

# MANA

“New barrier, single/double technology, long range”

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## MANA MW

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## MANA IR

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## MANA DT

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## MANA SMA

The new barrier conceived for outdoor protection of large sites. MANA can, in fact, be composed and configured based on the installation requirements and to the degree of safety required, micro-waves only, active infrared only, or combined with double technology. Each section has an independent alarm output, that can be managed in AND or OR directly from the alarm control unit. Sturdy structure made of aluminum with protective polycarbonate screen, fastened on a base arranged for the installation on pavement or on cable pit (accessory on request).

## MANA MW

Microwave device with operational frequency of 24GHz in K band with cavity and 200 mm parabola and 4 different channels, allows a considerable field penetration, therefore long range but with a lobe with a highly contained diameter, enabling installations in locations with limited space. The calibration and test system is simplified by the LED bar and the digital volt meter, present on the motherboard of the receiver column

## MANA IR

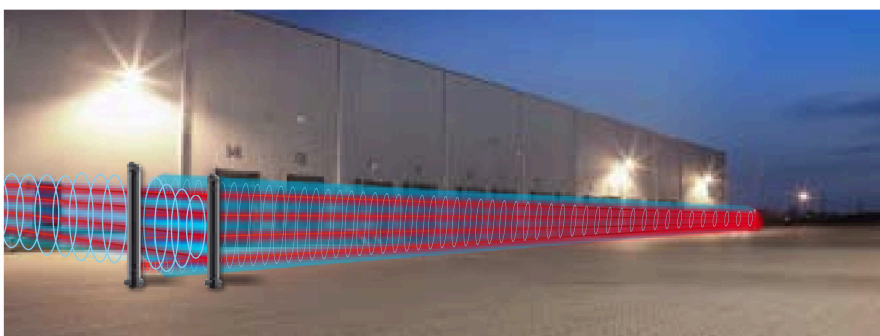
Is **PARVIS MES** e della **SANDOR PLUS**, barrier, appropriately modified in its optical part, to be able to access the high ranges required, therefore it is perfectly compatible with the line of barriers **PARVIS MES** and **SANDOR PLUS** but with maximum range of those (see characteristics).

