

# PMD2 Plus

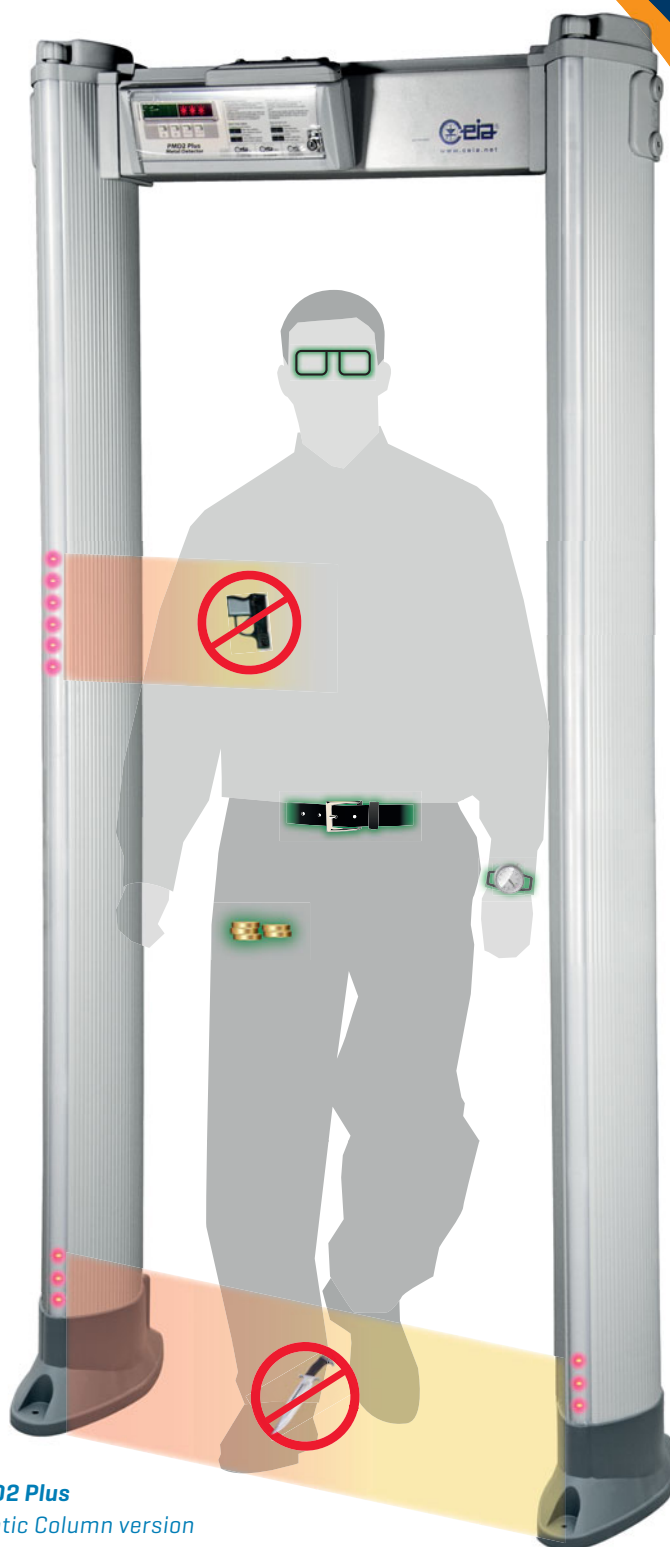
45+  
years of  
experience

## ENHANCED WALK-THROUGH MULTI-ZONE METAL DETECTOR

- Superior Detection and Throughput
- Very High Discrimination of Non-Threat Items
- Compliant with the strictest Security Standards for weapons detection
- 60 localization zones:
  - 20 vertical • 3 lateral
- Column and Panel versions
- Unmatched Reliability
- Rapid Installation



**PMD2 Plus** Panel version



**PMD2 Plus**  
Elliptic Column version



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*Threat Detection through Electromagnetics*

CEIA reserves the right to make changes, at any moment and without notice, to the models (including programming), their accessories and options, to the prices and conditions of sale



Strict requirements and detection needs call for security checkpoints to perform efficiently even under very challenging conditions. Choosing the right metal detector is essential.

