DIGITAL MICROWAVE BARRIER

ERMO 482X PRO 3.0

up to 500 m













DIGITAL MICROWAVE BARRIER FOR OUTDOOR PERIMETER PROTECTION THE ULTIMATE EVOLUTION OF OUTDOOR MICROWAVES



EXTREME SECURITY







Digital microwave barrier with digital signal analysis for ranges of 50, 80, 120, 200, 250 and 500m. ERMO 482X Pro is the ideal device for protecting very high risk sites such as nuclear power plants, prisons, military sites, petrochemical sites, etc. furthermore, it is impossible to mask the ERMO 482X Pro thanks to the 16 crystal controlled modulation channels and the complete environmental monitoring performed by the microprocessor.



DYNAMIC DIGITAL ANTI-MASKING

The 16 crystal controlled modulation channels, together with a dynamic analysis of the absolute value of the received signal, detected during the installation process, make masking impossible and possible the detection of potential faults in the microwave components.



AUTOMATIC ENVIRONMENT ADJUSTMENT

Temperature and environmental noises are continuously checked to detect possible faults.









FEATURES

FSTD - FUZZY SIDE TARGET DISCRIMINATION

For long range (over 50m) using a parabolic antenna will give a much purer signal than devices using elliptical or planar antennas. In particular situations where there is continuous interference at the side of the field, such as loose, moving metallic fences in the beam pattern, vegetation that encroaches the side of the beam or other large parallel side movements it is possible to use the fstd function in the software. Using this it is possible to adjust the sensitivity only at the side of the beam pattern, or even exclude all signal analysis from the sides. In this way we can have a beam that although it is physically as normal, it appears elliptical with different shapes dependent on the FSTD setting while maintaining the purity of signal that is the advantage of the parabolic antenna compared to an elliptical antenna.



FBM - FUZZY BEHAVIOUR MODEL FOR DIGITAL ANALYSIS

ERMO 482X Pro monitors the signal, comparing it with behaviour models using algorithms based on "Fuzzy" logic (Fuzzy behaviour models - fbm) to decide if the signal was created by a real intruder or some other factor. The size, shape and rate of change of the signal are continuously measured and compared with typical stored signals. The sensor is able to detect intruders walking, running, crawling or rolling. Every event that generates an alarm or a significant change in the received signal is date/time stamped and stored in memory and can be analysed in real time and/or later.

IP-DOORWAY





IP-Doorway is an interface designed to make all the CIAS digital detectors "IP-ready". Using the IP-Doorway, the barrier or sensor in which it is installed has all the elements of an "IP native detector".

With an ethernet CAT5E FTP cable it is possible to power the product while also remotely managing the alarm data and configuration.

It immediately becomes clear that there is a significant economic advantage to the installer as, using a single cable, means that almost anything can be implemented with ease.

The product can be powered using the PoE 802.3AF standard or by using a dc voltage of

13.8 Vdc, commonly used in intruder detection systems. Since IP-Doorway handles the TCP: UDP: HTTP: DHCP: ICMP: ARP; RARP protocols, it can be used for many different types of data management.

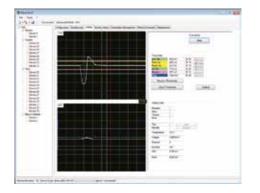
CONFIGURATION

ALIGNMENT AND SETTING

Alignment and set-up of the barrier are simplified by the incorporated tool, an smd circuit and audiovisual set-up system, along with walk-test function to identify real dimension of the protection field.

WAVE-TEST2

Software package for setting up, fine tuning, troubleshooting and maintenance also from remote, via RS485 or via IP. Among its many functions, it shows in real time the received signal as well as hundred of events stored in the individual barrier memory.



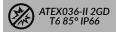
MMD SYSTEM - MOBILE BARRIERS





MMD System, 200m range, is a portable solution for rapid deployment, using microwave barriers on tripods to create invisible detection zones, for temporary surveillance of sites considered at risk. Barriers detect any intrusion attempt into this zone and send a radio signal, from 500mt to 1km thanks to extra antenna, to the MMD Control panel, located in a guard room or into a designated control centre. Endowed with armoured cables and military connectors, this mobile system it's easy to trasport with robust flight case. Its power supply grants autonomy up to 10 days.

ATEX VERSION





ERMO 482X Pro barrier is also available in anti-explosion version, for particularly critical environment requiring special safety precaution, like gas stations, chemical factories, distilleries, etc. Barriers are provided in explosion proof boxes certified CESI 01 Atex 036 (under European regulations).

SPECIFICATIONS

RANGE	50, 80, 120, 200, 250, 500 m
FREQUENCY AND CERTIFICATION	K/X BAND. CE+FCC+IC CERTIFIED
MODULATION CHANNELS	16 CRYSTAL CONTROLLED
PROBABILITY OF DETECTION	99%
FALSE ALARM RATE	1/UNIT/YEAR
TEMPERATURE	-35 °C / +70 °C
ALARM OUTPUTS	3 SOLID STATE RELAYS FOR ALARM, FAULT, TAMPER
OUTPUTS	ALARM, FAULT, TAMPER MANAGED VIA RELAYS OR RS-485. OVER IP OUTPUT AVAILABLE THROUGH IP-DOORWAY
POWER SUPPLY	19Vac - 13.8Vdc, 24Vdc OR PoE 802.3AF (USING IP-DOORWAY)
ALIGNMENT	INCORPORATED AUDIO-VISUAL INSTRUMENT WITH SELF-CHECK
SPECIAL	SOFTWARE WAVE-TEST2 FOR REMOTE MAINTENANCE
IP GRADE	IP66

CIAS RESERVES THE RIGHT TO CHANGE THE SPECIFICATIONS DESCRIBED IN THIS BROCHURE AT ANY TIME WITHOUT PRIOR NOTICE.







