

# PMD2 Plus

## ENHANCED WALK-THROUGH MULTI-ZONE METAL DETECTOR



### KEY FEATURES

- **SUPERIOR DETECTION** and **THROUGHPUT**
- **HIGH DISCRIMINATION** of Non-Threat Items
- **EXCEPTIONAL IMMUNITY** to external interferences
- **COMPLIANT WITH** and **CERTIFIED** to the applicable Standards for Enhanced Metal Detectors
- **AESTHETIC, COMPACT** and **LIGHT WEIGHT**
- **EMBEDDED MI2 SENSOR** for superior smartphone and cellphone detection (option)
- **RAPID INSTALLATION**



COLUMN AND PANEL VERSIONS AVAILABLE



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Threat Detection through Electromagnetics

Strict requirements and detection needs call for security checkpoints to perform efficiently even under very challenging conditions.

The **PMD2 Plus detects firearms and knives, even when they are hidden within body cavities**, and accurately indicates the position of the threat, its intensity and its prevalent composition.

## KEY CONSIDERATIONS TO CHOOSE THE RIGHT METAL DETECTOR



The **PMD2 Plus** satisfies all the requirements



### MOST POWERFUL AND VERSATILE SECURITY FEATURES

- Up to 50 built-in Security Programs
  - ▶ Up to 30 International Standards
  - ▶ Up to 20 Customizable Levels

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 program and save it in internal memory for later use.



- Chip Card system for fast, simple and secure parameter changes (i.e. alarm volume and tone, counter reading, etc..and security level selection)
- Any security standard can be enhanced with selectable random alarm probability

### CHIP CARD SYSTEM

The system allows the Head of Security to **set Security Level quickly, reliably** and without having to program the device in any way.





### DETECTION OF ALL METALLIC THREAT ITEMS

- Capability to detect the full range of metal weapon threats even within body cavities
- Quick, accurate analysis of all parts of the body of people in transit, from the shoe level to the crossbar
- Guaranteed coverage for all orientations and locations, never in need of calibration
- Met-Identity technology for Identification of Threat Composition

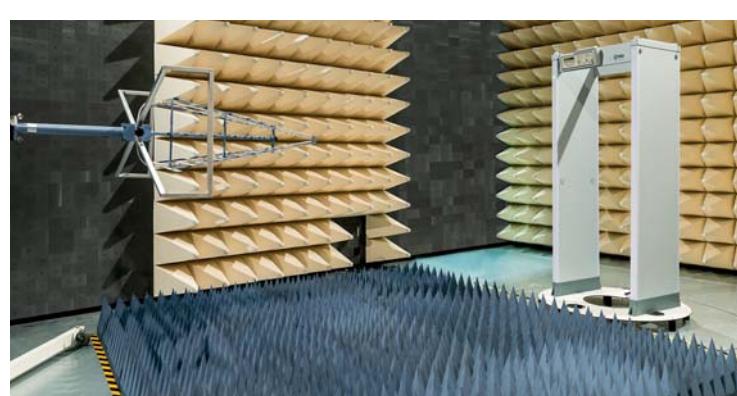


### HIGH DISCRIMINATION & THROUGHPUT

- Cutting-edge discrimination technology allows personal effects to be ignored, creating rapid transit flow
- No need to remove items such as belts, coins, keys, jewelry, watches, wallets, etc.
- Better Discrimination = Shorter Lines and/or Less Staffing

