# 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

**CEIA**®

ISO 9001 CERTIFIED
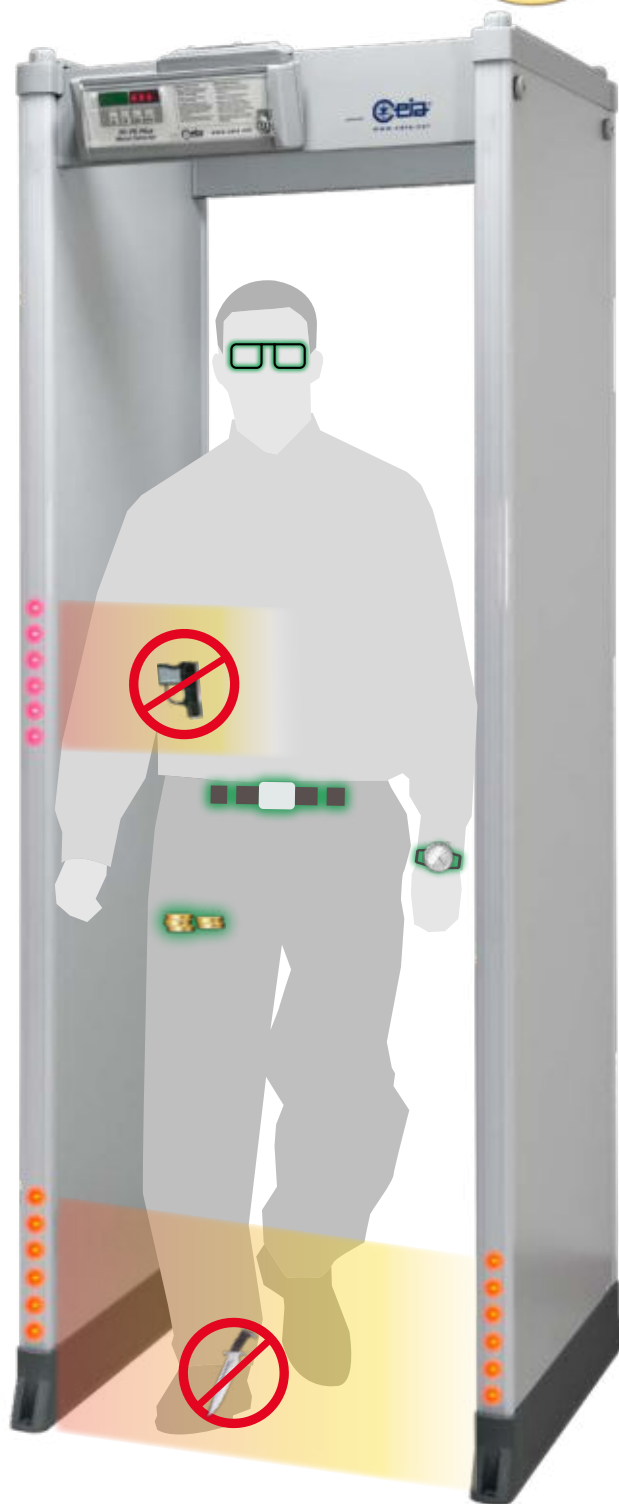
*Threat Detection through Electromagnetics*

*The **HI-PE Plus Multi-Zone Metal Detector** provides accurate detection of all metals, high level of discrimination of non-threat items, full compliance with the latest Security Standards and exceptional immunity to external interferences.*

## FEATURES

**VERY HIGH SENSITIVITY**

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

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.

**HIGH RESOLUTION AND PRECISION**

- 60 localization zones: • 20 vertical • 3 lateral
- Met-Identity technology for Identification of Threat Composition
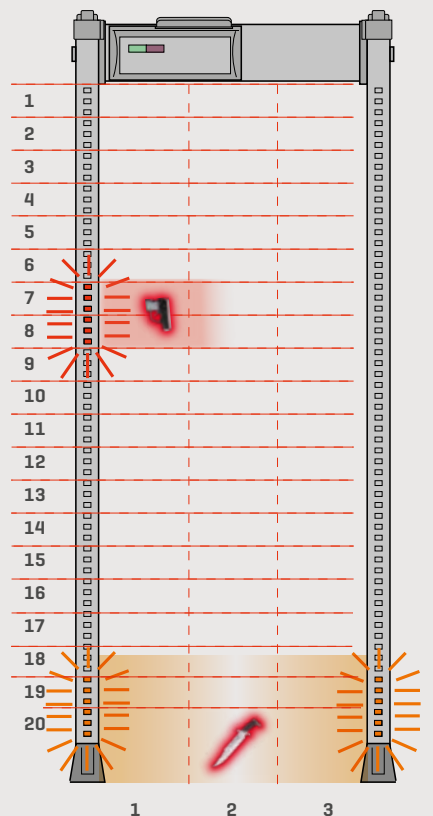
### MET-IDENTITY TECHNOLOGY

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.

**F e r r**      **n o F e**

▸ FERROUS METAL      ▸ NON FERROUS METAL

**60 LOCALIZATION ZONES** WITH LEFT, CENTER AND RIGHT INDICATION

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.*

## BENEFITS

**VERY HIGH 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 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 BARS** 2 IN, 2 OUT

**PROGRAMMABLE DISPLAY BARS**

- 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.

**INTENSITY LEVELS**

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

- 10 Alarm Volume Levels

**A complete acoustic alarm system allows personalization of the alarm tones and volume**, 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.