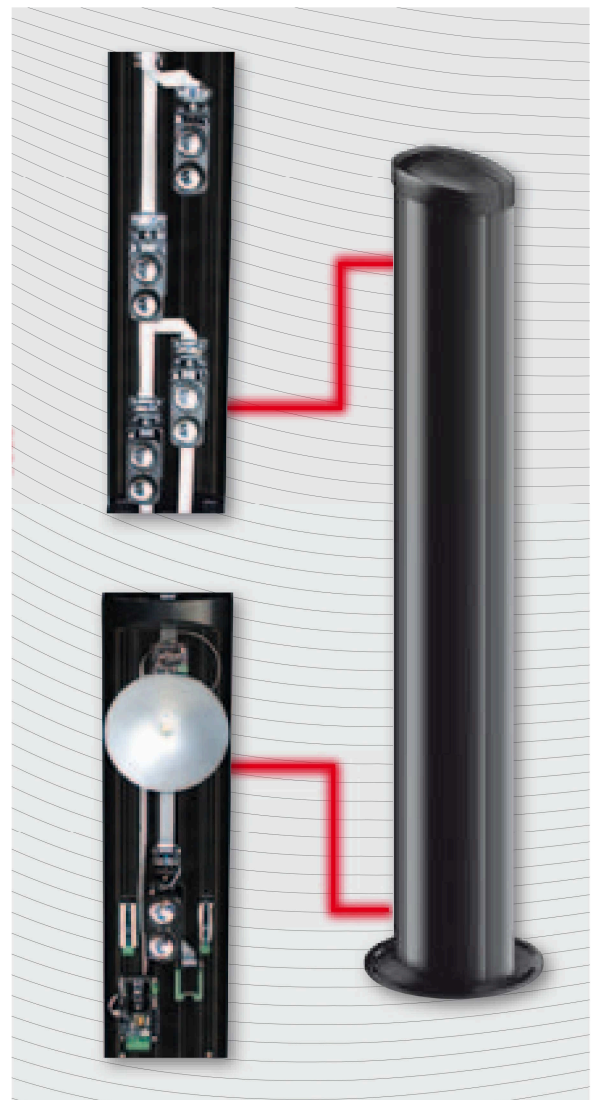
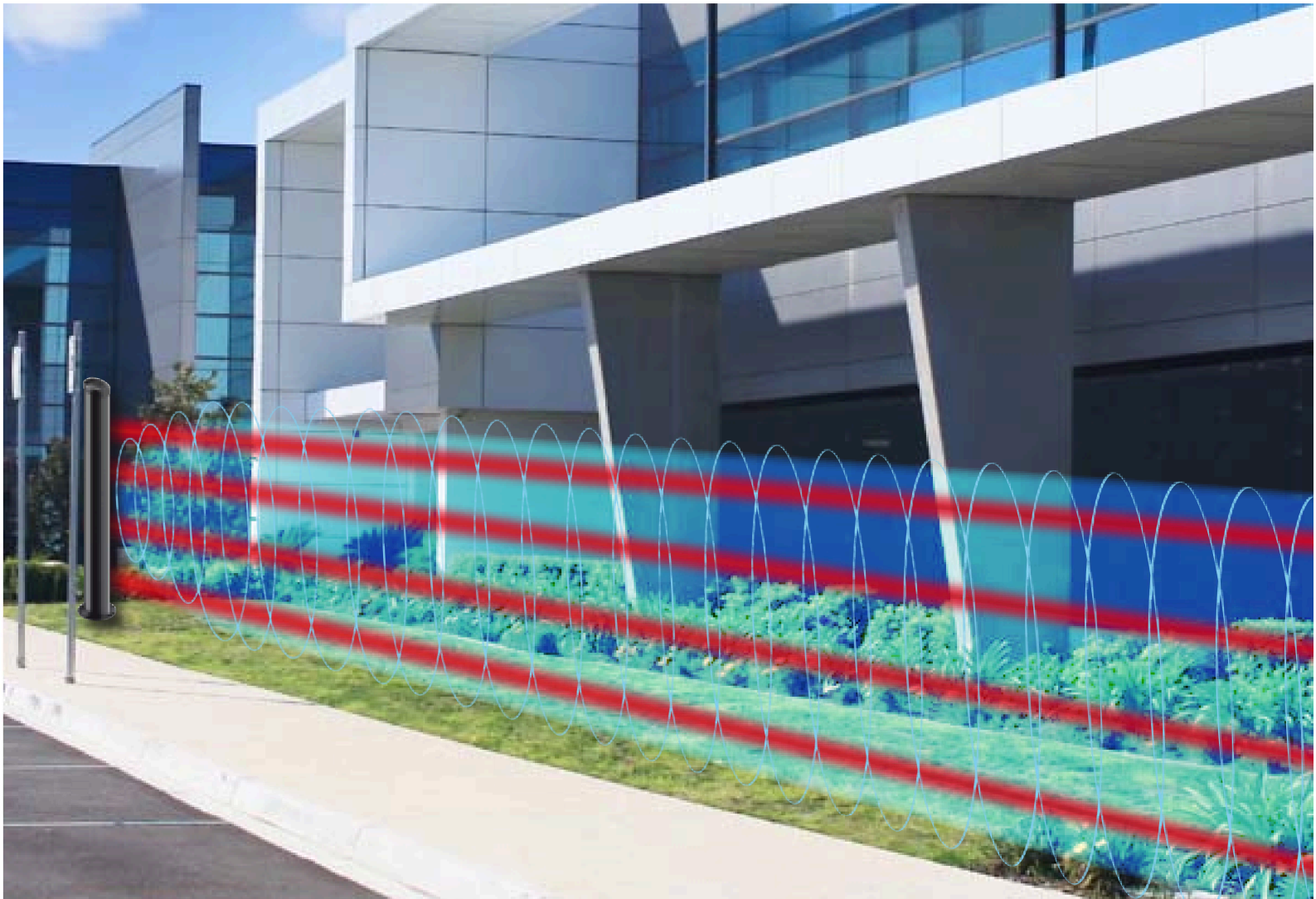
## MANA DT

is the combination of the two versions, normally given by a microwave barrier and the infrared active part.