**Key considerations include identifying:** the size and composition of the items to detect [**SECURITY LEVEL**], items and levels of personal effects to ignore [**DISCRIMINATION**], the number of people that will be passing through the checkpoint [**THROUGHPUT**]. These characteristics must be obtained even in environments with electrical and mechanical interferences, therefore the walk-through metal detector must present excellent immunity [**IMMUNITY**].

The **PMD2 Plus** Metal Detector satisfies all the requirements.

### Detection Features



- Capability to detect the full range of metal weapon threats even within body cavities



- Met-Identity technology for Identification of Threat Composition

The most advanced Security Standards require detection of all ferrous and non-ferrous metal weapons and of those constructed in special non-magnetic alloys. The **PMD2 Plus** detects firearms and knives of this type, even when they are hidden within body cavities, and accurately indicates the position of the threat, its intensity and its prevalent composition. Inspection personnel thereby acquire thorough knowledge of the metal item and can act, according to procedures, with maximum effectiveness and security.



- 60 pinpointing zones with high resolution & precision:
  - 20 Vertical
  - 3 Lateral



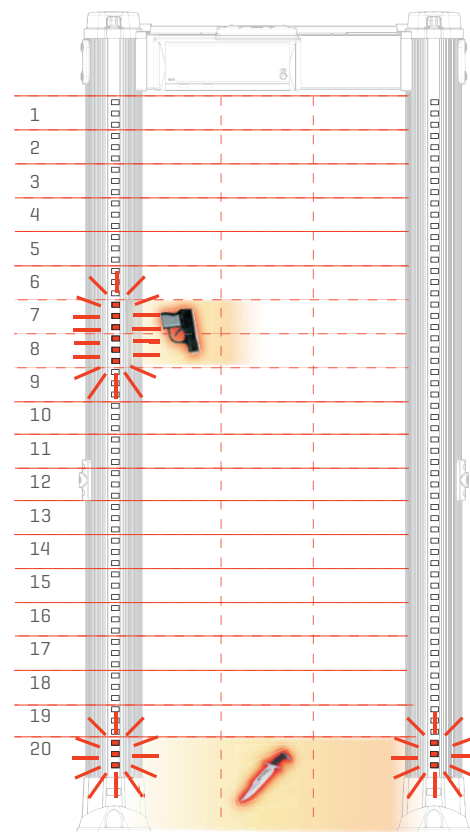
### MET-IDENTITY TECHNOLOGY

With Met-Identity technology, the **PMD2 Plus** allows you to know where, how much and what type of metal is being brought into the secure area.



➤ Ferrous Metal

➤ Non Ferrous Metal



### 60 LOCALIZATION ZONES

with left, center and right indication

## Unique Alarm Signaling



- 4 Multi-Zone Display Bars, each programmable as entry Stop/Go and/or local alarm indication
- High visibility of the control unit and the zone indication independent from the operator position and the installation environment

Accurate signaling is essential for best operation and flow management. The *PMD2 Plus* provides the user with fully-programmable signaling. Both entry-points can indicate with a high level of accuracy, even simultaneously, the vertical and lateral areas of transit of the threats detected, and can also be configured as 'traffic lights' to control transits through the detector.



- Flexible Acoustic Alarm Signaling System:
  - ✓ 10 Continuous and Pulsed Tones
  - ✓ 34 Special Sounds
- 10 Acoustic Intensity Levels

A complete acoustic alarm system allows personalization of the alarm tones and intensities, with a wide choice of continuous, pulsed and special tones at different levels of intensity. The wide volume control dynamic allows operation even in very noisy environments.



