POLITEC
Perimeter protection
Politec Srl has the technology and the expertise to design and manufacture intrusion detection systems, offering the solution for the indoor and outdoor perimeter protection of your property.

Over the years we have developed a notable and innovative research and development resource that enables us to meet the requirements of a challenging and demanding market and to adapt to our customers needs, who are ever more aware of a need of security.

WS SMA - HIBRID SMA - SMA SOLAR are defacto new product lines meeting all the market demands even for the most critical installation environments. Politec is constantly committed to designing innovative products and systems to meet the requests for customised solutions.

The quality of all our products are approved and certified and Politec is certified to ISO 9001: 2008.
Politec is an Italian company that specialises in the design and production of active infrared anti-intrusion perimeter barriers designed specifically to protect outdoor perimeters.

For more than 20 years, Politec has been creating the most advanced products with high quality and technological standards, combined with ease of use and installation, made entirely in Italy.

A partner who supports you from the design phase

Politec works closely with architecture firms, builders and engineers to draw up technical specifications for public, residential or industrial projects that require intrusion detection systems.

Made in Italy excellence

Politec is an Italian company that specialises in the design and production of active infrared anti-intrusion perimeter barriers designed specifically to protect outdoor perimeters.

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ADEBUS is an advanced system to monitor, set-up and customise all the devices involved in the anti-intrusion system.

It allows the complete exchange and management of information between two or more systems or networks, and the use of said information.

It is functional when the system is at a distance from the installer or in cases of poor accessibility (bad weather, night hours, etc.) as it allows total control of the devices, even remotely.

Management of: MANA IR SMA, PARVIS MES SMA, SANDOR PLUS SMA, GAPID SR.
It is able to interact on all system parameters, to know and change the status of each column or Gapid SR, and can memorise and download up to 32000 events on a PC.

Management of: MANA IR SMA, PARVIS MES SMA, SANDOR PLUS SMA, GAPID SR

PERFORMANCES: COLUMN GAPID SR

- State of each single optical beam
- Alarm, fog disqualification, antimask
- Power supply values
- Alignment signal value
- Column temperature
- Heater activation
- AND/OR operation selector
- Disqualification select
- Exclusion select
- Crawl detection select
- Random delay select
- Serial BUS status
- Tower tamper status
- Single event memory

- Status of each sensor or sensor group
- Alarm
- Tamper
- Power values
- Signal values
- Status of BUS Serial
- Event logs
- Sector-specific management
- Management of single sensor or group of sensors
- Logs
- Self-addressing
Mana is the new barrier designed by POLITEC for outdoor protection of large sites. MANA can be composed and configured to match the installation requirements and the level of security required: only IR, only microwave, double “dual technology” or “triple technology”, where there is a Doppler microwave that covers the dead zone.

**MANA IR SMA**

SMA technology (Single Man Alignment) permits single operator alignment thanks to the high brightness LEDs and a buzzer on each beam, permits the operator to attained the maximum alignment value without the use of additional instrumentation. The features is easily activated using the button situated near each beam optics.

The RS 485 output allows for the centralization of the systems.

**MANA DT3 triple technology**

This version has a Doppler microwave installed inside the column to protect the blind zone.

**TECHNOLOGY**

**MANA IR SMA**

SMA (Single Man Alignment) technology allows performing an alignment, while still being a single operator.
PERFORMANCES IR SMA

- Random delay
- Parallel or crossed beams
- Fog disqualification with dedicated output OC
- Random AND or bottom two beams activation
- Exclusion of the first beam or the lower two beams
- Wired or optical synchronization
- Antimask detection with dedicated output OC
- Crawl detect on bottom beam
- Adjustable response time
- Optical synchronization
- Exclusion Leds
- RS485 connection (only with wired synchronization) with the Adebus system
- Dimensions 25 x 20 cm - H 1,2 ÷ 4 m

MANA IR SMA

MANA AC TOP
ANTI-CLIMB COVER

HIGH INTENSITY LEDS
VISIBLE AT 500m

BUZZER

THERMOSTATICALLY CONTROLLER HEATERS

TERMINAL BLOCK WITH S485 OUTPUT

230 VAC SUPPLY INPUT

SPACE FOR A 7 AH BATTERY

MANA SD
WALL MOUNT OR EXTERNAL MOUNT BRACKET

MANA FOR REINFORCING BRACKETS

MANA BH NEW CABLE PIT BATTERY SUPPORT

PRODUCTS FOR INDUSTRIAL SYSTEMS
MANA
Barrier for protecting large perimeters

MANA DT SMA
A barrier consisting of two columns with IR TX and TX MW optics in one, while the other consists of RX and RX MW optics. Each section has its own alarm outputs, which can be managed as required (OR or AND).

