



# *PMD2 Plus*

Enhanced Walk-Through  
Multi-Zone Metal Detector



**NEW  
GENERATION**

- Superior Detection and Throughput
- Very High Discrimination
- Compliant with the strictest Security Standards
- Column and Panel versions
- Unmatched Reliability
- Rapid Installation



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*Threat Detection through Electromagnetics*

# PMD2 Plus

Enhanced Walk-Through Multi-Zone Metal Detector

## Superior Detection



VERY HIGH SENSITIVITY

- Capable of detecting the largest range of threat objects composed of magnetic, non-magnetic and mixed alloys



OFFICIALLY CERTIFIED

- Compliant with the Strictest Security Standards for weapons detection



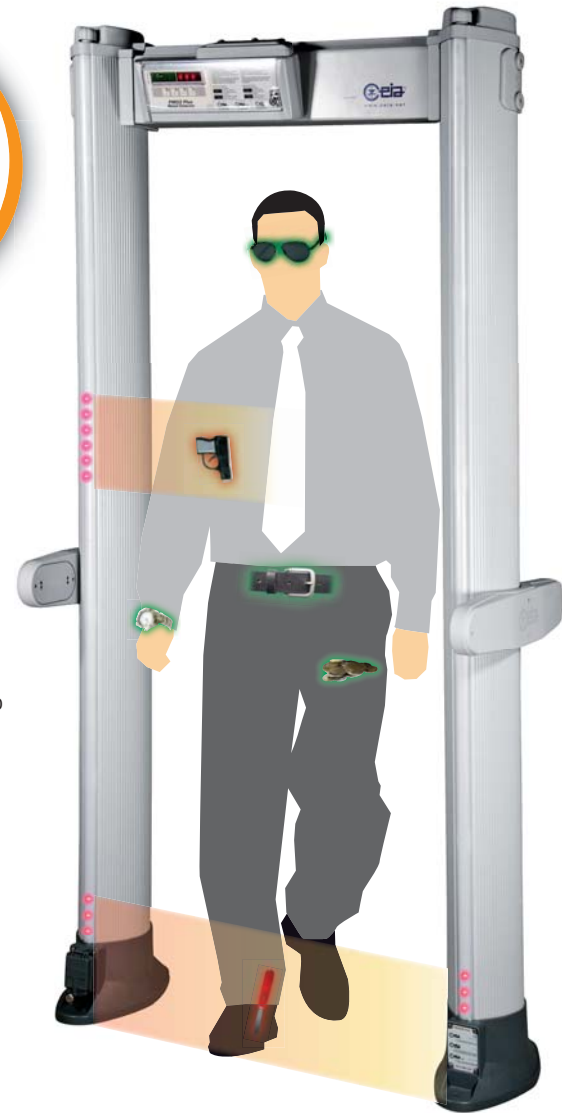
HIGH RESOLUTION AND PRECISION

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



METAL KIND IDENTIFICATION

- Met-Identity for Identification of Threat Composition  
PMD2 Plus is the world's first metal detector with Met-Identity technology. Now you know where, how much and what type of metal is being brought into the secure area.



IN THE CASE OF AN ALARM THE TYPE OF THE METAL MASS DETECTED CAN BE SHOWN ON THE DISPLAY

UNDER THE ALARM THRESHOLD	
★	Small metal mass
★★★	Medium metal mass
OVER THE ALARM THRESHOLD	
★★	Medium metal mass
★★★★	Large metal mass

GREEN AND RED METERING SIGNALS PROPORTIONAL TO THE METAL MASS DETECTED



➤ FERROUS METAL



➤ NON FERROUS METAL

60 ZONES! PMD2 PLUS IS THE MOST ACCURATE METAL DETECTOR IN THE WORLD. YOU KNOW THE EXACT POSITION OF THE WEAPON WITHOUT LIFTING A FINGER

## Unmatched Throughput



UNMATCHED DISCRIMINATION

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



SWEEP SCAN 4D

- Uniform inspection field, allowing more personal metal effects to be ignored

**ALARM**



**NO ALARM**



## Advanced Alarm Indication



PROGRAMMABLE  
DISPLAY BARS

- 4 Multi-Zones Display Bars, each programmable as entry pacing and/or localization lights



FLEXIBLE  
SOUND SYSTEM

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



INTENSITY LEVELS

- 10 Acoustic Intensity Levels programmable from 0 up to 90 dBA at 1 m



BIDIRECTIONAL  
COUNTER

- High Precision Transit Counter:
  - ✓ In-Bound Transits
  - ✓ Out-Bound Transits
  - ✓ Alarm Rate
  - ✓ Automatic Rescreening compensation



LIGHT BARS INDICATE METAL POSITION VERTICALLY AND Laterally AND CAN ALSO SHOW PACING LIGHTS

## Comprehensive Security Features



SECURITY LEVELS

- Over 40 built-in Security Programs
  - ✓ Up to 22 International Standards
  - ✓ Up to 20 Customizable Levels



CHIP CARD  
SYSTEM

- Chip Card system for fast, simple and secure parameter changes (i.e. alarm volume and tone, counter reading etc...) and Security Level Selection