- High Precision Transit Counter:
  - ✓ In-Bound Transits
  - ✓ Out-Bound Transits
  - ✓ Alarm Rate
  - ✓ Automatic Compensation for repeated transits of the same person

The metal detector provides an automatic count of the people passing through the access point in both directions and the related nuisance alarm percentage.



### 4 MULTI-ZONE DISPLAY BARS

Light bars indicate metal position vertically and laterally and can also show pacing lights.



### HIGH PRECISION TRANSIT COUNTER

Two photocells fitted into the archway allow counting of transits, alarms and percentage of alarms.

## Unmatched Throughput



- Cutting-edge discrimination technology allows personal effects to be ignored, creating rapid transit flow

The transit volume magnetic scanning system, invented by CEIA and applied since production of the first zonal Metal Detectors in 1986, allows state-of-the-art detection and discrimination results.

The *PMD2 Plus* has an extremely low nuisance alarm rate even at the strictest Security Levels requested today, and therefore allows high transit flow rates and the minimum need for intervention by inspection personnel.

### ALARM



### NO ALARM



### Most Powerful and Versatile Security Features



#### ■ Up to 50 built-in Security Programs

- ✓ Up to 30 International Standards
- ✓ Up to 20 Customizable Levels

Setting the Security Levels could not be easier and more versatile than in the *PMD2 Plus*. Users can choose directly from the known International Standards or request implementation of a Standard personalized to their own requirements. Users can also create their own work program and save it in internal memory.



#### ■ Chip Card system for fast, simple and secure parameter changes [i.e. alarm volume and tone, counter reading, etc.] and security level selection

One unique characteristic of the CEIA metal detectors is the chip-card system, which allows Security Management to set the Security Level quickly, reliably and without having to program the device in any way.



#### ■ Any security standard can be enhanced with selectable random alarm probability



#### CHIP CARD SYSTEM

Chip Card for automatic selection of Security Levels and parameter changes.

### Rapid Installation

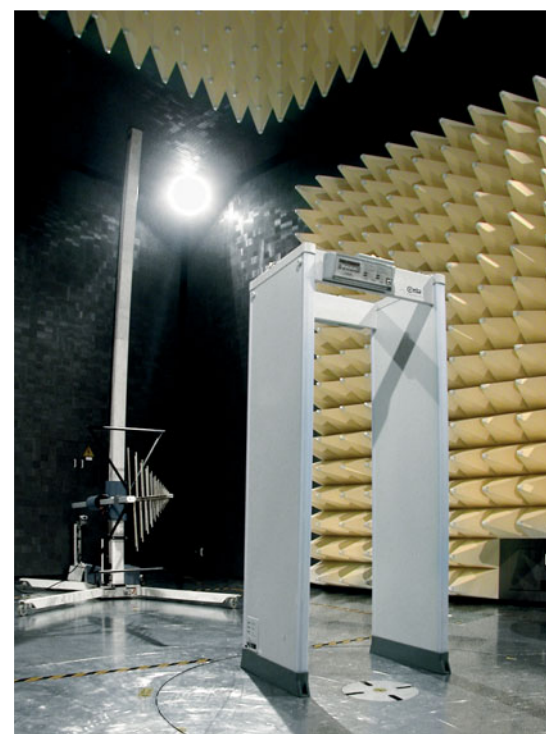


#### ■ One touch guided automatic installation [OTS]

Innovative function assisting the installation through an automatic step-by-step procedure



#### ■ Continuous self diagnostics assures monitored performance reliability



#### EXCEPTIONAL IMMUNITY

Exceptional immunity to environmental interferences makes the Metal Detector easy to use even when electrical noise is encountered.