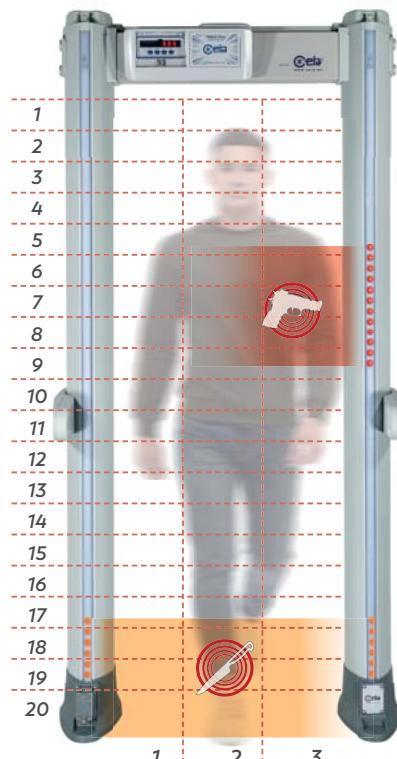


### IMMUNITY TO EXTERNAL INTERFERENCES



### 60 LOCALIZATION ZONES

**60 Localization zones** (20 vertical x 3 lateral) with left, center and right indication.



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

# PMD2 Plus MODEL SELECTION

## STANDARD CONFIGURATION

| GATE - SHAPE   | PMD2 Plus/EZ | PMD2 Plus/PZ |
|--|--------------|--------------|
| ELLIPTIC COLUMN  | PANEL        |              |
| Compliant with the strictest detection and discrimination standards for Enhanced Metal Detectors | ●            | ●            |
| 4 display bars each programmable as zone indicators and/or pacing lights                         | ●            | ●            |
| 60 localization zones (20 vertical x 3 lateral)  | ●            | ●            |
| Specific Shoe Alarm color indication   | ●            | ●            |
| Antivandalic and Antitampering IP66 Control Unit   | ●            | ●            |
| Weatherproof gate compliant with IEC 60950-22  | ●            | ○            |
| Transit counter  | ○            | ●            |
| Chip Card Reader   | ●            | ●            |
| BT, infrared and RS-232 communication  | ●            | ●            |
| Programmable Random Alarm capability   | ●            | ●            |
| 3-Level Password and hardware key access protection  | ●            | ●            |
| Met-Identity technology  | ●            | ●            |
| <b>OTS:</b> One Touch Automatic Self Installation  | ●            | ●            |
| <b>OFV:</b> Automatic Operational Functional Verification  | ●            | ●            |
| <b>AVS, EVA:</b> Automatic Vibration Compensation  | ●            | ●            |
| <b>CS:</b> Automatic Channel Search  | ●            | ●            |
| <b>FGA:</b> Automatic Floor Gain Adjustment  | ●            | ●            |
| <b>TFV:</b> Automatic Technical Functional Verification  | ●            | ●            |
| <b>ENA:</b> Automatic Environmental Noise Compensation   | ●            | ●            |
| Powered by safe low voltage DC   | ●            | ●            |
| Anti-tamper on/off switch  | ●            | ●            |

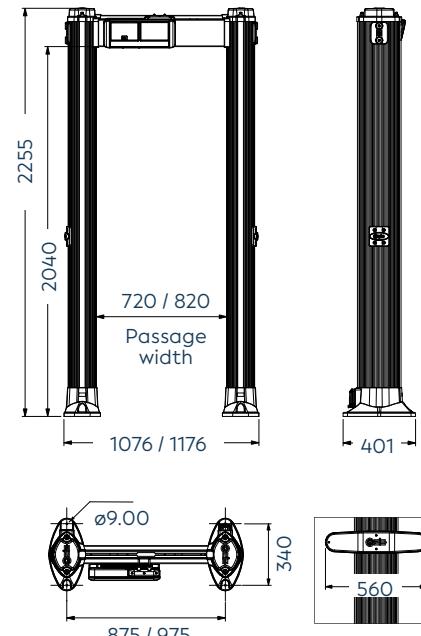
## COMMUNICATION CAPABILITIES

| TYPE OF OPERATION      | ETHERNET | USB | INFRARED | BT | RS-232 |
|------------------------|----------|-----|----------|----|--------|
| MAINTENANCE            | ○        | ○   |          | ●  | ●      |
| REMOTE CONTROL         | ○        |     | ●        | ●  | ●      |
| REMOTE DATA COLLECTION | ○        |     |          |    |        |

