MITECH®

PERIMETER BARRIERS

Italian Engineering

Catalogue **2015**

MITECH®
SECURED
BY INNOVATION

Mitech®manufactures a complete range of intrusion perimeter barriers of utmost reliability and high quality, Made in Italy, for civil building, industry and the protection of sensitive areas.

The Company has been constantly investing in research and development thus applying innovative technologies engineered for a congenial and easy perimeter set-up ensuring the maximum protection for a worry-free environment.

Mitech®, owing to a direct management intervention and exhaustive product documentation, differs by paying particular attention to support activities to its customers in the configuration analysis design phase and after-sales service.

Today Mitech® relies on a consolidated distribution network throughout the domestic market. Over the recent years it is expanding rapidly in many foreign countries by means of solid partnerships undertaken with qualified security distributors and well-reputed system integrators firms.

Maurizio Fantoni
Founder & CEO

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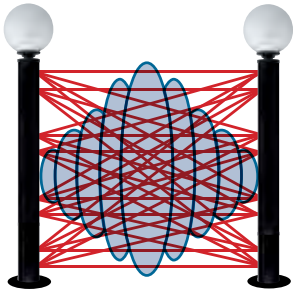
GARDEN and TOWER MAGNUS

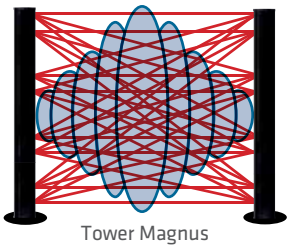
DUAL IR+MW TECHNOLOGY COLUMNS
Also available in bidirectional version **MAGNUS PLUS**

GARDEN and **TOWER MAGNUS** are the new dual technology perimeter columns with utmost reliability and efficacy.
The GARDEN version is camouflaged as a lamp post that combines aesthetics with functionality to a reliable security device. It is pre-cabled and ready for installation, composed of a transmitting and a receiving unit.
The transmitter emits a codified sequence of infrared beams and high frequency electromagnetic waves directed to the respective receiver.
The microwave device uses planar antennas of new generation and military derivation with reduced size owing to the absence of the cumbersome parabolic antenna.
MAGNUS PLUS is the bidirectional version with a column of 14 cm containing built-in transmitting and receiving devices enabling a 90° angle.
GARDEN and **TOWER MAGNUS** are also indicated for harsher environments and weather situations (low temperatures, fog, humidity, gusts of winds) thanks to the built-in automatic temperature control device and the disqualification system and sturdy aluminium structure.

FEATURES AND SOLUTIONS FOR INSTALLATION



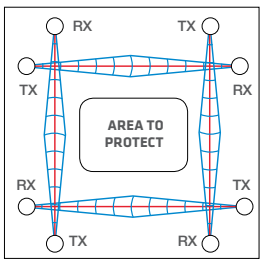
Garden Magnus



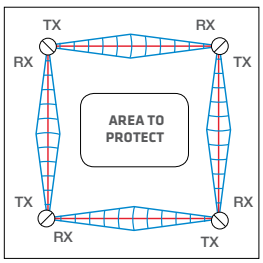
Tower Magnus

- Maximum range 100 m
- Double lens
- Planar antenna lobe height 2,5 m – lobe opening 1,0 m
- Operating frequency 24.000:24.250 GHz (250 channels)
- Point-to point easy alignment
- Pre-cabled, ready for installation
- Built-in automatic temperature control device
- Integrated disqualification (fog function)
- Optical synchronization
- Independent MW and IR programmable in AND/OR function on control panel
- Aluminium structure and polycarbonate cover
- Column diameter 14 cm (available heights from 1,5 m to 3,0 m)
- Serial communication RS485
- Protection class **IP65**