### Communication Capabilities





TYPE OF OPERATION	Ethernet	USB	Infrared	Bluetooth	RS-232
Maintenance	○	○		■	■
Remote Control	○		■	■	■
Remote Data Collection	○				

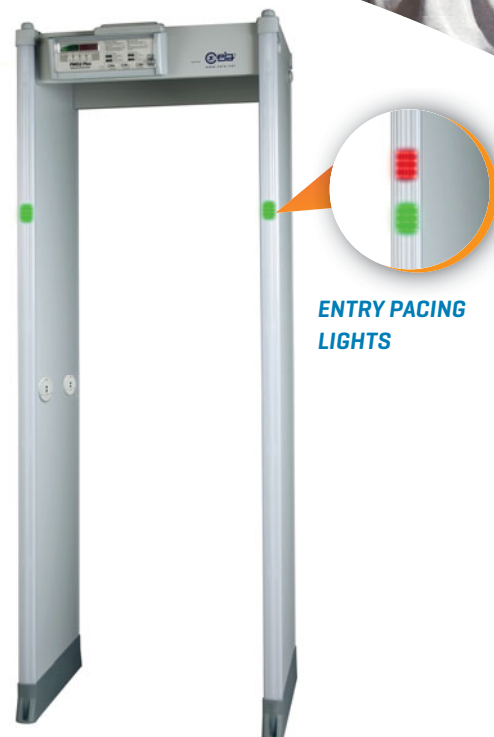
■ STANDARD ○ OPTION



## Model Selection

Features	PMD2 Plus/EZ	PMD2 Plus/PZ
Gate - Shape	 Elliptic Column	 Panel
Compliant with the strictest detection and discrimination standards for EMDs (Enhanced Metal Detectors)	■	■
4 display bars each programmable as zone indicators and/or pacing lights	■	■
60 localization zones (20 vertical x 3 lateral) with left, center and right indication	■	■
Chip Card Reader	■	■
Bluetooth, infrared and RS-232 communication	■	■
3-Level Password and hardware key access protection	■	■
Met-Identity technology (separate Ferrous and Non-Ferrous alarm signaling)	■	■
One Touch Automatic Self Installation (OTS)	■	■
Automatic Operational Functional Verification (OFV)	■	■
Automatic Vibration Compensation (AVS, EVA)	■	■
Automatic Channel Search (CS)	■	■
Automatic Floor Gain Adjustment (FGA)	■	■
Automatic Technical Functional Verification (TFV)	■	■
Automatic Environmental Noise Compensation (ENA)	■	■
Powered by safe low voltage DC	■	■
Anti-tamper on/off switch	■	■
High precision transit counter	□	■
Programmable Random Alarm capability*	□	■
Integrated web-server & logger (includes Ethernet and USB interface)	□	□
Weather resistant protection	□	□
Anti-vandalism, anti-tampering protection (with IP65 control unit)	□	□
IP65 protection (IP65 control unit, IP67 power supply adapter, anti-vandalism protections, weatherproof gate structure, compliant with IEC 60950-22)	□	□
Long life crossbar battery back-up	-	□
Embedded battery charger and under-voltage protection	-	□
820 mm useful passage width	□	□

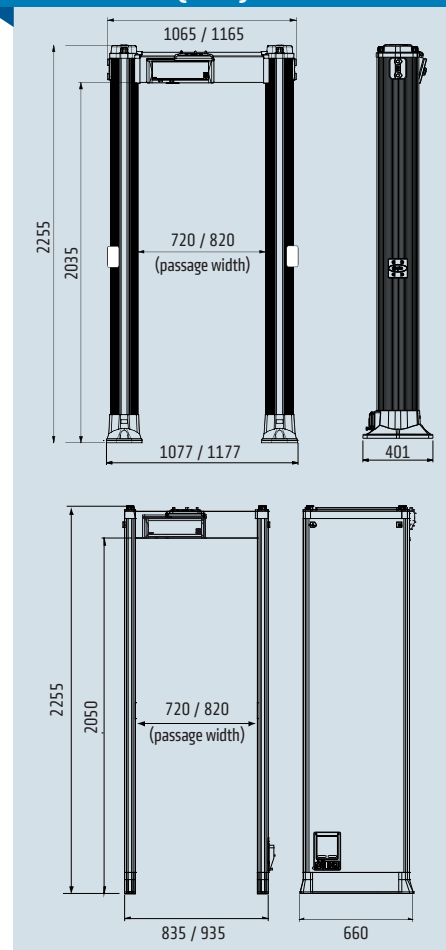
■ STANDARD □ OPTION \*Transit Counter required