The MANA DT SMA can be connected via RS485 BUS and managed with ADEBUS centralised system.

MANA MW
Microwave system with a work frequency of 24GHz band K, with cavities and 200mm parabolic antenna and 4 different channels.

This barrier allows a long range protection but with a lobe set up from several centimeters to 4m maximum, that allows to use it in a narrow space.

Calibration and test system is integrated into the receiver mother board. The onboard LED bar, and the digital voltmeter will help to install it easily.

TECHNOLOGY
MANA DT SMA
It features two IR + MW sections inserted in the column to form a pair of typical TX and RX columns.

MANA MW
24 GHz microwave barrier
MANA DT SMA
A TX and RX tower pair with both active IR and MW components.

The two independent components can be controlled separately, guaranteeing system operation continuity in the event of critical ambient or weather conditions.

PERFORMANCES DT SMA
- Outdoor range 250m
- Random delay
- Parallel or crossed beams
- Fog disqualification with dedicated output OC
- Random AND or bottom two beams activation
- Exclusion of the first beam or the lower two beams
- Wired or optical synchronization
- Antimask detection with dedicated output OC
- Crawl detect on bottom beam
- Adjustable response time
- Optical synchronization
- Exclusion LEDs
- RS485 connection (only with wired synchronization) with the Adebus system
- Dimensions 25 x 20 cm - H 1.2 ÷ 4 m.

MANA MW
An electronic control board installed in the RX tower and is equipped with all the necessary instrumentation to simplify the operations of installation.

The colored LED BAR displays the optimal alignment, whilst on the digital display you can read the voltage values during calibration.

A powerful buzzer can be activated to control the cover efficiency during the Walk-test.

PERFORMANCES MW
- 24 GHz microwave K-band

MANA DT3
A barrier that contains three technologies in a single product to also cover the blind zone.

PERFORMANCES DT3
- Microwave TX/RX - 4 different channels
- DT3 doppler for blind zone protection - adjustment 1/8m
Intelligent system characterised by sensors that detect attempts to climb, cut or break through barriers, designed to protect the perimeter of garages, doors, gates, nets, window, grilles, grating as it adapts to any type of fence.

Each Gapid sensor is equipped with a system to diagnose and digitally process vibrations across a surface area of 15 m² in order to detect possible attempts of intrusion.

Internal algorithms enable the system to reset false alarms, since it checks the entire perimeter and the individual areas configured.

The software allows inserting the various sensors in a map and, through graphic management, is able to enter inside each Gapid sensor, configuring it and checking its status in real time.

GAPID SR
The serial sensor for any type of fence

TECHNOLOGY
GAPID SR
Suitable for multiple systems connected on a serial base controlled and managed by a single concentrator.
Gapid SR forms an intelligent system consisting of a series of state-of-the-art MEMS accelerometric sensors. Gapid detects attempts of climbing over, cutting and breaking through of the perimeter.

Each sensor can work autonomously, and is connected to the system via a RS485 serial cable interconnected to a control and configuration concentrator called Adebus, which can simultaneously analyse two sections of 128 sensors, up to 1 km each (expandable).

PERFORMANCES

- Maximum surface covered of 5m radius
- Integrated analysis and control device
- Power supply of 7-14Vdc
- Remote control outputs on serial bus
- IP66 protection
- Rustproof and rodent-resistant cable
- Management with ADEBUS system that interfaces with the alarm control unit via:
  - 3 relays + 4 open collectors on base board
  - 16 relays on each expansion board (for a max of 6 boards)

APPLICATIONS

- Nets and fences
- Grilles and grating
- Gates
- Railings
- Blastproof walls
- Windows
- Garages and doors

The software allows graphically managing a map with the site plan where each Gapid sensor can be positioned in its exact location, thus making it easy to visualise in case of an alarm.

Each sensor, single or group, can be configured and checked in real time: all the operations can be performed locally or remotely via web-based interface.
SANDOR PLUS SMA
The barrier is housed in a small attractive designed anodized aluminium frame with polycarbonate front. Typical applications are wall/window protection or pole mounted (using the appropriate brackets) for perimeter security.