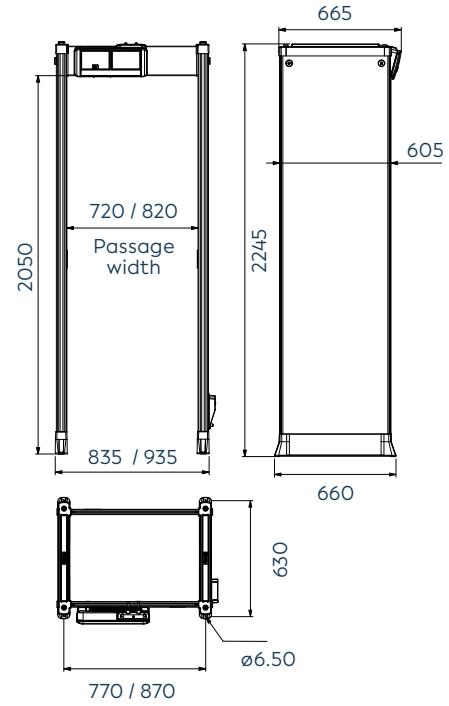
STANDARD ● OPTION ○

## DIMENSIONS (mm)

### ELLIPTIC COLUMN



### PANEL



## MI2 CELL PHONE DETECTION

The **PMD2 Plus Elliptic** can be equipped or field upgraded for the screening of people in applications where **simultaneous detection of all metal** (magnetic and non-magnetic) **firearms and cellphone/smartphone devices**, including the most miniaturized, low-metal content versions, is required along with high-throughput and a low nuisance alarm rate.

### CELL PHONES DETECTOR

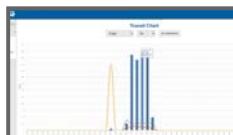
- Detection of standard and micro cell phones and smartphones concealed on the person or in body cavities
- Detection of magnetic items - smartwatches, select headphones/earbuds
- Constant Sensitivity across the detection area in pass-through operations
- Multizone yellow signaling

### METAL DETECTOR

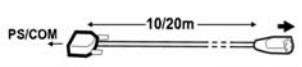
- Simultaneous detection of all-metal weapons, including magnetic, non-magnetic and mixed alloy and light alloy threats
- High Throughput
- Detection of radiation shielding containers (Lead) containing radiological sources
- Multizone red signaling



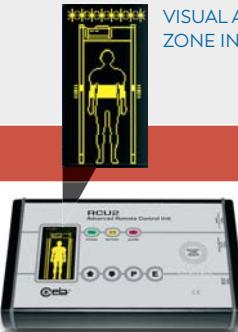
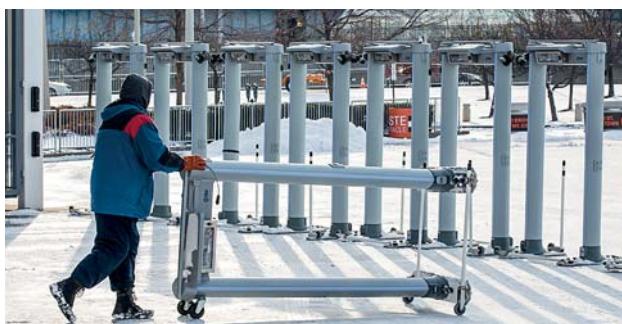
## OPTIONS / ACCESSORIES