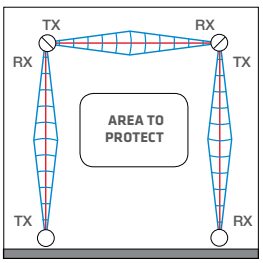
Solution with terminal columns



Solution with bidirectional columns



Solution with terminal and bidirectional columns



ACCESSORIES

GAR GR (standard)
Base for ground fixing
200 x 210 mm d. 33 cm

GAR WL
Base for wall mounting
200 x 210 mm d. 33 cm

GAR POW
Dual power supply
12 Vdc - 1,5 Ah
24 Vac - 2,0 Ah

TW PRCAP
Anti-climbing pressure cap

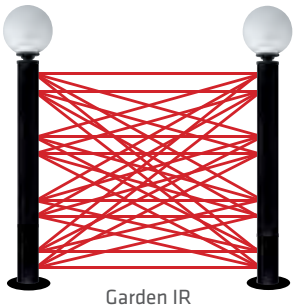
GAR LAMP
Ø 32 cm
cognac white

GARDEN and TOWER IR

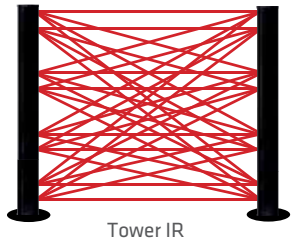
ACTIVE INFRARED COLUMNS
Available in terminal and bidirectional version

GARDEN and **TOWER IR** are the perimeter columns with crossed beams and double lens.
The GARDEN version is camouflaged as a lamp post that combines aesthetics with functionality to a reliable security device.
Both pre-cabled and ready for installation they are composed of a transmitting and a receiving unit.
The transmitter emits a coded sequence of infrared beams which are detected by all the receivers.
The columns do not require any wire synchronism because each beam is recognized by means of differentiated optical codes (optical synchronization).
GARDEN and **TOWER IR** are more suitable for harsher environments and weather situations (low temperatures, fog, humidity, gusts of winds) thanks to the built-in automatic temperature control device, the disqualification system and sturdy aluminium structure.

FEATURES AND SOLUTIONS FOR INSTALLATION



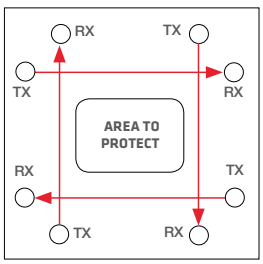
Garden IR



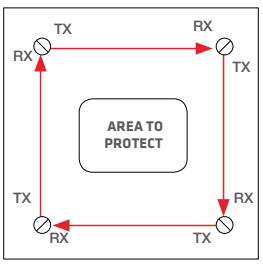
Tower IR

- Maximum range 100 m
- Double lens
- AND/OR programming
- Point-to point easy alignment
- Pre-cabled, ready for installation
- Built-in automatic temperature control device
- Integrated disqualification device
- Optical synchronization
- Aluminium structure and polycarbonate cover
- Column diameter 14 cm
- Available heights from 1,5 m to 3,0 m
- Protection class **IP65**

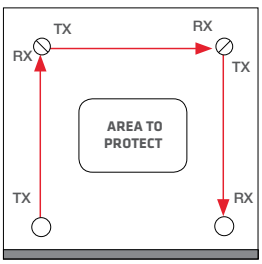
Solution with terminal column



Solution with bidirectional columns



Solution with terminal and bidirectional columns



ACCESSORIES

GAR GR (standard)
Base for ground fixing
200 x 210 mm d. 33 cm

GAR WL
Base for wall mounting
200 x 210 mm d. 33 cm

GAR POW
Dual power supply
12 Vdc - 1,5 Ah
24 Vac - 2,0 Ah

TW PRCAP
Anti-climbing pressure cap

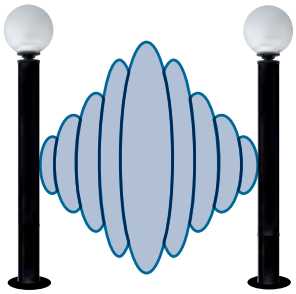
GAR LAMP
Ø 32 cm
cognac white

GARDEN and TOWER MICRO

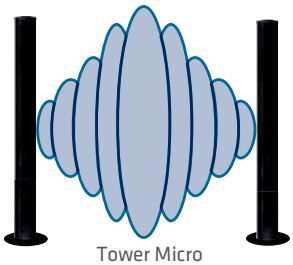
MICROWAVE COLUMNS
Available in terminal and bidirectional version