ENTRY PACING LIGHTS

PMD2 PLUS IS AVAILABLE IN PANEL AND ELLIPTIC VERSIONS

## Dimensions [mm]



### Options / Upgrade Kits

#### ➤ Weather Resistant Protection

Kit for upgrading the standard version to outdoor applications according to IEC 60950-22; this kit includes shelters, crossbars, protection covers for power supply and waterproof mains power supply adapter.

##### PANEL

- 720 mm passage width (part # 55630)
- 820 mm passage width (part # 55633)

##### ELLIPTIC

- 720 mm passage width (part # 55657)
- 820 mm passage width (part # 55658)



#### ➤ Anti-vandalism, Anti-tampering Protection

This option includes stainless steel IP65 control unit, waterproof mains power supply adapter, protection covers for power supply and antenna connection compartments, equipped with screws requiring tools for removal.

PANEL: Part # 55629



ELLIPTIC: Part # 55659



#### ➤ IP65 Protection

This option includes the Weather Resistant and Anti-vandalism kits.

##### PANEL

- 720 mm passage width (part # 55631)
- 820 mm passage width (part # 55632)

##### ELLIPTIC

- 720 mm passage width (part # 55660)
- 820 mm passage width (part # 55661)

#### ➤ High precision Transit Counter

Two photocells fitted into the archway allow counting of transits, alarms and percentage of alarms. Panel versions are already equipped with transit counter.

ELLIPTIC: part # 46982



#### ➤ Long life Crossbar Battery Back-up

Crossbar battery back-up in stainless steel case. Provides up to 8 hours of autonomous working time.

- 8 hours typical (5.5 hours minimum) continuous operation with PMD2 Plus

PANEL: part # 55681



#### ➤ 820 mm Useful Passage Width

PANEL: part # 55635    ELLIPTIC: part # 55664

#### ➤ Embedded Battery Back-up and Charger

Anti-tamper on/off switch, RS-232 interface, 35 minutes typical (25 minutes minimum) internal battery back-up with 12 hours mains disconnection diagnostic alarm.

PANEL: part # APSM2Plus/P



#### ➤ Integrated Web-server & Logger, Battery Back-up and Charger

Anti-tamper on/off switch, RS-232, USB, 10/100 baseT Ethernet interface, data logger, real-time clock, integrated web-server, transit statistical data analysis, 20' internal battery back-up with 12 hours mains disconnection diagnostic alarm.

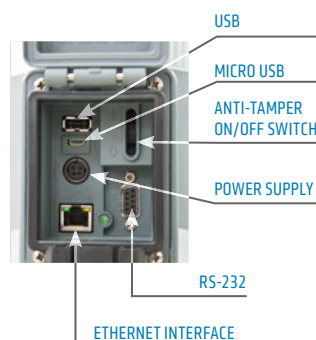
PANEL: part # APSIM2Plus/P



#### ➤ Integrated Web-server & Logger

Anti-tamper on/off switch, RS-232, USB, 10/100 baseT Ethernet interface, data logger, real-time clock, integrated web-server, statistical transit data analysis.