| DESCRIPTION  |  | CODE  |
|--|--|---|
| <b>MI2 SENSOR</b>  | <p>The PMD2 Plus Elliptic with integrated MI2 sensor provides unmatched versatility in its ability to screen people in applications that require simultaneous detection of all metal (magnetic and non-magnetic) firearms and cellphone/smartphone devices.</p> <p>In this configuration both panels of the archway are equipped with dual color light bars (red and yellow colors) and 4-beam photocells modules.</p> |  <p><b>ELLIPTIC:</b><br/>720 mm passage width: 132116<br/>820 mm passage width: 132117</p> |
| <b>IP65 CONFIGURATION WITH IP66 CONTROL UNIT</b>                                   | <p>Outdoor sheltered permanent or non-sheltered short-term installations (single event entrance).</p>  |  <p><b>PANEL:</b><br/>720 mm passage width: 138341<br/>820 mm passage width: 138986</p>     |
|  | <p>Upper protection cover:<br/>additional outdoor protection<br/>to further improve the IP65 protection rating</p>   |  <p><b>ELLIPTIC:</b><br/>720 mm passage width: 102713<br/>820 mm passage width: 102714</p> |
| <b>EMBEDDED BATTERY BACK-UP AND CHARGER</b>  | <p>Lower Connection Module with anti-tamper on/off switch, RS-232 interface and internal battery back-up. The module provides an audible 'flat battery' signal activated when the battery charge goes below the operational limit of the device (signal endurance: about 12 hours).</p>  |  <p><b>PANEL:</b><br/>APSM2Plus/P</p>  |
| <b>APSiM2 PLUS Integrated Web-server &amp; Logger, Battery Back-up and Charger</b> | <p>Lower Connection Module with anti-tamper on/off switch, RS-232 interface, internal battery back-up and the following functions:</p> <ul style="list-style-type: none"> <li>• Built-in 10/100 base T Ethernet LAN interface</li> <li>• Web server for set-up and remote data log</li> <li>• Real/Time clock with battery backup</li> <li>• Non-volatile Memory for Metal Detector events storage</li> </ul>          |  <p><b>PANEL:</b><br/>APSiM2Plus/P</p>   |
| <b>APSiM3 PLUS Wireless Network Module</b>   | <p>Includes all features and characteristics of the APSiM2 Plus with additional:</p> <ul style="list-style-type: none"> <li>• Wi-Fi communication capability</li> <li>• Compatibility with NetID Management software (NetID software license not included)</li> </ul>  |  <p><b>PANEL:</b><br/>APSiM3Plus/P</p> <p><b>ELLIPTIC:</b><br/>APSiM3Plus/E</p>          |
| <b>HIGH PRECISION TRANSIT COUNTER (2-BEAM)</b>                                     | <p>Two photocells fitted into the archway allow counting of transits, alarms and percentage of alarms</p>  |  <p><b>ELLIPTIC:</b> 46982</p>  |
| <b>VERY HIGH PRECISION TRANSIT COUNTER (4-BEAM)</b>                                | <p>The 4-beam version further increases accuracy in counting and determination of transit direction, even in intense transit conditions.</p>   |  <p><b>ELLIPTIC:</b> 46983</p>  |
| <b>820 mm USEFUL PASSAGE WIDTH</b>   |  | <p><b>ELLIPTIC:</b> 55664<br/><b>PANEL:</b> 55635</p>   |

## OPTIONS / ACCESSORIES

|                             | DESCRIPTION  | CODE  |
|-----------------------------|--|---|
| CHIP CARDS                  | Chip cards for simple and secure selection of Security Levels and parameter setting.<br>List of chip-cards available on request.   |   |
| MD-WHK                      | Wireless repeater of acoustic indications for WTMDs.<br>Bluetooth audio function to be requested at WTMD ordering time   |  MD-WHK  |
| CROSSBAR<br>BATTERY BACK-UP | <p>① Crossbar battery back-up in stainless steel case.<br/>Up to 10 h of autonomous working time.</p> <p>② Protection cover</p>    | <b>PANEL:</b> 55681<br><b>Protection cover:</b><br>720 mm passage width: 75122<br>820 mm passage width: 75124   |
|                             | <p>The battery pack is embedded into the crossbar of the archway.<br/>Typical operating time in battery mode is 7 hours.</p>    | <b>ELLIPTIC:</b><br>720 mm passage width: 74699B<br>820 mm passage width: 89609   |
| SUPPLY UNIT<br>SERIES       | <p>① MBSU-2<br/>② TSU (Tactical supply unit)</p> <p>Portable and compact battery back-up units and charger designed to supply DC voltage to CEIA equipment where mains is not available or as Uninterruptable Power Supply unit (UPS) in installations requiring continuous operations. The devices are extremely easy to use, and provide indication of the battery level and charging status.</p> <p><b>TYPICAL CONTINUOUS OPERATION</b></p> <ul style="list-style-type: none"> <li>• MBSU-2: 14h</li> <li>• TSU: 4 battery pack: 12h / 6 battery pack: 17h / 8 battery pack: 23h</li> </ul> | <br><b>MBSU-2</b><br><br><br><b>TSU</b> |
| RRU                         | Remote relay unit (RRU) to repeat the detection alarms of the gate through a relay contact.<br>The RRU module can be used for integration of the Metal Detector in interlocked door systems.<br>An additional relay is available for a customer-specified application.   | <b>RRU-2</b>  |
| IRC-1                       | Infrared Remote Controller for wireless remote programming of the control unit.  | 47180   |
| UPPER CONNECTION<br>MODULE  | This module along with an extension cable allows the connection of power supply and serial communication to personal computers or CEIA accessories, such as RCU-2.   | 46650<br>180 mm: 89040<br>5 m: 95352  |
| TOP POWER<br>CABLE          | This cable allows the AC/DC adapter to be connected to PS/COM port located on top of the TX antenna to supply the Metal Detector Gate  | <br>10 m: 64228<br>20 m: 68346  |