**ALARM**

**NO ALARM**

*HIGH PRECISION TRANSIT COUNTER*

*The Metal Detector provides an automatic count of the people passing through the access point in both directions and the related nuisance alarm percentage:*

- *In-Bound Transits*
- *Out-Bound Transits*
- *Alarm Rate*
- *Automatic Compensation for repeated transits of the same person*

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

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*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 program and save it in internal memory for later use.*

## MOST POWERFUL AND VERSATILE SECURITY FEATURES

**SECURITY LEVELS**

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

**CHIP CARD SYSTEM**

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

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

## RAPID INSTALLATION

**ONE TOUCH AUTO-SETTING**

- 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

## 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.



## 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 ○
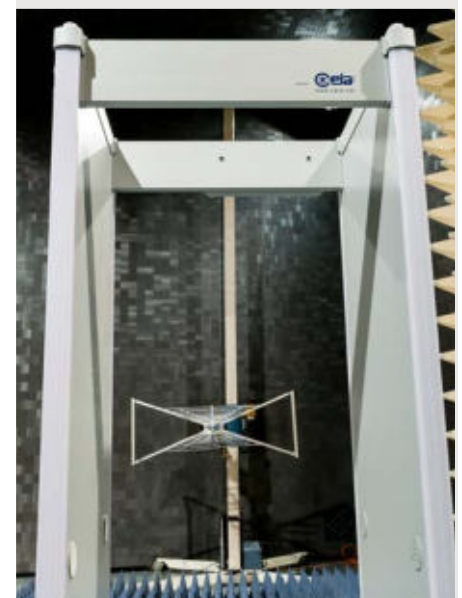
## HI-PE PLUS/PZ MODEL CONFIGURATION

| | |
|---|---|
| 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 | ● |
| Specific Shoe Alarm color indication | ● |
| High precision transit counter | ● |
| Chip Card Reader | ● |
| Bluetooth, infrared and RS-232 communication | ● |
| Programmable Random Alarm capability | ● |
| 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 | ● |
| 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, IP68 power supply adapter, anti-vandalism protections, weatherproof gate structure, compliant with IEC 60950-22) | ○ |
| Embedded battery charger and under-voltage protection | ○ |
| Long life crossbar battery back-up | ○ |
| 820 mm useful passage width | ○ |

STANDARD ● OPTION ○

### DIMENSIONS (mm)

**FRONT**

2050

720 / 820
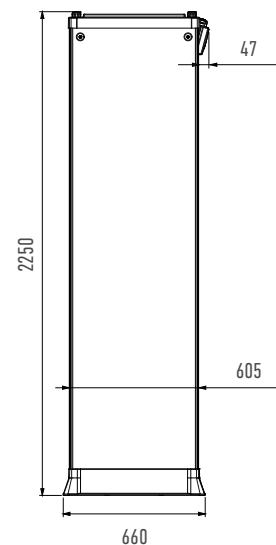(passage width)

**TOP**

876 / 976

**LATERAL**

2250

47

605

660
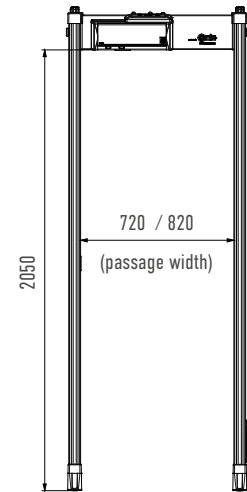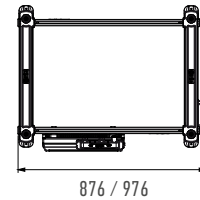
## OPTIONS / UPGRADE KITS

### 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 IP68 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, IP68 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 comprises the Weather Resistant and the Anti-vandalism kits.

- 720 mm passage width [part # 55631]
- 820 mm passage width [part # 55632]

### 820 mm USEFUL PASSAGE WIDTH

Part #  55635

### LONG LIFE CROSSBAR BATTERY BACK-UP

Crossbar battery back-up in stainless steel case.
- Up to 11 h of autonomous working time

Part # 55681



### EMBEDDED BATTERY CHARGER
### AND UNDER-VOLTAGE PROTECTION

Advanced power supply module with anti-tamper on/off switch, RS-232 interface, internal battery back-up and 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.

## MBSU-2

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

- 15 hours typical (up to 18 h) continuous operation with HI-PE Plus
- 7 hours typical charging time.

Part # MBSU-2

**H** 205 mm
**D** 425 mm
**W** 138 mm

## 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).

## RCU2

Control unit for full remote access,including alarm signalling and programming of CEIA Metal Detectors (part # RCU2).

The connection is performed via bluetooth (standard) or via cable connection (part # 3618).

VISUAL ALARM WITH ZONE INDICATION

## 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-0003

## WATERPROOF MAINS POWER SUPPLY

IP68 power supply for outdoor applications. It is provided with flanges for simple installation. Part # 64610

## WHEEL KIT - LONG RANGE

For heavy duty, longer range movement of the walk-through metal detector. Part # 70796

## WHEEL KIT - SHORT RANGE

For short range movement of the walk-through metal detectors. Part # 75459

## 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

## 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)

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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 | |
| | Met-Identity technology identifies and signals the metal type in real time | |
| | High precision bidirectional counter with automatic rescreening compensation | |
| | Random alarm capability programmable from 0% to 100% | |
| | Exceptional Immunity to external interferences | |
| | Standard Interfaces: Bluetooth, Infrared | |
| | 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 | |
| **GATE STRUCTURE** | State-of-the-art, robust and washable panels | |
| | 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 | |
| | 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** | 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) | |

### APPLICATIONS

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

### ENVIRONMENTAL DATA

- POWER SUPPLY : 100...277V~ ±10%, 47...63Hz, 40 VA typical consumption
- OPERATING TEMPERATURE: -20°C to +65°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 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 LOCATION