

# Product Specifications

# AVANTGARDE™

## IP based Infrared Barrier

# SICURIT

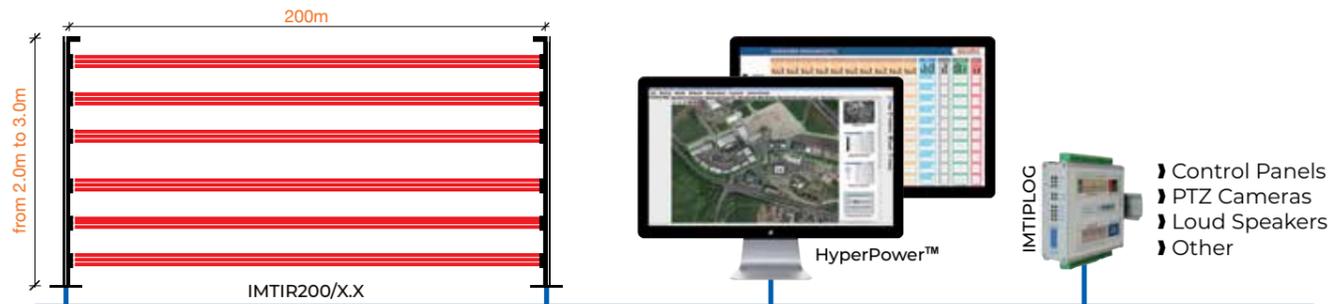
PERIMETER PROTECTION SYSTEMS

### ETHERNET ONVIF & I/O MODULE

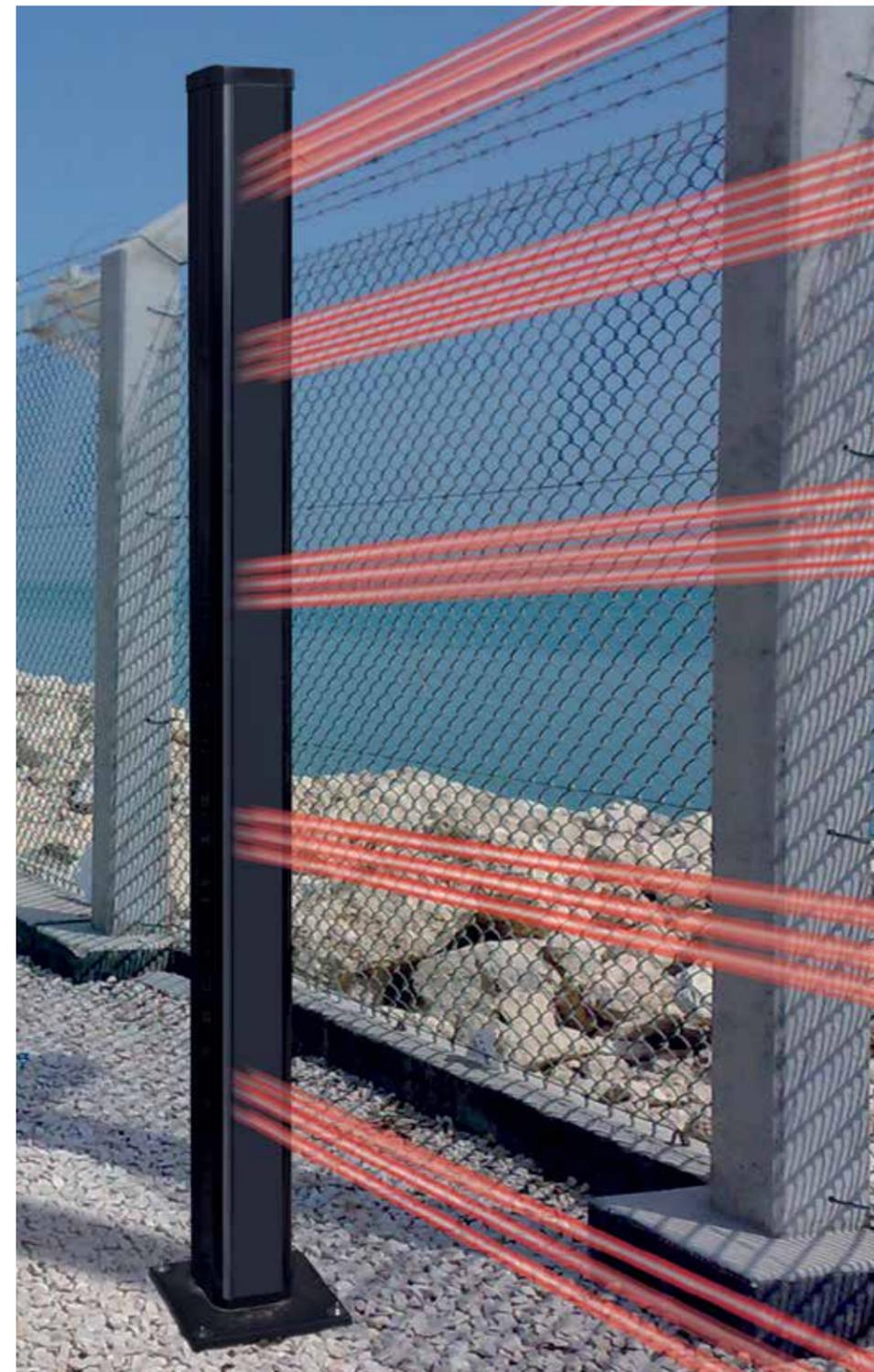
**IMTIPLUG** is a Linux based Ethernet I/O module that collects data from up to 30 sets of **Avantgarde™** barriers converting them into physical outputs for third party system integration. It can be also programmed to command networked CCTV cameras via ONVIF protocol or CGI commands. Supports SNMP, SMTP, SNTIP, IGMP and UPMP. Working temperatures: from -40° to 70°C.



