PMD2 Plus

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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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.

- **Ferr**  
  - Ferrous Metal
- **noFe**  
  - 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.

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.
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

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

Communication Capabilities

<table>
<thead>
<tr>
<th>TYPE OF OPERATION</th>
<th>Ethernet</th>
<th>USB</th>
<th>Infrared</th>
<th>Bluetooth</th>
<th>RS-232</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td></td>
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<tr>
<td>Remote Control</td>
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<tr>
<td>Remote Data Collection</td>
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</table>

- STANDARDS
- OPTION

Exceptional immunity

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

<table>
<thead>
<tr>
<th>Features</th>
<th>PMD2 Plus/EZ</th>
<th>PMD2 Plus/PZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate - Shape</td>
<td>Elliptic Column</td>
<td>Panel</td>
</tr>
<tr>
<td>Compliant with the strictest detection and discrimination standards for EMDs (Enhanced Metal Detectors)</td>
<td>○</td>
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<tr>
<td>4 display bars each programmable as zone indicators and/or pacing lights</td>
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<td>○</td>
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<tr>
<td>60 localization zones (20 vertical x 3 lateral) with left, center and right indication</td>
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<td>○</td>
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<tr>
<td>Chip Card Reader</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Bluetooth, infrared and RS-232 communication</td>
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<td>○</td>
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<tr>
<td>3-Level Password and hardware key access protection</td>
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<td>○</td>
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<tr>
<td>Met-Identity technology (separate Ferrous and Non-Ferrous alarm signaling)</td>
<td>○</td>
<td>○</td>
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<tr>
<td>One Touch Automatic Self Installation (OTS)</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Automatic Operational Functional Verification (OFV)</td>
<td>○</td>
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<tr>
<td>Automatic Vibration Compensation (AVS, EVA)</td>
<td>○</td>
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<tr>
<td>Automatic Channel Search (CS)</td>
<td>○</td>
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<tr>
<td>Automatic Environmental Noise Compensation (ENA)</td>
<td>○</td>
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<tr>
<td>Automatic Floor Gain Adjustment (FGA)</td>
<td>○</td>
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<tr>
<td>Automatic Technical Functional Verification (TFV)</td>
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<tr>
<td>Powered by safe low voltage DC</td>
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<tr>
<td>Anti-tamper on/off switch</td>
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<tr>
<td>High precision transit counter</td>
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<tr>
<td>Programmable Random Alarm capability*</td>
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<td>○</td>
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<tr>
<td>Integrated web-server &amp; logger (includes Ethernet and USB interface)</td>
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<tr>
<td>Weather resistant protection</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Anti-vandalism, anti-tampering protection (with IP65 control unit)</td>
<td>○</td>
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<tr>
<td>IP65 protection (IP65 control unit, IP67 power supply adapter, anti-vandalism protections, weatherproof gate structure, compliant with IEC 60950-22)</td>
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<tr>
<td>Long life crossbar battery back-up</td>
<td>-</td>
<td>○</td>
</tr>
<tr>
<td>Embedded battery charger and under-voltage protection</td>
<td>-</td>
<td>○</td>
</tr>
<tr>
<td>32.3” useful passage width</td>
<td>-</td>
<td>○</td>
</tr>
</tbody>
</table>

- STANDARD ○ OPTION

*Transit Counter required

Dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Elliptic Column</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>88.8”</td>
<td>80.7”</td>
</tr>
<tr>
<td>Width</td>
<td>42.4” / 46.4”</td>
<td>42” / 46”</td>
</tr>
<tr>
<td>Passage Width</td>
<td>28.3” / 32.3”</td>
<td>28.3” / 32.3”</td>
</tr>
</tbody>
</table>

ENTRY PACING LIGHTS

PMD2 Plus is available in Panel and Elliptic Versions
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.

<table>
<thead>
<tr>
<th>PANEL</th>
<th>ELLIPTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 28.3&quot; passage width (part # 55630)</td>
<td>• 28.3&quot; passage width (part # 55657)</td>
</tr>
<tr>
<td>• 32.3&quot; passage width (part # 55633)</td>
<td>• 32.3&quot; passage width (part # 55658)</td>
</tr>
</tbody>
</table>

➤ 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 |

➤ 32.3" Useful Passage Width

| PANEL: part # 55635 | ELLIPTIC: part # 55664 |

➤ 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 |

➤ 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 # APSM2Plus/P |

➤ IP65 Protection
This option comprises the Weather Resistant and the Anti-vandalism kits.

<table>
<thead>
<tr>
<th>PANEL</th>
<th>ELLIPTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 28.3&quot; passage width (part # 55631)</td>
<td>• 28.3&quot; passage width (part # 55660)</td>
</tr>
<tr>
<td>• 32.3&quot; passage width (part # 55632)</td>
<td>• 32.3&quot; passage width (part # 55661)</td>
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</tbody>
</table>

➤ 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 # APSM2Plus/E |

➤ 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 |
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**
  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: 24” (Part # 18074)
  - Extended length: 47” (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).

- **MD-Scope**
  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 # 64355
  - 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 28.3” 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
### 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 (DFV)
- 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 50 ft/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 2” 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:** -4°F to 158°F (-35°F to 158°F upon request)
- **Storage Temperature:** -35°F to 158°F
- **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 USA PROVIDES FULL OPERATIONAL AND TECHNICAL TRAINING SUPPORT BY CERTIFIED PERSONNEL EITHER AT CEIA USA FACILITY OR AT CUSTOMER PREMISES
- phone technical support
- in-house and on-site repair/services
- standard and custom training

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