ELLIPTIC: part # APSIM2Plus/E



## Accessories

### ➤ Chip Cards

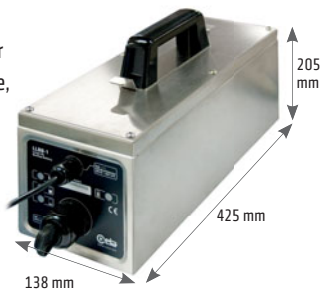
Chip cards for simple and secure selection of Security Levels and parameter setting. List of chip-cards available on request.

### ➤ MBSU-2

Independent, compact size, long life power supply in weatherproof stainless steel case, with embedded fast charger:

- 14 hours typical (10 hours minimum) continuous operation with PMD2 Plus
- 5 hours typical charging time.

Part # MBSU-2



### ➤ IRC-1

Infrared Remote Controller for wireless remote programming of the control unit. Part # 47180



### ➤ Upper Connection Module

This extension cable allows the connection of power supply and serial communication to personal computers or CEIA accessories, such as RCU-2. Part # 46650

### ➤ RRU

Remote relay unit (RRU) to repeat the detection alarms of the gate through a relay contact. The RRU module can be used for integration of the Metal Detector in interlocked door systems. Part # RRU

### ➤ Waterproof Mains Power Supply

100W IP67 power supply for outdoor applications. It is provided with flanges for simple installation. Part # 43564



### ➤ ID-Holder (panel version)

This accessory is designed to be hung on a crossbar of the archway, either at the entrance or the exit side. It can hold, for instance, a notice or an ID number for waiting people or for the screener.

Part # 64987



### ➤ Metal Detector Divesting Table for management of personal metal belongings

- Standard length: 610 mm (Part # 18074)
- Extended length: 1200 mm (Part # 39491)



### ➤ RCU2

Control unit for full remote access, including alarm signaling and programming of CEIA Walk Through Metal Detectors (part # RCU2). The connection is performed via bluetooth (standard) or via cable connection (part # 3618).



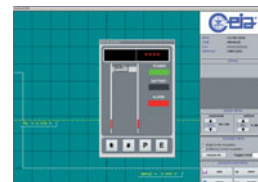
VISUAL ALARM  
WITH ZONE  
INDICATION



### ➤ MD-Scope2

Powerful, PC based installation and service software. Includes oscilloscope and terminal functionality (part # MD-SCOPE2).

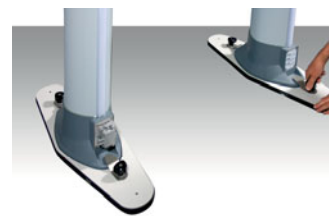
The connection is performed via bluetooth (standard) or via cable connection (part # 3805).



### ➤ Stabilizing Plates (elliptic version)

Comfortable alternative to direct floor mounting.

- Standard version: part # 46705
- Outdoor version: part # 46706
- For uneven floor and mobile applications: part # 46938



### ➤ Tool-free assembly kit (elliptic version)

This accessory allows the detector to be assembled and disassembled quickly and without tools.

Part # 55699



### ➤ Stainless Steel Deck Dolly (panel version) for local moving of the panel metal detector gate

- Robust construction in AISI 316L stainless steel
- Rubber-covered castor-type wheels for easy movement
- Incorporated handles for transport

(available only for 720 mm useful passage width: part # 50789)



### ➤ Test Samples Kit

Reference Samples for accurate verification of the Security Level. Includes guided procedures and certificate of calibration.