GARDEN and **TOWER MICRO** are the microwave perimeter columns.
The GARDEN version is camouflaged as a lamp post that combines aesthetics with functionality to a reliable security device.
Both pre-cabled and ready for installation they are composed of a transmitting and a receiving unit.
The transmitter emits high frequency electromagnetic waves directed to the respective receiver.
The microwave device uses planar antennas of new generation and military derivation with reduced dimensions owing to the absence of the cumbersome parabolic antenna.
GARDEN and **TOWER MICRO** are more suitable for harsher environments and weather situations (low temperatures, fog, humidity, gusts of winds) thanks to the built-in automatic temperature control device, the disqualification system and sturdy aluminium structure.

FEATURES AND SOLUTIONS FOR INSTALLATION



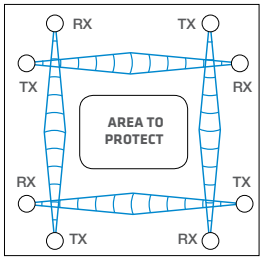
Garden Micro



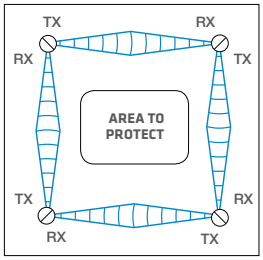
Tower Micro

- Maximum range 100 m (200 m by request)
- Planar antenna lobe height 2,5 m – lobe opening 1,0 m
- Operating frequency 24.000:24.250 GHz (250 channels)
- Point-to point easy alignment
- Pre-cabled, ready for installation
- Built-in automatic temperature control device
- Aluminium structure and polycarbonate cover
- Column diameter 14 cm
- Available heights from 1,5 m to 3,0 m
- Serial communication RS485
- Protection class **IP65**

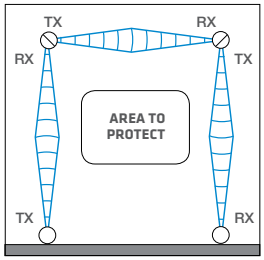
Solution with terminal columns



Solution with bidirectional columns



Solution with terminal and bidirectional columns



ACCESSORIES

GAR GR (standard)
Base for ground fixing
200 x 210 mm d. 33 cm

GAR WL
Base for wall mounting
200 x 210 mm d. 33 cm

GAR POW
Dual power supply
12 Vdc - 1,5 Ah
24 Vac - 2,0 Ah

TW PRCAP
Anti-climbing pressure cap

GAR LAMP
Ø 32 cm

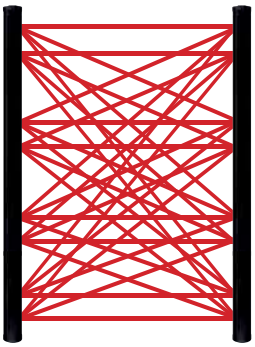
FOSTER

ACTIVE INFRARED BARRIER WITH DOUBLE LENS
Also available in single lens

FOSTER is a perimeter IR barrier with crossed beams for protection of external areas, with a pleasant design and compact dimensions.
Pre-cabled and ready for installation **FOSTER** is composed of a transmitting and a receiving unit.
The transmitter emits a coded sequence of infrared beams which are detected by all the receivers.
Due to its innovative features and sophisticated technological content , it belongs to the top-end product range but it is offered at really unrivalled price/quality ratio.
Available in different versions and heights, it can be installed on a pole or wall and used in combination with columns TOWER and GARDEN IR.
FOSTER, standard equipped with automatic temperature control device, disqualification system and sturdy aluminium structure, is synonymous with security and reliability.