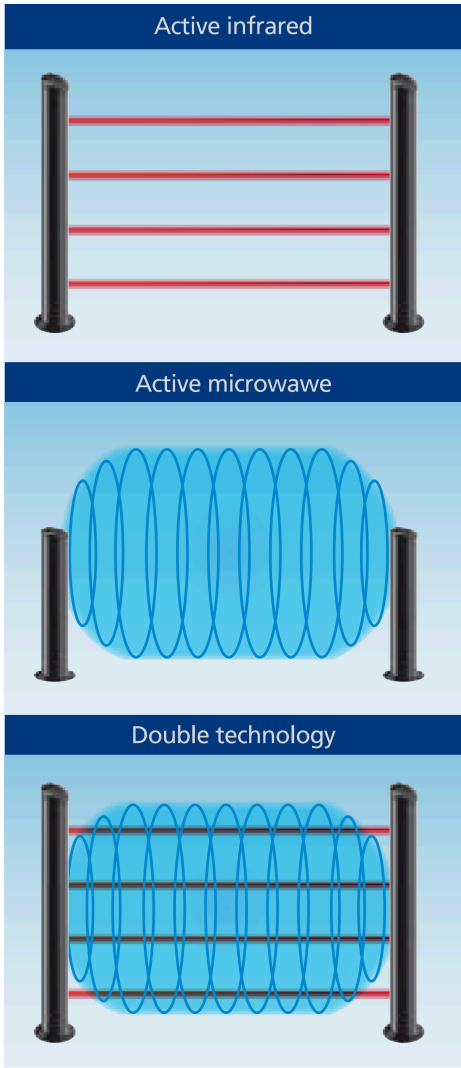
## MANA DT3 TRIPLE TECHNOLOGY

It is the barrier double technology with inserted a doppler microwave sensor for each column to cover the dead zones

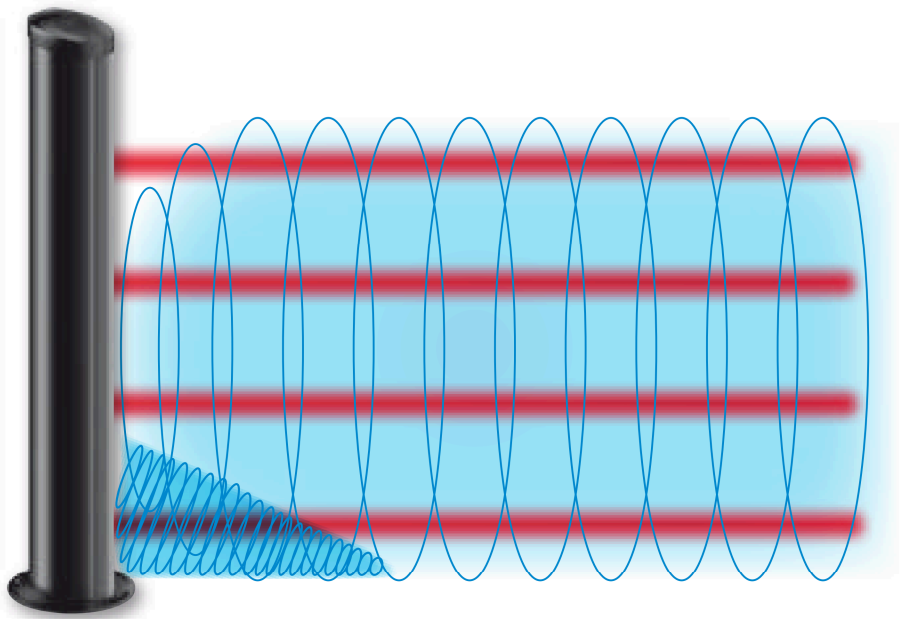




 POLITEC



**SINGLE AND DOUBLE TECHNOLOGY, TO LONG RANGE 250m**  
 Now is available a 100m range version inserting the SANDOR PLUS optics



**MANA DT3 TRIPLE TECHNOLOGY**

## PERFORMANCE

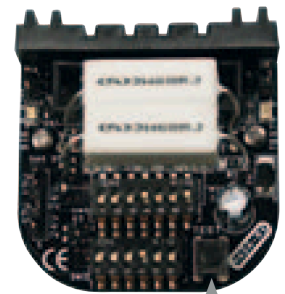
- Random delay.
- Parallel and crossed beams.
- Environmental disqualification from fog with OC signal.
- AND-OR random or first two beams.
- Beam 1 or first 2 exclusion.
- Wire or optical synchronism.
- Anti-mask with OC signal.
- Anti crawl.
- Adjustable crossing time.
- 4 optical synchronism channels.
- LED exclusion.
- RS485 communication activation



BUZZER

HIGH BRIGHTNESS LEDs  
VISIBLE AT 500 m

## NEW SMA RX OPTICAL LENS



BUTTON TO ACTIVATE  
THE ALIGNMENT

HEATERS POWER SUPPLY  
AT 12 OR 24 Vac / Vdc

THERMOSTATED  
HEATERS

TERMINAL BOARD WITH  
RS485 OUTPUT

INPUT POWER  
SUPPLY 230Vac

BATTERY SPACE  
7 AH

## THE NEW MANA SMA

The new SMA (single man alignment) technology allows for alignment by a single operator, as the high brightness LEDs and buzzer for each optical lens can reach maximum value without use of additional instrumentation. Alignment is achieved simply via a button located on each optical lens. RS485 output for system centralisation. Ability to operate with optical synchronism.