RANDOM  
ALARM

- Any security standard can be enhanced with selectable random alarm probability



CHIP CARD FOR AUTOMATIC SELECTION OF SECURITY LEVELS AND PARAMETER CHANGES



## Rapid Installation



ONE TOUCH  
AUTO-SETTING

- One touch guided self installation (OTS)  
Innovative function assisting the installation through an automatic step-by-step procedure



INTERFERENCE  
IMMUNITY

- Industry Leader in Immunity against environmental interferences



SELF-DIAGNOSTIC  
SYSTEM

- Continuous self diagnostics assures monitored performance reliability



## PMD2 Plus

Enhanced Walk-Through Multi-Zone Metal Detector

## Breakthrough Value



- Superior CEIA reliability slashes total cost of ownership

The overall system is characterized by sturdy, reliable electronic and mechanical construction, and ease of installation.



- No periodic re-calibration and preventive maintenance required



NEARLY 20% OF CEIA'S STAFF IS FOCUSED ON RESEARCHING TOMORROW'S METAL DETECTION TECHNOLOGY

## Communication Capabilities

TYPE OF OPERATION	Ethernet	USB	Infrared	Bluetooth	RS-232
Maintenance	<input type="radio"/>	<input type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>
Remote Control	<input type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Remote Data collection	<input type="radio"/>				

● STANDARD ○ OPTION

## Modern Digital Electronics



- State-of-the-Art digital components for longer life and consistent performance



- Custom designed DSP allows unparalleled detection



- Powered by low voltage DC resulting in the safest gate operation



VERY HIGH MTBF (MEAN TIME BETWEEN FAILURE) OBTAINED THROUGH LARGE SCALE INTEGRATION DEVICES AND 200 HOURS BURN-IN TESTING



INTERNAL VIEW OF CEIA SMT (SURFACE MOUNTING TECHNOLOGY) DEPARTMENT



## Model Selection

Features	PMD2/EZPlus	PMD2/PZPlus
Gate - Shape	 Elliptic Column	 Panel
4 display bars programmable as zone indicators and/or pacing lights	●	●
60 localization zones with left, center and right indication	●	●
Met-Identity technology	●	●
Powered by safe low voltage DC	●	●
Chip Card Reader	●	●
One Touch Automatic Self Installation (OTS)	●	●
Bluetooth, infrared and RS-232 communication	●	●
Password and hardware key access protection	●	●
Anti-tamper on/off switch	●	●
High precision transit counter	○	●
Programmable Random Alarm capability*	○	●
Weather resistant protection	○	○
Anti-vandalism, anti-tampering protection	○	○
IP65 protection [includes weather resistant and anti-vandalism options]	○	○
Integrated web-server & logger [includes Ethernet and USB interface]	○	○
Long life crossbar battery back-up	—	○
Embedded battery back-up and charger	—	○
820 mm useful passage width	○	○

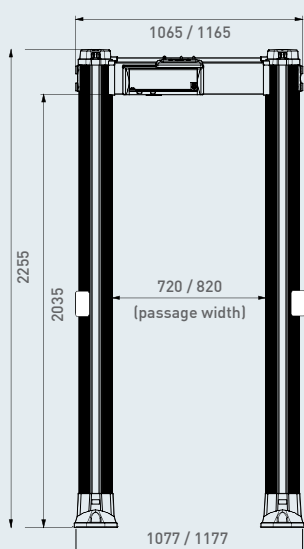
● STANDARD ○ OPTION \*Transit Counter required



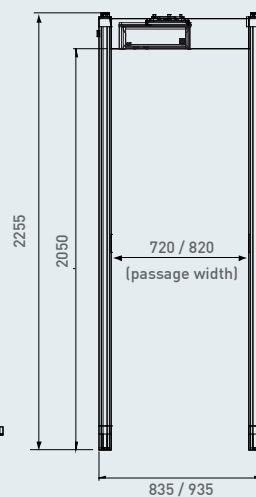
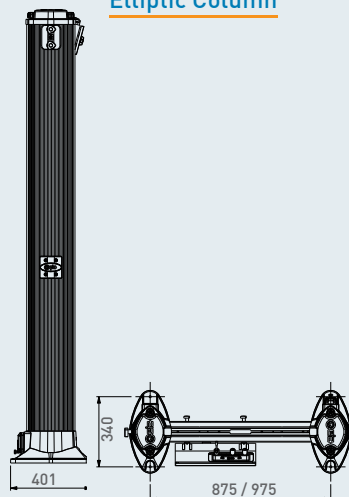
ENTRY PACING LIGHTS

PMD2 PLUS IS AVAILABLE IN PANEL AND ELLIPTIC VERSIONS

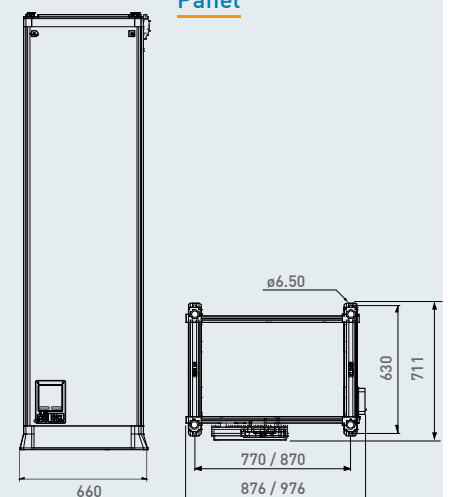
## Dimensions (mm)



PMD2/EZPlus  
Elliptic Column



PMD2/PZPlus  
Panel



# PMD2 Plus

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## Options and 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 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.