## OPTIONS / ACCESSORIES

| DESCRIPTION                           |   | CODE  |
|---------------------------------------|---|---|
| <b>RCU2</b>                           | <p>Control unit for full remote access, including alarm signalling and programming of CEIA Metal Detectors.</p> <p>The connection is performed via serial cable connection or via BT (option).</p>  |  <b>RCU2</b>   |
| <b>MD-SCOPE</b>                       | <p>Powerful, PC based installation and service Software. Includes oscilloscope and terminal functionality.</p> <p>The connection is performed via BT (standard) or via cable connection.</p>  |  <b>MD-SCOPE2</b>  |
| <b>WHEEL KIT - LONG RANGE</b>         | For heavy duty, longer range movement of the walk-through metal detector.   |  <br><b>ELLIPTIC:</b> 70569<br><b>PANEL:</b> 70796  |
| <b>WHEEL KIT - SHORT RANGE</b>        | For short range movement of the walk-through metal detectors.   | <br><b>ELLIPTIC:</b> 77318<br><b>PANEL:</b> 75459   |
| <b>ELLIPTIC GATE PROTECTIVE COVER</b> | <p>Protects the gate in permanent outdoor installations during periods of inactivity:</p> <ul style="list-style-type: none"> <li>• Long life product, heavy duty material and construction, welded cloth, seamless</li> <li>• Foldable, small dimensions</li> <li>• Tear resistant</li> <li>• Easy to clean</li> <li>• Anti-vandalism deterrent</li> <li>• Anti-tampering - lockable</li> </ul> <p>Open the link to see video:<br/><a href="http://www.ceia.net/security/EllipticGateProtectiveCover.aspx?lan=us1">www.ceia.net/security/EllipticGateProtectiveCover.aspx?lan=us1</a></p> | <br><b>ELLIPTIC GATE:</b><br>720 mm passage width: 64395<br>820 mm passage width: 76609<br><br><b>ELLIPTIC GATE WITH PHOTOCELL ARMS:</b><br>720 mm passage width: 76520<br>820 mm passage width: 76610 |

