

## AVANTGARDE

IR | MW | DT

### IP based linear bi-directional Infrared Barrier

P/N: IMTIR200/2.0, IMTIR200/2.5, IMTIR200/3.0



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 temporarily 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

Maximum operating range	200m (100m in dense fog environment)
Number of IR beams	3 (IMTIR200/2.0), 4 (IMTIR200/2.5), 5 (IMTIR200/3.0)
Towers height (H)	2.0m (IMTIR200/2.0), 2.5m (IMTIR200/2.5), 3.0m (IMTIR200/3.0)
Type of detection	Linear   Bi-directional Infrared Technology
IR Frequency	950nm
Probability of detection (POD)	Greater than 98%
False alarm rates	Typically 1/unit/year

#### Communication

Communication interfaces	Relay outputs, Ethernet (RJ45)
Alarm outputs	N.C. Relay Output on M-TX or S-RX (optional)
Tamper outputs	N.C. Relay Output on M-TX and S-RX
Auxiliary outputs	3x programmable O.C. in both M-TX and S-RX
Auxiliary inputs	4x double balanced in both M-TX and S-RX
Alarm data transmission	TCP/IP to HyperPower SMS and A-Bridge
Ethernet (M-TX/S-RX)	TCP 10/100 Base T
Third party integration options	API, Modbus TCP

#### Electrical

Power supply	12VDC ±15% and 24VAC ±20% (Anti-mist heaters)
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	110/230V (with BEA1224ALI/EX/USA; PoE+ (with IMTSPT1220BOX)

#### 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

### List of accessories

IMT242	Additional IR beam module
BEC205	Anti-climbing top cover
BEA1224ALI/EX	230V Power supply
IMTSPT1220BOX	PoE+ Splitter
BET040	Single tower base (ground application)
BET040DUO	Dual tower base (back to back)

### 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.

### Graphic representation