Inside are the same electronic boards of PARVIS MES SMA and MANA IR SMA, hence being compatible with them and can be used to meet all needs of the perimeter systems.

SANDOR PLUS SMA can also be connected to the RS485 Bus and managed via ADEBUS system.

SANDOR DUAL - QUAD - ESA SMA
Designed especially and recommended for the protection of large wall areas with windows, they allow to select parallel or cross beams which form a “net” of detection.

The signal emitted from any transmitter is received by all the receivers.

TECHNOLOGY
SANDOR PLUS SMA
SMA (Single Man Alignment) technology applied to wireless.
NEW ENCLOSURE WITH CABLE GLANDS

PERFORMANCES PLUS SMA
- Outdoor range 100m
- Random delay
- Parallel or crossed beams
- Fog disqualification with dedicated output OC
- Random AND-OR or first two beam activation
- Exclusion of the first beam or the 1st and 2nd beams
- Wired or optical synchronization
- Antimask with dedicated output OC

PERFORMANCES DUAL - QUAD - ESA - SMA
- Outdoor range 100m
- Parallel or crossed beams
- Optical synchronism channel selector
- Fog disqualification
- AND – OR on two optics
- Supply voltage 10 - 30 Vcc/ 150 mA
- Heater voltage 10 - 30 Vac/Vcc / 50 W
- Protection degree IP65
- Dimensions 6 x 6 cm - H 0,5 + 4 m

PRODUCTS FOR INDUSTRIAL AND RESIDENTIAL SYSTEMS
SANDOR SMA WS
The SANDOR SMA WS range maintains the single tower philosophy with two columns in opposition with battery use.

The low battery is indicated in the same time one person pass trough barriers. In case of fully discharged battery, a positive safety alarm is provided.
3 YEARS BATTERY LIFE

SANDOR SMA HY
The SANDOR SMA HY range has the same features and functions as SANDOR SMA WS with one TX and one RX column; the supply is given by a power supplier working at 230 Vac.
IN CASE OF POWER OUTAGE 230 VAC, 3 MONTHS BATTERY LIFE

SANDOR SOLAR SMA
SOLAR SMA represents the last protect system evolution using solar energy.
These barriers are equipped with a mini Film-solar panel fitted to the top of the tower to keep the batteries, housed in the column, constantly charged, capable of powering all the optics.
3 MONTH OPERATION WITHOUT RECHARGING ACTIVE CHARGE EVEN WITH 20% OF SOLAR ENERGY

TECHNOLOGY
SANDOR SMA WS
SMA (Single Man Alignment) technology applied to wireless.

SANDOR SMA HY
Column with 230Vcc power supply and built-in power unit that allows charging rechargeable batteries and using heating systems.
This is the evolution in perimeter protection systems, which uses solar energy to recharge the batteries that power the columns.

### SANOR SMA SOLAR
- **Self-Powered**
- **Built-in Battery and Power Unit**
- **Built-in Solar Panel and Battery**

### Performances WS
- Outdoor range 50m
- Low battery indication
- Fog disqualification
- Crawl detect
- AND 2 beams
- AND pets
- Beams 3-4-5-6 selector
- Adjustable reaction time
- Tamper TX send to RX via optics

### Performances HY
- Outdoor range 100m
- 230 Vac power supply
- Rechargeable battery
- Heaters included

### Performances SL
- Solar power supply

**Products for Residential Systems**
PARVIS

The product for your peace of mind

Outdoor security system created for residences and industrial sites which is possible to add an illumination device.

PARVIS MES SMA
An invisible and discreet barrier is created by the active infrared beams which are both pulsed and synchronized.

This system is fitted into an aluminium frame which is covered with a polycarbonate tube which has the diameter of standard lighting fixtures.

This range maintains the Bi-directional philosophy with 2TX + 2RX or 3TX +3RX.