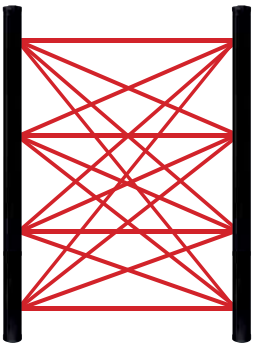
FEATURES AND SOLUTIONS FOR INSTALLATION

DOUBLE LENS



Maximum range 100 m

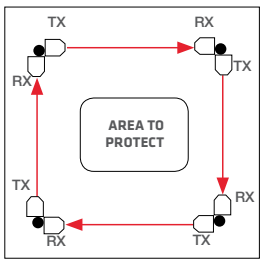
SINGLE LENS



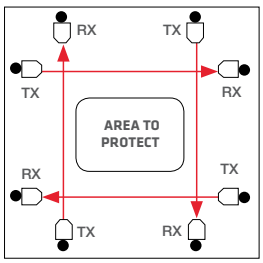
Maximum range 70 m

- Maximum range 100 m (double lens version)
- Maximum range 70 m (single lens version)
- AND/OR programming
- Point-to point easy alignment
- Pre-cabled, ready for installation
- Built-in automatic temperature control device
- Integrated disqualification device
- Optical synchronization
- Aluminium structure and polycarbonate cover
- Available heights from 1,5 m to 3,0 m
- Protection class **IP65**

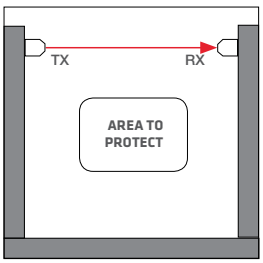
Solution with pole fixing 1



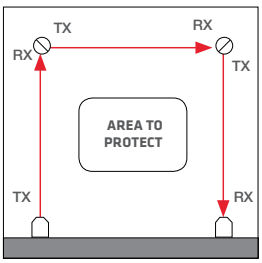
Solution with pole fixing 2



Solution with wall fixing



Solution in combination with bidirectional columns GARDEN and TOWER IR



ACCESSORIES

FTN WL
Wall mounting bracket

FTN SUP
Pole mounting bracket kit

FTN PL
Pole with base for ground fixing
2 meters height – d. 48 mm 20 x 20 cm base

GAR POW
Dual power supply
12 Vdc - 1,5 Ah
24 Vac - 2,0 Ah

DOOR AND WINDOW PROTECTIONS

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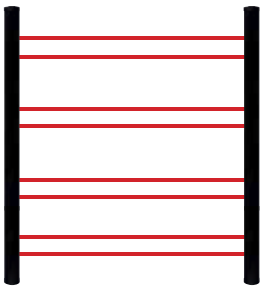
WINNER

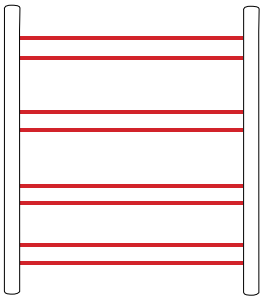
WIRE ACTIVE INFRARED BARRIER
Also available in white

WINNER is a dual led IR barrier with parallel beams.
It consists of two symmetrical profiles to be installed on either side of the entrances to be protected and it allows to anticipate intrusion by leaving freedom to move indoors with even windows and doors open.
Thanks to its compact dimensions it can be easily installed in small spaces including the interspaces between doors and windows, rolling blinds and shutters.
WINNER guarantees an excellent reliability standard, high immunity to sunlight and insects.
It is sturdy, easy to be installed, available in white and black colours and it has a maximum range of 15 meters.

