

AVANTGARDE

IR | MW | DT

IP Bi-Directional Infrared Barrier

IMTIR200 series



AVANTGARDE-IR is a high security active Infrared barrier enclosed in two tamper protected extruded aluminium columns equipped with Sicurit last generation of digital patented **bi-directional Infrared Technology** with range up to 200m.



BI-DIRECTIONAL INFRARED TECHNOLOGY

IMMUNE TO SUNLIGHT



Thanks to the **patented 3TX+3RX-Optics Beam** head, in case of any **false exposure** to direct light sources (e.g. sunlight/car headlights) the inflicted receiver raises a pre-alarm, but as the corresponding receiver on the other side is getting a correct signal, AVANTGARDE will not set an alarm condition thus drastically reducing nuisance alarm rates. AVANTGARDE results therefore to be the only active infrared barrier **completely immune to direct light exposure**.

Unique Functions



Target Direction Analysis (TDA)

AVANTGARDE-IR 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.



Detection Scenarios (Distributed Intelligence)

Being each Infrared beam equipped with microprocessor, individual crossing parameters can be set and up to 5 multiple intrusion detection scenarios can be programmed to better define detection target based on intrusion attempts behaviors.



Predictive Maintenance Tool (SEA)

Another key innovation is the continuous Signal Efficiency Analysis (SEA) which monitor all optical communication efficiency and notifies when critical thresholds has been reached that can be caused by e.g. dirty front-cover, IR beam end of life.



Infrared Beams Control (ON-OFF)

AVANTGARDE-IR can adapt itself to any drastic environmental change such as big snow falls, growing grass or sand storms by simply disabling without additional wire connections any Infrared Beam temporally obstructed thus preserving its capability of detection.

KEY BENEFITS

- Linear Detection
- Bi-directional IR Technology with distributed intelligence
- End-to-End IP based Sensor
- Complete remote control and diagnostic
- Optional PoE+ splitter
- Integrated with major VMS
- Certified Grade 4

Specifications

General

Operating ranges	200m (100m in dense fog environment)
Type of detection	Linear Infrared Technology
IR Frequency	940nm
Probability of detection (POD)	Greater than 98%
False alarm rates	Typically 1/unit/year
Number of IR beams	3x (IMTIR200/2.0); 4x (IMTIR200/2.5); 5x (IMTIR200/3.0)
Towers height (H)	2.0m (IMTIR200/2.0); 2.5m (IMTIR200/2.5); 3.0m (IMTIR200/3.0)

Communication

Communication interfaces	Dry contacts, Ethernet (RJ45)
Communication protocols	TCP-IP/ModBusTCP (API available on request)
Ethernet (M-TX/S-RX)	TCP 10/100 Base T
Alarm data transmission	TCP/IP to HyperPower SMS and A-Bridge; ModBusTCP to IMTIPLUG
Alarm outputs	N.C. Relay Output in M-TX and S-RX (selectable)
Tamper outputs	N.C. Relay Output in M-TX and S-RX
Auxiliary I/O	4IN/3OUT (programmable O.C.) in both M-TX and S-RX

Electrical

Power supply	PoE+/12VDC-24VAC (110V/230V built-in Power Supply available)
Power consumption	M-TX 450mA/S-RX 450mA (2.0); M-TX 550mA/S-RX 550mA (2.5); M-TX 650mA/S-RX 650mA (3.0)
Power supply options	PoE+ (with IMTSPT1220BOX); 110/230V (with BEA1224ALI/EX/USA)

Environmental

Operating temperatures	-25°C / +70°C; -40°C / +70°C with additional PTC Heater -10°C / +70°C with IMTSPT1220BOX PoE+ splitter
IP Rating (towers)	IP65

Configuration tool

Web-browser and Software (Windows® based)

Dimensions

Tower: 15.5x16.6xHcm | Base: 28x28cm

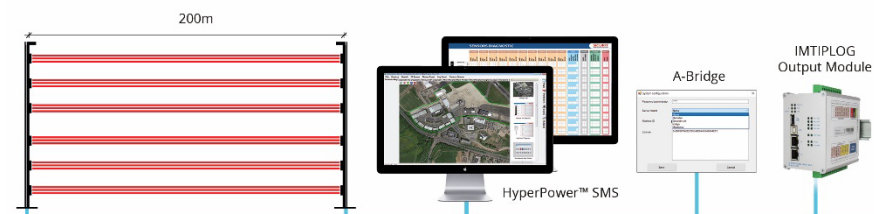
Regulatory compliance

CE, Product classified Security Grade 4 - Environmental Class IV (according to EN 50131-1:2006, EN 50131-1-2-4:2008)

Warranty

Comprehensive 3 years

Graphic representation



How to order (P/N)

Models

IMTIR200/2.0	Set of Avantgarde-IR H: 2.0m 3x IR's
IMTIR200/2.5	Set of Avantgarde-IR H: 2.5m 4x IR's
IMTIR200/3.0	Set of Avantgarde-IR H: 3.0m 5x IR's

List of accessories

BET040	Ground base
BEA1224ALIEX	230V Power supply
IMTSPT1220BOX	PoE+ Splitter

Integration options

CMHPAVSW	Hyperpower SMS
IMTAB16/32/64/128	A-Bridge VMS gateway
IMTIPLUG	Ethernet output module ONVIF ready

Complete list of accessories available in SICURIT official pricelist.