TECHNOLOGY

PARVIS MES SMA
Active infrared synchronised technology that integrates with lighting systems.
PERFORMANCES

- Outdoor range 100m
- Random delay
- Parallel or crossed beams
- Fog disqualification with dedicated output OC
- Random AND-OR or first two beam activation
- Exclusion of the first or the two lower beams
- Wired or optical synchronization
- Antimask detection with dedicated output OC
- Crawl detect on bottom beam
- Adjustable response time
- 4 channels optical beams synchronization
- Exclusion of Leds
- Optical synchronism channel selector
- Power supply 10-30 Vdc / 150 mA
- Heating supply 12-24 Vac / Vcc / 50 W
- RS485 connection [only with wired synchronization] with the Adebus system
- Protection degree IP65
- Dimensions Ø80 - H 1,2 ÷ 3 m
PARVIS

Easy to install wireless barrier

PARVIS SMA WS
Column with 230Vcc power supply and built-in power unit that allows charging rechargeable batteries and using heating systems.
3 YEARS BATTERY LIFE

PARVIS SMA HY
The PARVIS SMA HY range maintains the same philosophy as the previous one with TX and RX columns, 2 or 3 dual beams, depending on columns high that allows a site of any size or shape to be protected. All the features and functions are the same as those in the SANDOR SMA WS, but the supply is given by a power supplier working at 230Vac and rechargeable Lithium battery.
IN CASE OF POWER OUTAGE 230 VAC, 3 MONTHS BATTERY LIFE

PARVIS SOLAR SMA
This is the evolution in perimeter protection systems which uses solar energy to recharge batteries that power the columns.
3 MONTH OPERATION WITHOUT RECHARGING
ACTIVE CHARGE EVEN WITH 20% OF SOLAR ENERGY

TECHNOLOGY

PARVIS SMA WS
SMA (Single Man Alignment) technology applied to wireless.

PARVIS SMA HY
Column with 230Vcc power supply and built-in power unit that allows charging rechargeable batteries and using heating systems.
PARVIS SMA SOLAR
This is the evolution in perimeter protection systems which uses solar energy to recharge batteries that power the columns.

PERFORMANCES PARVIS WS
- Outdoor range 50m
- Low battery indication
- Fog disqualification
- Crawl detection
- AND two optics
- AND for pets immunity
- Beams 2-3 selector
- Adjustable reaction time
- Tamper TX send to RX via optics

PERFORMANCES HY
- Outdoor range 100m
- 230 Vac power supply
- Rechargeable battery
- Heater power supply

PERFORMANCES SMA SOLAR
- Solar cells for power supply
- 3 month operation without recharging

NB: THE SOLAR ENERGY CAN NOT POWER THE LAMP.
The safety barrier for windows

Miniaturised barrier, particularly suitable for the protection of doors and windows but, thanks to its capacity, can also be used to protect larger surfaces as long as it is not directly exposed to the elements.

The range includes a self-powered battery version that can be used with all wireless systems available on the market, thanks to its relay outputs that can be managed by universal transmitters.

The WSE version has a container fixed at the top part of the barrier to contain both a high-power battery and a universal transmitter and provides a self-protected housing for the latter.

A white model is also available, with a reduced range of 3 m.

TECHNOLOGY

SADRIN
Low-absorption active infrared barrier.

SADRIN WSE SMA
SMA (Single Man Alignment) technology applied to wireless. This version has an external battery compartment.
**PERFORMANCES**

- Outdoor range 15m (black) and 5m (white)
- AND random
- Adjustable reaction time
- Exclusion LEDs
- Expandable up to 10 dual beams
- Power supply 13.8Vcc
- Consumption 150 mA max
- Optional heaters
- Dimensions 25 x 22 mm H 0.50 ÷ 4 m

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**PERFORMANCES  WSI - WSE SMA**

- Outdoor range max
  - 10m (black)
  - 3m (white)
- Self-learning automatic optic numbers
- From 2 to 8 double beams
- Alarm confirmation (OR-AND)
- Adjustment crossing speed
- Low signal battery
- Tamper TX send to RX via optics
- Walk-test function
- 3 years battery life

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**SADRIN WSI**

The battery compartment in this model is inside the column.
NAT SENSOR

Revolutionary passive perimeter protection

NAT SENSOR
A compact dual technology detector with curtain effect, suitable for the protection of doors, windows and facades, which is positioned in the upper corner of the accesses to be protected.

MW and IR are both equipped with antimasking, always active, able to detect any tampering attempts.

NAT WS
The new outdoor sensor of Politec with curtain-effect dual technology detector for outdoor use with microwave active 24/7.

Battery power supply for easy installation in all radio systems on the market, which can house all the TX radio models on the market, making it a universal wireless sensor.

AUTONOMY OF 3 YEARS

TECHNOLOGY

NAT
Dual technology passive sensor with active antimasking.