FEATURES AND SOLUTIONS FOR INSTALLATION



Black
Maximum range 15 m

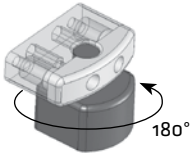


White
Maximum range 3,5 m

- Maximum range 15 m (black version)
- Maximum range 3,5 m (white version)
- Double led – AND/OR programming
- Available heights from 0,5 m to 3,0 m
- Wire synchronism connection
- Beams adjustable within the profile and expandable up to 10
- Aluminium structure and polycarbonate cover
- Customized profile sizes available on request
- Protection class **IP54**

ACCESSORIES

WIN TW
Turning articulation

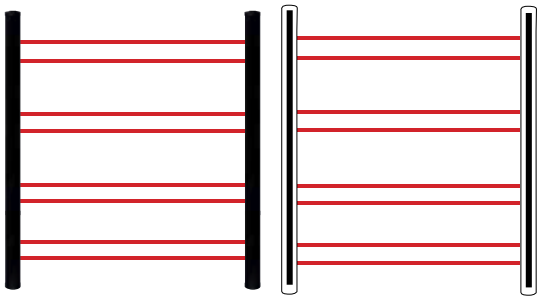


TRENDY *plus*

SELF-POWERED ACTIVE INFRARED BARRIER
Compatible with any radio transmitter

TRENDY *plus* is a wireless, self-powered miniature IR barrier with double led and 24-month autonomy, which is compatible with any radio transmitter.
It consists of two symmetrical profiles to be installed on either side of the entrances to be protected and it allows to anticipate intrusion by leaving freedom to move indoors with even windows and doors open.
Thanks to its compact dimensions it can be easily installed in small spaces including the interspaces between doors and windows, rolling blinds and shutters.
TRENDY *plus* has a maximum range of 5 meters and it is available in different versions up to a maximum of 7 beams.

FEATURES AND SOLUTIONS FOR INSTALLATION



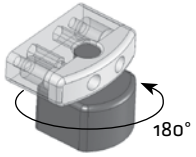
Black
Maximum range 5 m

White with black cover
Maximum range 5 m

- Compatible with any radio transmitter
- Lithium battery autonomy of 2 years
- Maximum range of 5 m
- Double led - AND/OR programming
- Available heights from 0,5 m to 3,0 m
- Optical synchronism
- Beams adjustable within the profile and expandable up to 7
- Aluminium structure and polycarbonate cover
- Customized profile sizes available by request
- Protection class **IP54**

ACCESSORIES

WIN TW
Turning articulation



TWIN and TWIN WS

DOUBLE PIR CURTAIN SENSOR

with antimask

TWIN e **TWIN WS** are the new dual passive infrared sensors for doors and windows. Weather resistant, they have small dimensions which make them suitable for protection of well-defined and restricted areas. They have a maximum range of 4 metres and are available in white and brown colours.
TWIN WS is self-powered version by lithium batteries, compatible with any radio transmitter.

TWIN WS

IP54

TWIN

IP54

Features

- Maximum range 4 m
- Horizontal detection angle 35°
- Operating temperature from -20°C up to +50°C (humidity 85%)
- Antimask
- AND/OR programming
- Number of pulses 1 or 2 pulses in 2,5 s
- ON/OFF led selector
- Temperature automatic compensation
- 4 detection areas
- Tropicalized board
- TWIN dimensions 190 x 30 x 26 mm
- TWIN WSdimensions 280 x 38 x 30 mm

SMART

DOUBLE TECHNOLOGY CURTAIN SENSOR

SMART is a double technology sensor for doors and windows. Particularly weather-resistant, it has reduced sizes, which makes it suitable for protection of well-defined and restricted areas.
SMART creates an ultra-reduced curtain barrier of approximately 7.5 degrees and it has an adjustable range of up to 2 metres. Available in white and brown colours. Corner wall mounting bracket included.