### TYPICAL SYSTEM ARCHITECTURE



FEATURES	DESCRIPTIONS
Outdoor Range	Up to 200m (IMTIR200/X.X)
Columns Height	2/2.5/3.0m (tailor made heights available on request up to 4.0m)
Number of IR Beams	Minimum 3 up to 18 (Depending on columns height)
Alarm response time	From 25ms up to 1000ms (Selectable for each Beam + Multiple alarm intrusion scenarios)
Probability of detection (POD)	Greater than 95% (in relation to the number of IR beam modules)
Power Supply	12VDC ±15% and 24VAC ±20% (Anti-mist heaters) 110/230V with BEA1224ALIEX or BEA1224ALIEX-USA <b>NEW</b> PoE+ versions (IMTIR200P/X.X)
Operating Temperatures	From -25°C to +75°C From -40°C to +75°C with IMERES module
Alarm Output	C form Contact Relay Outputs on MasterTX and SlaveRx columns
Tamper Output	N.C. Contact switch on MasterTX and SlaveRx columns
Ethernet standard	Ethernet IEEE 802.3af, TCP/IP
Integrated Platforms	Genetec, HyperPower Via HyperPower: Geutebrueck, Milestone, Winguard, Lensec
Integration tools	API, Modbus TCP, SDK (via HyperPower)
Auxiliary INPUT	2 in each column
Auxiliary O.C. OUTPUT	2 in each column
Column Dimensions (mm.)	155(W) x 166(P) x (H)
Base Dimensions (mm.)	280 x 280 (BET040)
Column IP rating	IP55
Configuration Tools	Web-browser for barrier communication and configuration setup Software (Windows® based) for barrier parameters setting and diagnostic
Electro magnetic compatibility	In compliance with European standards (FCC pending)
Product classification	<b>Security Grade 4 - Environmental Class IV (EN 50131-1:2006, EN 50131-1-2-4:2008)</b>
Warranty	Comprehensive 2 years warranty on HW and SW



# SICURIT

PERIMETER PROTECTION SYSTEMS

a dedicated division of **SICURIT Alarmitalia Spa**  
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IP Native | Range 200m | 12V/24V or PoE+ | Security Grade 4

# AVANTGARDE™

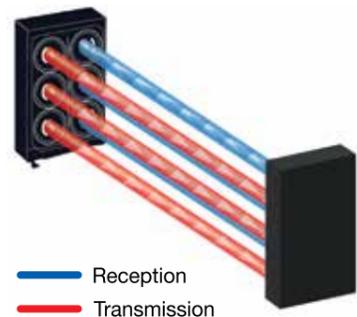
**SICURIT**  
PERIMETER PROTECTION SYSTEMS

**Avantgarde™** is a high security fully digital modular Infrared Beam barrier designed for long range outdoor surveillance (up to 200m coverage between transmitter and receiver unit).