## MANA TECHNICAL CHARACTERISTICS

	MANA IR	MANA IR SMA
Maximum internal distance of use	650 m	
Maximum external distance of use	250 m	
Synchronization	Wire	Wire or Optical
Optical lens with dual beam	YES with 50 mm in AND lenses	
Photo devices	Pulsed beams, working wave 950 NM	
Maximum double beam configuration inside column	4TX + 4RX	
Beam arrangement	Parallel	
Power supply per column	230 V network with outputs: 13.8 Vdc circuit / 24Vca heaters in addition to controlled output for battery charging	
Circuit absorption	From 135 to 150 mA per column, based on the number of beams housed	
Thermostat heater absorption	From 80 to 120W per column, based on the number of beams housed	
Operating temperature	from -25 to +65° C	
Alarm outputs	Relay with NC/NO free contacts	
Tamper protection output	Column opening tamper protection and front polycarbonate	
Environmental disqualification from fog	YES with special OC output (signal attenuation at 90%)	
Beam anti-masking	YES with special OC output	
RS 485 serial output	NO	YES for local and remote control on universal resident interface, owner and not, combined with management software
Protection Degree	IP 54	
Profile size LxWxH	250mm x 200mm x from 1000 to 4000 mm	

**Different heights available on request**



## MANA FUNCTIONAL PERFORMANCE

	MANA IR	MANA IR SMA
Tracking and alignment system	Test point on each beam	SMA technology via high brightness LED and Buzzer
Optical excursion	180° horizontal and 20° vertical	
Operating mode settable on board or via remote	OR: single beam AND Random (random of two beams) AND 1st and 2nd beam (if there are 4 beams in a column)	
Anti crawl	Settable on the first bottom beam	
Response time	50/500ms adjustable	
Time delay function	Random 0 ÷ 2 seconds (can be activated from dip)	
Beam exclusion mode settable on board or via remote	1st beam at the bottom 1st and 2nd beam at the bottom Temporary total for 1 minute	
LED activation	Can be excluded with dip	
Optional mounting accessories	Housing, mounting brackets, climbing protection lid, wall brackets inside column can use a 12V 7Ah max buffer battery	
Accompanying manuals	Instructions manual with application example figures	
Warranty	Integral 2 years for manufacturing defects	

**MANA IR is compatible with PARVIS MES 9000S and SANDOR PLUS**



## MANA TECHNICAL CHARACTERISTICS

	MANA MW	MANA MW DIGIT
Maximum internal distance of use		650 m
Maximum external distance of use		250 m
Working frequencies		24 GHz in K band
Modulation		ON - OFF
Modulation channels		4 switchable / selectable
Power supply per column		230 V network with outputs: 13.8 Vdc circuit / 24Vac heaters in addition to controlled output for battery charging
Circuit absorption		TX 200 mA RX 200 mA
Thermostat heater absorption		100W per column
Operating temperature		from -25 to +65° C
Alarm outputs		Relay with NC/NO free contacts
Tamper protection output		Column opening tamper protection and front polycarbonate
RS 485 serial output	NO	YES for local and remote control on universal resident interface, owner and not, combined with management software
Protection Degree		IP 54
Profile size LxWxH		250mm x 200mm x from 1000 to 4000 mm



## MANA FUNCTIONAL PERFORMANCE

	MANA MW	MANA MW DIGIT
Tracking and alignment system	Via electronic instrumentation on board, clear reading on digital display and LED bar	
Parabola excursion		+/- 20° vertical
Sensitivity adjustment		continuous
Delay adjustment		continuous
Optional mounting accessories	Housing, mounting brackets, climbing protection lid, wall brackets inside column can use a 12V 7Ah max buffer battery	
Accompanying manuals	Instructions manual with application example figures	
Warranty	Integral 2 years for manufacturing defects	



## TECHNICAL CHARACTERISTICS AND FUNCTIONAL PERFORMANCE

	MANA DT	MANA DT SMA
	All characteristics are the same since the two technologies are combined.	
	The only difference is the arrangement of all transmitting parts on one column and all receiving parts on the other column, regardless of the number of active infra-red beams, with minimum of two pairs and a maximum of four.	

### MANA DT3 / DT3 SMA

is a dual technology barrier with microwave Doppler sensor for each column covering the dead band. With range up to 6 metres and 30° opening, 24 Ghz frequency, works coupled with microwave.