IP54

Features
- Maximum range 12 meters
- Immune to white light
- Vertical detection angle 80°, horizontal angle 7,5°
- Anti-collision
- Active IR antimask
- 24 GHz microwave
- Tropicalized board
- Immunity up to 2 Ghz
- Sensor dimensions 115x40x45 mm

RELLOS

PASSIVE INFRARED CURTAIN SENSOR

RELLOS is a curtain sensor for doors and windows. The reduced sizes and the ability to self compensate any sudden change in temperature automatically make it suitable also in critical circumstances.
RELLOS creates a curtain barrier of approximately 7 degrees, it has a maximum range of 8 metres and is available in white and brown colours.

IP54

Features
- Maximum range 8 metres
- Detection angle 60° vertical, 7° horizontal
- Immunity up to 2 GHz
- Immune to white light
- Sensor dimensions: 95x28x35 mm

MINI GSM

ULTRA-COMPACT MODULE

MINI is the ultra-compact module (6x3 cm) designed to create a perimeter protection independent of conventional alarm systems. **MINI** has very high and innovative performances, it has extremely reduced sizes and it can be programmed via USB or bluetooth.

Features
- Operating via SMS
- Two inputs
- Open connector output 300mA controlled by Caller-ID
- Text and voice messages for alarm and system status
- Contact ID, jammer alarm

Applications
- Perimeter barriers
- Free opening of gates and garages doors via caller ID recognition
- Control of household appliances, air conditioning, heating,lighting, garden irrigation

Accessories

USB KIT
Programming USB kit

AD BLUE
Programming Bluetooth

GSM RI
Relay for OC output

TECHNICAL FEATURES

Infrared Technology

	GARDEN/TOWER	FOSTER	WINNER	TRENDY *plus*
Maximum range outdoors	100 m	100 m (double lens)	15 m	5 m
Minimum distance between receiver and transmitter (RX – TX)	1.0 m version: minimum distance 4 m For all other versions, with minimum distances of less than 15 m, please contact the supplier	1.0 m version: minimum distance 4 m For all other versions, with minimum distances of less than 15 m, please contact the supplier	20 cm for all heights	20 cm for all heights
Column height	1.0 m – 1.5 m – 2.0 m – 2.5 m – 3.0 m For non-standard heights, please contact the supplier	1.0 m – 1.5 m – 2.0 m – 2.5 m – 3.0 m 3,5 m For non-standard heights, please contact the supplier	0.5 m – 1.0 m – 1.5 m – 2.0 m 2.5 m – 3.0 m For non-standard heights, please contact the supplier	0.5 m – 1.0 m – 1.5 m – 2.0 m 2.5 m – 3.0 m For non-standard heights, please contact the supplier
Column width	//	6.4 cm	2.5 cm	2.5 cm
Column depth	//	6.9 cm	2.5 cm	2.5 cm
Column diameter	14 cm	//	//	//
Profiles	Extruded in IR aluminium and polycarbonate	Extruded in IR aluminium and polycarbonate	Extruded in IR aluminium and polycarbonate	Extruded in IR aluminium and polycarbonate
Synchronisation	Optical	Optical	Wire	Optical
Number of beams	Max. 5 double lenses	Max. 5 double lenses	Max. 10 double lenses	Max. 7 double lenses
Total number of beams (max.)	50 crossed	50 crossed	20 linear	14 linear
Battery autonomy	//	//	//	2 years
Wireless usage	//	//	//	Yes
Power supply	12 Vdc - 24 Vac for heaters	12 Vdc - 24 Vac for heaters	12 Vdc	3.6 V/ 4800 mAh lithium batteries
Disqualification	Automatic with external signals	Automatic with external signals	//	//
Maximum absorption	390 mA (TX 120 mA - RX 270 mA)	390 mA (TX 120 mA - RX 270 mA)	110 mA - TX+RX	220 µA - TX + 220 µA - RX
Maximum consumption of heaters	RX 30W - TX 30W	RX 30W - TX 30W	//	//
Operating temperature	– 35°C + 70°C (with heat regulator)	– 35°C + 70°C (with heat regulator)	– 25°C + 70°C	– 25°C + 70°C
Vertical alignment angle	30°	30°	//	//
Horizontal alignment angle	180°	180°	//	//
Detection system	OR - AND on TX and RX with the possibility of remote AND activation	OR - AND on TX and RX with the possibility of remote AND activation	OR - AND on TX and RX	OR - AND on TX and RX
Anti-blinding system	Automatic, can be disabled	Automatic, can be disabled	//	Infrared with alarm output
Tripping time	Adjustable from 50 to 500 ms	Adjustable from 50 to 500 ms	Adjustable from 50 to 500 ms	200 ms
Alarm output	NC/NO relay contact	NC/NO relay contact	NC relay contact	NC - NO relay contact
Tamper output	NC contact	NC contact	NC contact	Open Collector
LED indicators	Power supply - Blinding - Heating, low signal - Alarm - Detection	Power supply - Blinding - Heating, low signal - Alarm - Detection	Synchronism - Alarm	Synchronism - Alarm
IR signal	Pulsed, coded	Pulsed, coded	Pulsed, coded	Pulsed, coded
Compliant with standards	CEI 79/2	CEI 79/2	CEI 79/2	CEI 79/2
Compliant with Directive	**ROhs** 2011/65/UE	**ROhs** 2011/65/UE	**ROhs** 2011/65/UE	**ROhs** 2011/65/UE
Protection class	IP65	IP65	IP54	IP54
Standard accessories	Base for ground mounting or wall fixing and screws with washers Light Socket or Closing cap Cable for manual alignment	Cable for manual alignment		Battery kit
Full warranty	2 years	2 years	2 years	2 years

