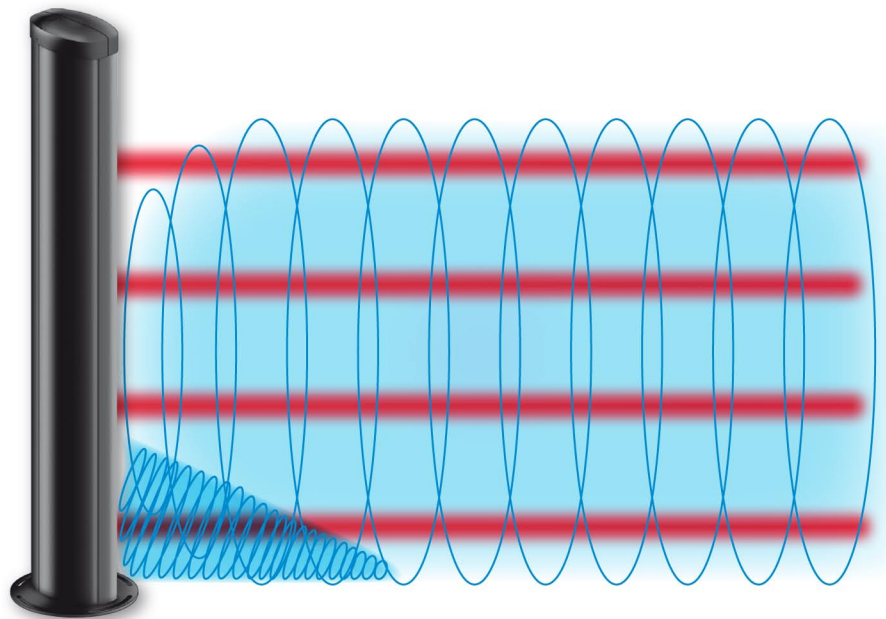


SINGLE AND DOUBLE TECHNOLOGY, TO LONG RANGE 250m  
 Now is available a 100m range version inserting the SANDOR PLUS optics



MANA DT3 TRIPLE TECHNOLOGY

## PERFORMANCE

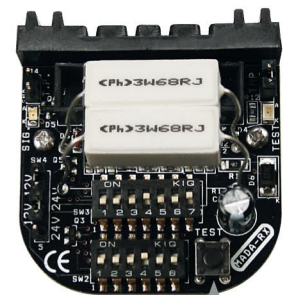
- Random delay.
- Parallel and crossed beams.
- Environmental disqualification from fog with OC signal.
- AND-OR random or first two beams.
- Beam 1 or first 2 exclusion.
- Wire or optical synchronism.
- Anti-mask with OC signal.
- Anti crawl.
- Adjustable crossing time.
- 4 optical synchronism channels.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



BUZZER

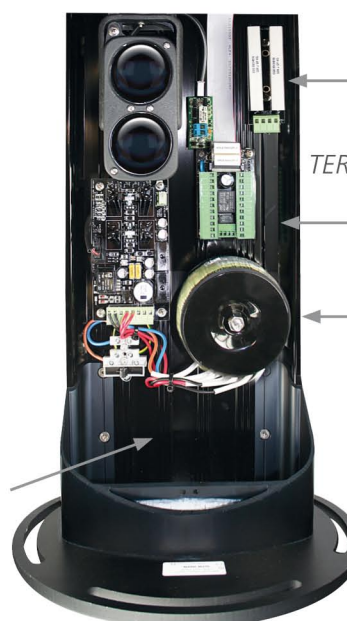
HIGH BRIGHTNESS LEDs  
VISIBLE AT 500 m

## 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.