

AVANTGARDE

IR | MW | DT

IP based Dual Technology Barrier

P/N: IMTDTA200/2.0, IMTDTA200/2.5, IMTDTA200/3.0



AVANTGARDE-DT is a high security active dual technology (DT) barrier enclosed in two tamper protected extruded aluminum columns equipped with Sicurit last generation of digital patented bi-directional infrared and brand new K-Band microwave technology, all within one unit.

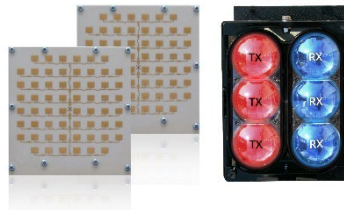
Bi-Directional IR Technology

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-DT will not set an alarm condition thus drastically reducing nuisance alarm rates.

New K-Band Microwave Technology

Additionally AVANTGARDE-DT makes use of latest digital planar antenna (K-Band) and Advanced Digital Signal Processing (ADSP) to reduce false alarm rates and distinguishing the type of intrusion attempt and eventual temporary obstructions specially during system arming.

Another innovation is the introduction of a random modulation channel shuffle-based algorithm that increases Microwave safety making AVANTGARDE-DT completely immune against attempts to tamper it.



Unique Functions



Target Direction Analysis (TDA)

AVANTGARDE-DT 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-DT 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 with volumetric pre-alarm
- Bi-directional IR and digital planar K-band Microwave technologies
- 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
Number of IR beams	3 (IMTDTA200/2.0), 4 (IMTDTA200/2.5), 5 (IMTDTA200/3.0)
Number of MW	1
Towers height (H)	2.0m (IMTDTA200/2.0), 2.5m (IMTDTA200/2.5), 3.0m (IMTDTA200/3.0)
Type of detection	Linear with volumetric pre-alarm Bi-directional Infrared + Microwave Technology
IR frequency	950nm
MW type & frequency	Planar K-Band
Probability of detection (POD)	Greater than 99%
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 or S-RX (optional)
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 580mA; S-RX 580mA (2.0), M-TX 680mA; S-RX 680mA (2.5), M-TX 780mA; S-RX 780mA (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)

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

