HI-PE Plus

ENHANCED WALK-THROUGH MULTI-ZONE METAL DETECTOR

- Accurate Detection of all Metallic Threat Items
- High Discrimination and Throughput
- Exceptional Immunity to external interferences
- Compliant with and Certified to the Strictest Security Standards for weapons detection
- Unmatched Reliability
- Rapid Installation
- Panel Design

* Data available upon request

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

60 LOCALIZATION ZONES: • 20 VERTICAL • 3 LATERAL

Certified by Governmental Laboratories*

www.ceia.net
CEIA presents the new **HI-PE Plus Multi-Zone Metal Detector**, a development of the well-established HI-PE model. Accurate detection of all metals, high level of discrimination, full compliance with the latest Security Standards and exceptional immunity to external interferences are among the main peculiarities of this new device.

**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 HI-PE Plus detects firearms and knives of this type, even when they are hidden within body cavities, and accurately indicate 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.

**MET-IDENTITY TECHNOLOGY**

With Met-Identity technology, the HI-PE 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**

UNIVERSAL EXHIBITION **EXPO 2015** - MILANO [ITALY]. Scan QR code to see Expo 2015 video.
BENEFITS

- 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 HI-PE Plus has a very 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.

UNIQUE ALARM SIGNALLING

- 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 HI-PE 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.
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 HI-PE 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 provided for the purpose.

- 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 the Security Level quickly, reliably and without having to program the device in any way.

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>
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<tbody>
<tr>
<td>Maintenance</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>

EXCEPTIONAL IMMUNITY

to environmental interferences makes the Metal Detector easy to use even when electrical noise is encountered.
# Model Configuration

## Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>HI-PE PLUS/PZ</th>
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<tbody>
<tr>
<td>Compliant with the strictest detection and discrimination standards for EMDs (Enhanced Metal Detectors)</td>
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<tr>
<td>4 display bars each programmable as zone indicators and/or pacing lights</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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<tr>
<td>Chip Card Reader</td>
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<tr>
<td>Bluetooth, infrared and RS-232 communication</td>
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<td>High precision transit counter</td>
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<td>Programmable Random Alarm capability</td>
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<td>3-Level Password and hardware key access protection</td>
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<td>Met-Identity technology (separate Ferrous and Non-Ferrous alarm signaling)</td>
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<tr>
<td>One Touch Automatic Self Installation (OTS)</td>
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<tr>
<td>Automatic Operational Functional Verification (OFV)</td>
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<tr>
<td>Automatic Vibration Compensation (AVS, EVA)</td>
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<tr>
<td>Automatic Channel Search (CS)</td>
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<tr>
<td>Automatic Floor Gain Adjustment (FGA)</td>
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<tr>
<td>Automatic Technical Functional Verification (TFV)</td>
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<tr>
<td>Automatic Environmental Noise Compensation (ENA)</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>Integrated web-server &amp; logger (includes Ethernet and USB interface)</td>
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<tr>
<td>Weather resistant protection</td>
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<tr>
<td>Anti-vandalism, anti-tampering protection (with IP65 control unit)</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>Embedded battery charger and under-voltage protection</td>
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<tr>
<td>Long life crossbar battery back-up</td>
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<tr>
<td>820 mm useful passage width</td>
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</table>

### Standard

- Green and Red Metering Signals
- Proportional to the Metal Mass Detected.

### Option

- Anti-vandalism, anti-tampering protection
- Embedded battery charger and under-voltage protection
- Long life crossbar battery back-up
- 820 mm useful passage width

## Dimensions (mm)

### Under the Alarm Threshold

- Small metal mass
- Medium metal mass

### Over the Alarm Threshold

- Medium metal mass
- Large metal mass

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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.
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 IP67 mains power supply adapter.
  • 720 mm passage width (part # 55630)
  • 820 mm passage width (part # 55633)

• ANTI-VANDALISM, ANTI-TAMPERING PROTECTION
  This option includes stainless steel control unit, IP67 mains power supply adapter, protection covers for power supply and antenna connection compartments, equipped with screws requiring tools for removal. Part # 55629

• IP65 PROTECTION
  This option includes the Weather Resistant and Anti-vandalism kits.
  • 720 mm passage width (part # 55631);
  • 820 mm passage width (part # 55632)

• LONG LIFE CROSSBAR BATTERY BACK-UP
  Crossbar battery back-up in stainless steel case. Provides up to 8 hours of autonomous working time.
  Part # 55681

• 820 mm USEFUL PASSAGE WIDTH
  Part # 55635

• EMBEDDED BATTERY CHARGER AND UNDER-VOLTAGE PROTECTION
  Anti-tamper on/off switch, RS-232 interface, battery charger with 12 hours mains disconnection diagnostic alarm.
  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.
  Part # APSIM2Plus/P
ACCESSORIES

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

**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).

**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 HI-PE Plus
- 5 hours typical charging time.
Part # MBSU-2

**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).

**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

**STAINLESS STEEL DECK DOLLY**
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)

**IP67 MAINS POWER SUPPLY**
100W IP67 power supply for heavy duty applications. Vandal resistant. It is provided with flanges for simple installation.
Part # 64609

**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.
Part # 54095

**METAL DETECTOR DIVESTING TABLE**
In combination with CEIA Walk-Through Metal Detectors, it is a temporary location of personal metal effects for people to be screened.
- Standard length: 610 mm (Part # 18074)
- Extended length: 1200 mm (Part # 39491)
- Outdoor version: 1300 mm (Part # 67021)

**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

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## SPECIFICATIONS

### KEY FEATURES
- Wide range of threat detection from guns to ½ cutter blade
- Excellent discrimination of personal metal effects
- 60 localization zones (20 vertical x 3 lateral) with left, center and right indication
- One touch automatic self installation (OTS)
- Automatic Environmental Noise Compensation (ENA)
- Met-Identity technology identifies and signals 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
- Standard Interfaces: RS-232, Bluetooth, Infrared
- Other available interfaces: Wi-Fi, Ethernet, USB

### QUALITY
- Continuous self diagnostic system
- Proven reliability
- No periodic re-calibration and preventive maintenance required
- Fully digital 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

### WALK-THROUGH GATE STRUCTURE
- State-of-the-art, robust and washable panels
- Protected against aging, weather and wear

### CENTRAL CONTROL UNIT
- Ergonomic and robust design
- 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
- 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
- Fixed or proportional to the mass in transit - visible from 6m under lighting of 4000lux
- 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 RS-232, 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 & 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
- Harmless to magnetic media (CD, 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 and on-site repair/services
- Standard and custom training

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