At the heart of the barrier is the intelligence built into each Infrared Beam in turn interfaced towards an internal Analysis unit which is able to manage up to 18 IR beams stacked into up to 4m columns (standard heights 2.0m - 2.5m - 3.0m).

Thanks to the internal integrated web-server, **Avantgarde™** can be easily configured, controlled and diagnosed remotely via LAN connection.

## BI-DIRECTIONAL IR BEAM TECHNOLOGY



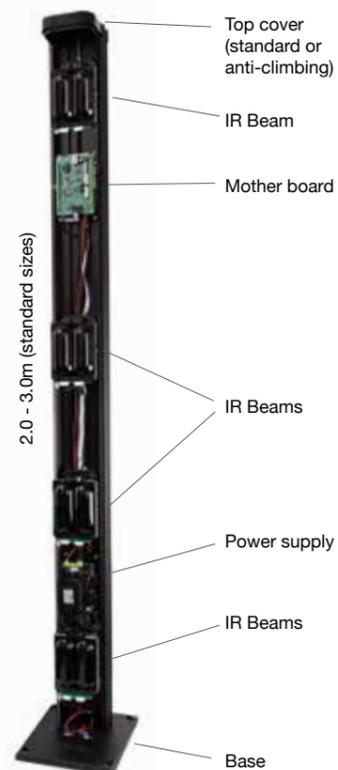
— Reception  
— Transmission

Research and Development is in our DNA. We do not limit ourselves to improve, if possible we innovate. One of SICURIT main innovation has been the bi-directional Infrared Beam technology (Patent Nr. 1377353) whose physical peculiarity is to host in each IR Beam head both Transmitting (3xTX) and Receiving (3xRX) Optics.

**Avantgarde™** is equipped with SICURIT last generation of bi-directional Infrared Beam technology which introduce, beside the complete immunity to sunlight,

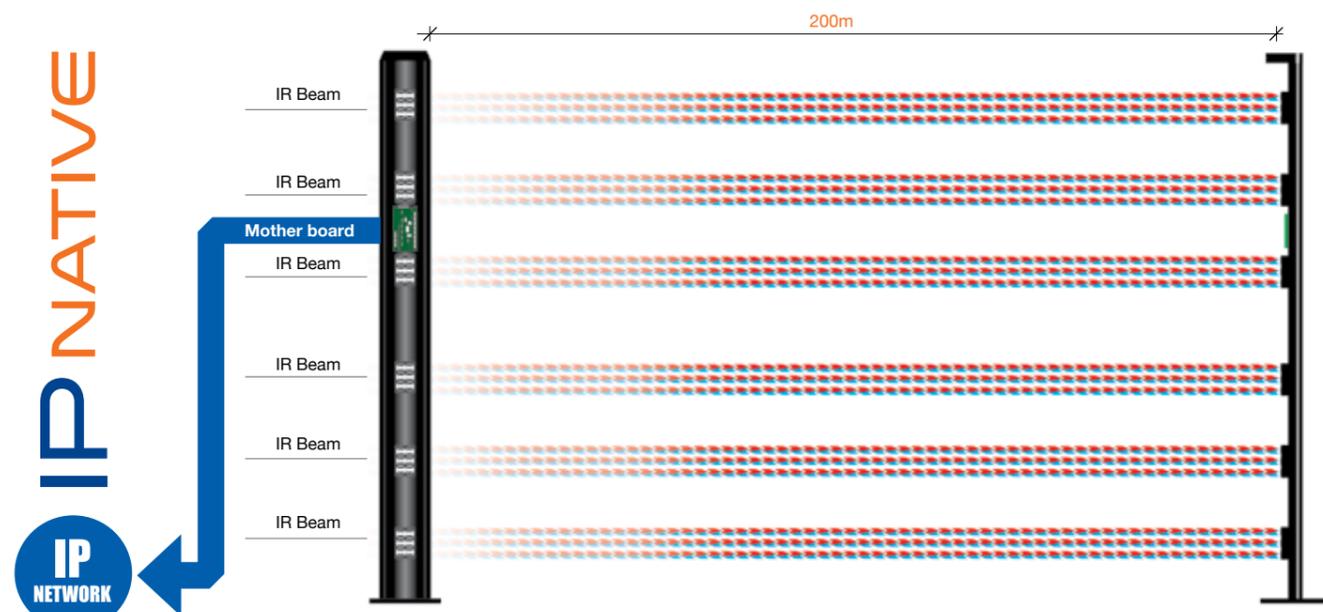
especially when this has an angle of incidence that affects directly the Receiving Optics, a critical issue that in conventional Infrared Beam barriers usually lead to high amounts of false alarms, the liability to define barrier crossing direction (TDA – Target Direction Analysis).