Part # EMD-SK-GAL - Part # EMD-SK-GDML



## PMD2 Plus

### WALK-THROUGH MULTI-ZONE METAL DETECTOR

## Specifications

KEY FEATURES	Elliptic column shape or traditional panel versions available		Automatic Environmental Noise Compensation (ENA)
	Wide range of threat detection from guns to ½ cutter blade		Met-Identity technology identifies and signals the metal type in real time
	60 localization zones (20 vertical x 3 lateral) with left, center and right indication		High precision bidirectional counter with automatic rescreening compensation
	One touch automatic self installation (OTS)		Chip Card capability for fast, simple, and secure programming
	Automatic Operational Functional Verification (OFV)		Random alarm capability programmable from 0% to 100%
	Automatic Vibration Compensation (AVS,EVA)		Exceptional Immunity to external interferences
	Automatic Channel Search (CS)		Powered by safe low voltage DC
	Automatic Floor Gain Adjustment (FGA)		Standard Interfaces: Bluetooth, Infrared
	Automatic Technical Functional Verification (TFV)		Other available interfaces: Ethernet, USB
QUALITY	Continuous self diagnostic system		
	Proven reliability		
	No periodic re-calibration and preventive maintenance required		
	No scheduled maintenance		
	Fully digital design		
WALK-THROUGH GATE STRUCTURE	State-of-the-art, robust and washable panels or compact elliptical columns		
	Protected against aging, weather and wear		
CENTRAL CONTROL UNIT	Ergonomic and robust design		
	High visibility alphanumeric display and programming keyboard		
	Made of advanced plastics or stainless steel and anti-vandalism construction (option)		
	Access to the front panel protected by hardware key and 3 levels of passwords		
ALARM SIGNALING	VISUAL SIGNALS	Multi-zone display bar for “height on person” localization	
		4 light bars with selectable entry/exit and pacing indication	
		Green and red metering signals proportional to the mass of the detected target	
	AUDIO SIGNALS	10 selectable continuous and pulsed tone plus 34 special tones	
10 selectable sound intensities ranging from 0 to 90 dBa at 1m			
TYPE OF SIGNALING	VISUAL	Fixed or proportional to the mass in transit - visible from 6m under lighting of 4000lux	
	VISUAL ZONE INDICATION	60 distinct zones (20 vertical x 3 lateral) entry and exit side	
PROGRAMMING	Up to 50 built-in security programs (up to 30 International Standards, up to 20 Customizable Levels)		
	Remote via Infrared Remote Control Unit, Bluetooth™ or Ethernet 10/100 base T (option) interface		
	SECURITY LEVEL	International Standard (IS) command	
		Chip card	
	Local by Control Unit alphanumeric display and keyboard		
	Programming and chip card access protected by user and super-user passwords		
OPERATIONAL FEATURES	Very high discrimination and transit flow rates five or more times greater than other metal detection systems		
	Quick reset time as short as 0.2 seconds for high throughput rate		
	Very high detection speed (up to 15 m/sec.)		
	Built-in operational functional verification		
	One-touch key reading of inbound, outbound and Security Level Data		
INSTALLATION DATA	Automatic synchronisation between two or more metal detectors with distance of down to 5 cm without the use of external cables		
	Automatic Installation function (OTS)		

## Environmental Data

- Power Supply : 100...240V~ -10/+15%, 47...63Hz, 40 VA max
- Operating temperature: -20°C to +70°C (-37°C to +70°C upon request)
- Storage temperature: -37°C to +70°C
- Relative humidity: 0 to 95% (without condensation)

## Certification and Compliance

- Compliant with the applicable Standards for Enhanced Metal Detectors
- Compliant with the applicable electromagnetic Standards on Human Exposure and Pacemaker Safety
- Compliant with all Airport Security Standards worldwide
- Compliant with applicable International Standards for electrical safety and EMC
- Harmless to magnetic media (CDs, tapes, etc.)

## Applications

- Government Buildings
- Airports
- Courts
- Industries (Security)
- Prisons (visitors)
- Public Events
- Nuclear Facilities (Security)
- Cruise ships
- Data Processing Centers (EDP)
- Schools Security
- Amusement Parks
- Hotels

## Comprehensive support

CEIA PROVIDES FULL OPERATIONAL AND TECHNICAL TRAINING SUPPORT BY CERTIFIED PERSONNEL EITHER AT CEIA FACILITY OR AT CUSTOMER PREMISES

- phone technical support
- in-house and on-site repair/services
- standard and custom training



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