## OPTIONS / ACCESSORIES

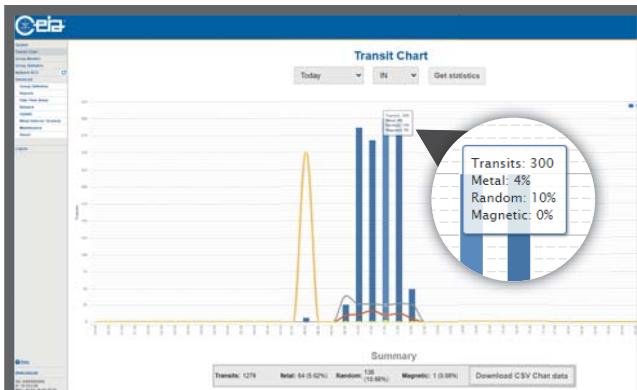
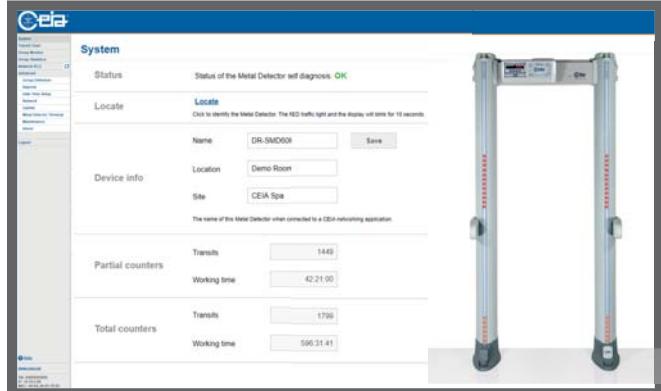
| DESCRIPTION  | CODE  |
|--|---|
| <b>INTEGRATED<br/>CAMERA SYSTEM</b><br><br>Video camera with support arm and connecting cables.<br>Installation of the APSiM3 Plus module is required.   | <br><b>ELLIPTIC:</b> 56110<br><b>PANEL:</b> 54253   |
| <b>TDU</b><br>Thermal<br>Detection<br>Unit<br><br>The TDU is an upgrade sensing kit for fast and cost effective screening operations:<br><br>① Thermal Camera Arm<br>② Dual Reference Calibration Unit<br>③ Transit counter (not needed if already installed on the gate)            | <br><br><b>ELLIPTIC</b><br>TDU/E ① + ②<br>4-Beam<br>Transit counter:<br>46983 ③<br><br><b>PANEL</b><br>TDU/P ① + ② |
| <b>METAL DETECTOR<br/>DIVESTING TABLE</b><br><br>In combination with CEIA Walk-Through Metal Detectors, it is a temporary location of personal metal effects for people to be screened:<br><br>① Standard length: 610 mm<br>② Extended length: 1200 mm<br>③ Outdoor version: 1300 mm | <br><b>STANDARD:</b><br>18074<br><b>EXTENDED:</b><br>39491<br><b>OUTDOOR:</b> 67021   |
| <b>STABILIZING<br/>PLATES</b><br><br>Comfortable alternative to direct floor mounting for uneven floor and mobile applications:<br><br>① Metal anchoring plate<br>② Anti-tilting metal plate   | <br><b>METAL<br/>ANCHORING<br/>PLATE:</b> 64355<br><b>ANTI-ТИLTING<br/>METAL PLATE:</b><br>70914  |
| <b>TOOL-FREE<br/>ASSEMBLY KIT</b><br><br>This accessory allows the detector to be assembled and disassembled quickly and without tools.  | <br><b>ELLIPTIC:</b> 55699  |
| <b>TEST SAMPLES KIT</b><br><br>Reference Samples for accurate verification of the Security Level: includes guided procedures and certificate of calibration.   | <br><b>EMD-SK-GAL</b><br><b>EMD-SK-GDML</b>   |
| <b>OFV</b><br><br>Operator Functionality Verification test-kit   | <br><b>OFV</b>  |

## INTEGRATED WEB-SERVER & LOGGER (OPTIONAL)



MONITOR

- Monitor the status of Metal Detector network in real time
- Centralized Setting of the Metal Detectors' working parameters
- Transits flow monitoring



REPORT

- Report on number of people screened and alarm rates automatically
- Detailed reporting of the transits data and the Security Device configuration data



CONTROL

- Remotely control and verify the security level
- No server or specific client software required, only a web browser
- Zero configuration network for simple setup
- 2 x Ethernet 100base-TX



### APSiM2 Plus, APSiM3 Plus

The APSiM2 Plus, APSiM3 Plus modules allow you to protect and manage your checkpoint better while saving labor hours in the process.

# SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| <b>GATE STRUCTURE</b>       | State-of-the-art, robust and washable panels or compact elliptical columns<br>Protected against aging, weather and wear  |
| <b>OPERATIONAL FEATURES</b> | High discrimination and transit flow rates five or more times greater than other metal detection systems<br>Quick reset time as short as 0.2 seconds for high throughput rate<br>Very high detection speed (up to 15 m/sec.)<br>Built-in operational functional verification<br>One-touch key reading of inbound, outbound and Security Level Data |
| <b>QUALITY</b>              | Continuous self diagnostic system<br>Proven reliability<br>No periodic re-calibration and preventive maintenance required<br>No scheduled maintenance<br>Fully digital design  |
| <b>ALARM SIGNALING</b>      | Multi-zone display bar for "height on person" localization<br>4 light bars with selectable entry/exit and pacing indication<br>Green and red metering signals proportional to the mass of the detected target<br>10 selectable continuous and pulsed tone plus 34 special tones<br>10 selectable sound intensities ranging from 0 to 90 dbA at 1m  |
| <b>TYPE OF SIGNALING</b>    | Fixed or proportional to the mass in transit - visible from 6m under lighting of 4000lux<br>60 distinct zones (20 vertical x 3 lateral) entry and exit side  |
| <b>PROGRAMMING</b>          | Up to 50 built-in Security Programs<br>Remote via Infrared Remote Control Unit, BT or Ethernet 10/100 base T (option) interface<br>Security level: International Standard (IS) command / Chip card<br>Local by Control Unit alphanumeric display and keyboard<br>Programming and chip card access protected by user and super-user passwords       |
| <b>ENVIRONMENTAL DATA</b>   | Power Supply : 100...277V~ ±10%, 47...63Hz, 40 VA typical consumption<br>Operating temperature: -20°C to +65°C<br>(-37°C to +70°C upon request)<br>Storage temperature: -37°C to +70°C<br>Relative humidity: 0 to 95% (without condensation)   |
| <b>INSTALLATION DATA</b>    | Automatic synchronisation between two or more metal detectors with distance of down to 5 cm without the use of external cables<br>Automatic Installation function (OTS)  |

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.

## CERTIFICATION AND COMPLIANCE

- Compliant with and certified to the applicable Standards for Enhanced Metal Detectors (EMD)
- 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

## APPLICATIONS

- GOVERNMENT BUILDINGS
- AIRPORTS
- INDUSTRIES (SECURITY)
- NUCLEAR FACILITIES (SECURITY)
- PRISONS (VISITORS)
- PUBLIC EVENTS
- AMUSEMENT PARKS
- COURTS
- CRUISE SHIPS
- DATA PROCESSING CENTERS (EDP)
- HOTELS
- SCHOOLS SECURITY

## COMPREHENSIVE SUPPORT

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

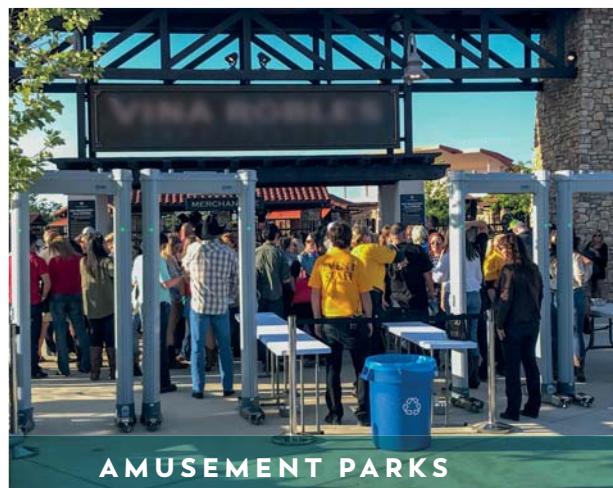
## SAMPLE INSTALLATIONS



SPORT EVENTS



BUILDING SECURITY



AMUSEMENT PARKS



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