Multiplexed and optically synchronized with a random codes built-in generator, **Avantgarde™** bi-directional Infrared Beam technology is also impossible to overcome making use of other Infrared beam sources and is consequently tamper proof.



## IP NATIVE TECHNOLOGY

Without any additional interface, **Avantgarde™** Infrared Beam barriers can be easily integrated into existing or new IP backbone networks and virtually in any location. Advantages of IP network solutions include remote accessibility for system maintenance and diagnostics, easy connections, better scalability, flexibility and enhanced installation cost-effectiveness



Drawings are for reference only

## UNIQUE FEATURES



### TARGET DIRECTION ANALYSIS

**Avantgarde™** provides not only simple alarm information but even target direction (IN or OUT) information which makes even target tracking with perimeter CCTV cameras easier and more accurate.



### IR BEAM REMOTE MANAGEMENT

**Avantgarde™** can adapt itself to any drastic environmental changing such as big snow falls, growing grass or sand storms by simply disabling without additional wire connections from the control room those IR beams temporally covered by high layer of snow or sand preserving its high capability of detection. Other circumstances may require remote IR beams disabling such as temporary obstructions.



### 5 DETECTION SCENARIOS + 5 ALARM FILTERS

Being each infrared beam equipped with a microprocessor, individual crossing parameters can be set and up to 5 multiple intrusion detection scenarios can be configured for better filtering nuisance alarms caused by random animal activities such as flying birds and small/medium wild animals keeping a high capability of real intrusions detection.



### PREDICTIVE MAINTENANCE TOOL

An other key innovation is the introduction of the Signal Efficiency Analysis (SEA) which continuously monitor the optical communication stability and efficiency of each IR beam which could decrease as for instance due to powder on lenses, dirty plexiglass, or any other factor that can cause optical communication reduction including IR beams end of life.

An alert is sent once the signal decrease under a warning level.



### END TO END INTEGRATION WITH GENETEC™ SECURITY CENTER

**Avantgarde™** is the unique active barrier directly integrated in Genetec™ Security Center. Thanks to the **Sicurit® IP Native PIDS - Genetec™ Gateway** security operators can monitor Sicurit IP Native active barriers directly from the Genetec™ Security Center without the need of any additional security management platform which would result, at this level, just useless.

## HYPERPOWER™ ALARM MONITORING AND MANAGEMENT PLATFORM

HyperPower™ is a Windows® based alarm monitoring and management platform (SW) that provides to security operators a clear tool for properly manage the data coming from SICURIT PIDS and any third party integrated devices.

HyperPower™ employs advanced software technology to enable the system easily handling the huge amount of data received from its peripherals.

System administrators can easily configure arm/disarm functions, user codes, time zone access, level of access, user group and touch screen terminals time restrictions and define any kind of alarm reactions. Thanks to the free SDK license, HyperPower™ can be integrated in any third party VMS or PSIM. Current integrations include **Geutebrueck®, Lensec®, Milestone®** and **Winguard®**.



## APPLICATION FIELDS

- ✓ Government buildings
- ✓ Airports & sea ports
- ✓ Military sites
- ✓ Correctional facilities
- ✓ Power plants
- ✓ Refineries
- ✓ Communication facilities
- ✓ Industrial facilities