TECHNICAL FEATURES
Microwave Technology

	GARDEN / TOWER MICRO
Maximum range outdoors	100 m – (200 m on demand)
Minimum distance between receiver and transmitter (RX – TX)	1 m
Column height	1,5 m – 2,0 m - 2,5 m – 3,0 m
Column diameter	14 cm
Profiles	Extruded in IR aluminium and polycarbonate
Lobe height	2,5 m
Lobe opening	1,0 m
Operating frequency	24.000 ÷ 24.250 GHz (available channel 250)
Serial communication	RS485
Power supply	12 - 36 Vcc (recommended 13,8 Vdc)
Detection speed	0,1 - 10,0 m/s
Maximum absorption	180 mA (TX 80 mA – RX 100 mA)
Maximum consumption heaters	28 W (item MW 301)
Operating temperature	-35°C +70°C
Horizontal alignment angle	180°
Maximum signal applicable to the output contacts:	maximum current 30 mA - maximum voltage 72 V
Set-up time from switch-on	10 s
Maximum reset time following alarm signal	10 s
Minimal signal duration	5 s
Reporting system	NC
Compliant with standards	CEI 79/2
Compliant with Directive	ROhs 2011/65/UE
Protection class	IP65
Standard accessories	Base for ground mounting or wall fixing and screws with washers Light Socket or Closing cap
Full warranty	2 years

TECHNICAL FEATURES
Dual IR+MW technology

	GARDEN / TOWER MAGNUS
Maximum range outdoors	100 m
Column height	1,5 m – 2,0 m - 2,5 m – 3,0 m
Column diameter	14 cm
Profiles	Extruded in IR aluminium and polycarbonate
Maximum absorption	570 mA (TX 200 mA – RX 370 mA)
Infrarared Technology	see technical features GARDEN/TOWER
Microwave Technology	see technical features GARDEN/TOWER MICRO
Compliant with standards	CEI 79/2
Compliant with Directive	ROhs 2011/65/UE
Protection class	IP65
Standard accessories	Base for ground mounting or wall fixing and screws with washers Light Socket or Closing cap Cable for manual alignment
Full warranty	2 years

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