**PANEL:** part # 55681

8 HOURS TYPICAL (5.5 HOURS MINIMUM) CONTINUOUS OPERATION WITH PMD2 PLUS



### 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

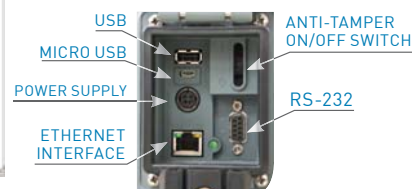
Anti-tamper on/off switch, RS-232, USB, 10/100 baseT Ethernet interface, data logger, real-time clock, integrated web-server, transit statistical data analysis, 35' internal battery back-up with 12 hours mains disconnection diagnostic alarm.

**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



VISUAL ALARM WITH ZONE INDICATION

## ▶ 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 stainless steel case and high protection degree, 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



## ▶ METAL DETECTOR DIVESTING TABLE FOR MANAGEMENT OF PERSONAL METAL BELONGINGS

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



## ▶ ID-HOLDER

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. PANEL VERSION: part # 54095



## ▶ RCU2

Control unit for full remote access, including alarm signalling and programming of CEIA Walk Through Metal Detectors.

Part # RCU2



## ▶ MD-SCOPE

Powerful, PC based installation and service Software. Includes oscilloscope and terminal functionality.

Part # MD-SCOPE2

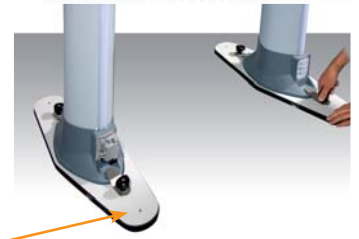


## ▶ STABILIZING PLATES

ELLIPTIC VERSION

Comfortable alternative to direct floor mounting.

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



## ▶ STAINLESS STEEL DECK DOLLY FOR LOCAL MOVING OF THE PANEL METAL DETECTOR GATE

PANEL VERSION

- 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 # 5078



## ▶ TOOL-FREE ASSEMBLY KIT

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

ELLIPTIC VERSION: part # 55699



## ▶ 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

Enhanced Walk-Through Multi-Zone Metal Detector



## Specifications

<b>KEY FEATURES</b>	Elliptic column shape or traditional panel versions available
	Wide range of threat detection from guns to 1/2 cutter blade
	Excellent discrimination of personal metal effects
	60 zones with left, center and right indication
	Met-Identity technology identifies the metal type in real time
	High precision bidirectional counter with automatic rescreening compensation
	Chip Card capability for fast, simple, and secure programming
	Random alarm capability programmable from 0% to 100%
	Exceptional Immunity to external interferences
	One touch automatic self installation (OTS)
	Powered by safe low voltage DC
	Standard Interfaces: RS-232, Bluetooth, Infrared
	Other available interfaces: Ethernet, USB
<b>QUALITY</b>	Continuous self diagnostic system
	Proven reliability
	No periodic re-calibration and preventive maintenance required
	No scheduled maintenance
<b>WALK-THROUGH GATE STRUCTURE</b>	State-of-the-art, robust and washable panels or compact elliptical columns
	Protected against aging, weather and wear
<b>CENTRAL CONTROL UNIT</b>	Ergonomic and robust design
	High visibility alphanumeric display and programming keyboard
	Made of advanced plastics or stainless steel and anti-vandalism construction (option)
<b>ALARM SIGNALLING</b>	<b>VISUAL SIGNALS</b> 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
<b>AUDIO SIGNALS</b>	10 selectable continuous and pulsed tone plus 34 special tones
	10 selectable sound intensities ranging from 0 to 90 dbA at 1m
<b>TYPE OF SIGNALLING</b>	<b>VISUAL</b> Fixed or proportional to the mass in transit - visible from 6m under lighting of 4000lux
	<b>VISUAL ZONE INDICATION</b> 60 distinct zones (20 vertical x 3 horizontal)
<b>PROGRAMMING</b>	Over 40 built-in security programs
	Remote via RS-232, Infrared Remote Control Unit, Bluetooth™ or Ethernet 10/100 base T (option) interface
	<b>SECURITY LEVEL</b> International Standard (IS) command
	Chip card
<b>OPERATIONAL FEATURES</b>	Local by Control Unit alphanumeric display and keyboard
	Programming and chip card access protected by user and super-user passwords
	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 50 ft/sec.)
<b>INSTALLATION DATA</b>	Built-in operational functional verification
	One-touch key reading of inbound, outbound and Security Level 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 (floppy disks, tapes, etc.)

## 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 repair/services
- standard and custom training



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