geographical address of the manufacturer are available at the Internet address on the

The **Serial Number «ID»** of the detector is printed on a label on the board of the detector

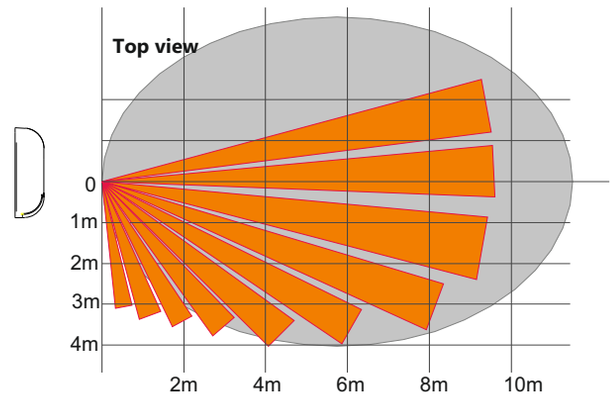
The manufacturer reserves the right to add, remove or change features or functions in order to technical improvements at any time. .

SPECIFICATIONS

Voltage:	Lithium battery3,6V
Max consumption	600uA
with led On	3,5mA
Consumption in operating mode	14uA
Microwave:	24 Ghz
Alarm Period:	1 sec
Relay Alarm:	10mA / 3,6V
Tamper:	100mA /30V
Wall Tamper:	300mA / 48V
Operating **Temperature:**	-10°C/+55°C
Ambient humidity:	95%
Teoric **MTBF :**	120.000 ORE
Size without acessories:	110 x44 x 46mm



Standard detection diagram



Detection diagram at maximum height installation.

CYLIX DT LAB LINE

DISPOSAL:
This product must be disposed of using the appropriate bins for electrical and electronic products.
This product must not be placed in bins for colletion of other waste types.