NAT WS
Dual technology passive wireless sensor with active anti-masking.
PERFORMANCES NAT

• Application 2 - 3m height.
• IR and Microwave range adjustable from 1 to 12m
• Thermal self-compensation
• Coverage angle: IR = 80° V - 6° H; MW = 85° V - 30° H
• Power supply: 10Vcc - 30Vcc - consumption: 42mA MAX
• Exclusion signal led: walk-test, IR, MW, alarm
• Function: ANTI-MASKING function IR and MW configurable
  ENERGY SAVING (no stand-by), PET IMMUNITY (10kg); INSECT IMMUNITY, AND + OR security function
• Operating temperature: –25° + 65°C
• Protection degree: IP65

PERFORMANCES NAT WS

• PIR LIMITER included to adjust the angle of the PIR detector
• IR and Microwave range adjustable from 0 to 10m
• Microwave K band 24 GHz always active 24/24
• Power supply: two 3.6V 2.7Ah Lithium Batteries 3 years life
• Configurable output 3-3.6V for power to TX radio
• Function: ANTI-MASKING function IR and MW configurable
  ENERGY SAVING (no stand-by), PET IMMUNITY (10kg); INSECT IMMUNITY, AND + OR security function
GAPID
Fence/gate shock detection system-anti climbing/cutting

GAPID is a MEMS detector, which use the triaxial acceleration capacity to discriminate and/or detect every kind of vibration or movement, to provide the best protection on many applications.

Each unit has 6 pre-set functions and 3 functions of self-learning, it is anti-tamper removal coverover, shockproof case is IP66 and the battery operated or supplied 8 – 30Vdc.

GAPID represents the latest evolution and innovation in the perimeter protection field.

Gapid is a real innovation and evolution in the perimeter protection industry.

TECHNOLOGY

GAPID
Autonomous triaxial accelerometric sensor for protection against attempts to climb over or break through the barrier.

GAPID WS
It has the same performances as the wired model, but with the ease of being a wireless battery-powered instrument.
PERFORMANCES

- Maximum coverage area 15sqm
- Setting and sensor programming
- Power supply 3.6 V (battery) or 8 ÷ 30Vdc
- Consumption -0.05mA stand-by, 0.8mA alarm
- 3 years battery life with 3.6V 2.7Ah
- Alarm and Tamper Relays output (dry contact)
- Terminal block for double balancing alarm / tamper
- Protection degree IP66
- Delivered with anti-corrosion and crushing cable

APPLICATIONS

- Light Metallic Grid
- Rigid Grid/Thick
- Garden Netting Not Welded
- Garden Netting Fences
- Welded Garden Netting
- Wall/Railings – Anti Breakthroughs
- Windows
- Garages

BASIC FUNCTIONS SWITCH

- sensibile
- + sensibile
Reliability of a double-range barrier

In one word, ALES is universal because it can be used everywhere.

**ALES SMA**
Single beam with dual optics which gave rise to the SMA technology, the special feature that allows “Single Man” installation and alignment. It could be provided with low consumption and efficient heater.

This product is also available in white, but with a reduced long range of 30m.

**ALES WS**
The new barrier is the same ALES 60-120 philosophy with SMA technology and self-powered. ALES WS is available only in 60 meters.

*3 YEARS BATTERY LIFE*

**TECHNOLOGY**

**ALES SMA**
SMA (Single Man Alignment) technology allows performing an alignment, even while still being a single operator.

**ALES WS**
Wireless barrier powered by battery with 3 years of autonomy.
PERFORMANCES

- Outdoor range of 60m or 120m
- Infrared technology with dual optics synchronisation (4 different channels)
- Fog disqualification with dedicated output OC
- Power supply 10 ÷ 30Vdc / 90 mA
- Adjustment 180°H. And 20°V.
- Thermostatically controller heaters (option)
- 10-30 VAC/Vdc Heater Power requirement – 250mA max
- Protection degree IP65

PERFORMANCES WS

- Outdoor range 60m
- Fog disqualification
- Optical synchronisation (4 channels)
- Tamper TX send to RX via optics
- Protection degree IP65
- Dimensions 78 x 130 x185 mm

COMPLETELY WIRELESS

ALES TS OPTIONAL THERMOSTAT KIT

HIGH INTENSITY LEDS visible up to 200m

BUZZER

ALES WS

MOUNTING BRACKET KIT INCLUDED

HOUSE BATTERY AND RADIO TRANSMITTER

ADJUSTMENT ANGLES

VERTICAL 20°

HORIZONTAL 180°