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
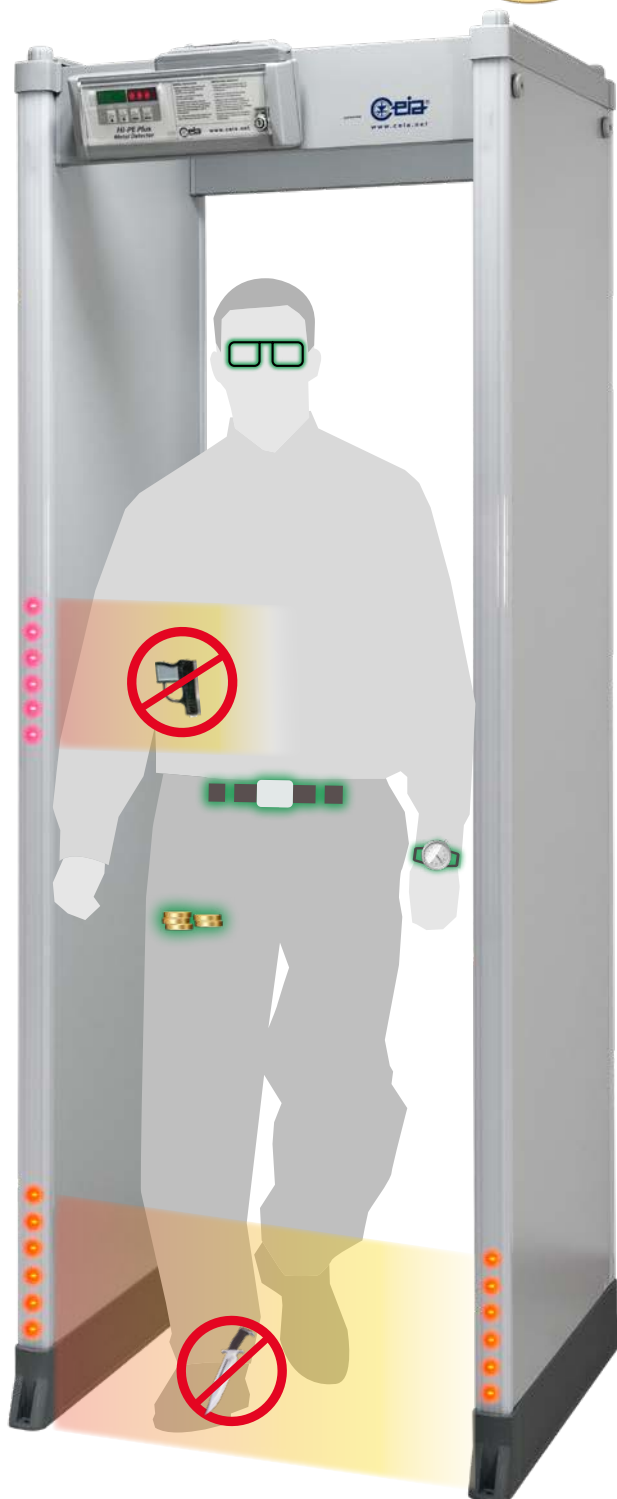
www.ceia.net

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.

Ferr   **noFe**

‣ FERROUS METAL   ‣ NON FERROUS METAL

60 LOCALIZATION ZONES WITH LEFT, CENTER AND RIGHT INDICATION
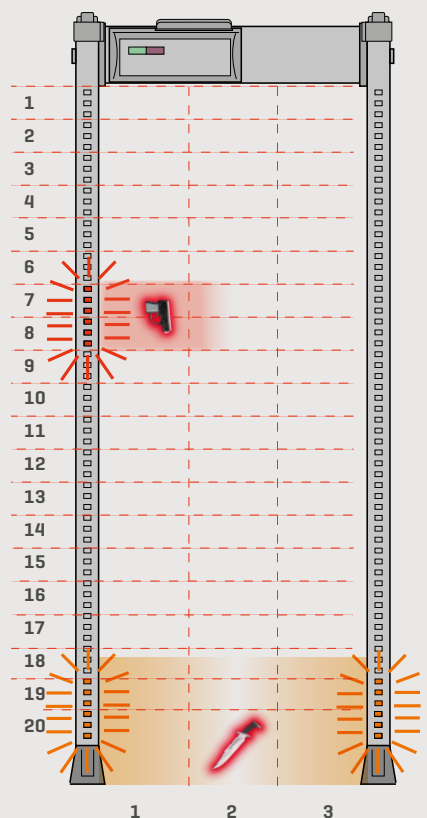
*The **HI-PE Plus has a very low nuisance alarm rate even at the strictest Security Levels requested today**, and therefore allows high transit flow rates and the minimum need for intervention by inspection personnel.*

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

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*

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

COMMUNICATION CAPABILITIES

TYPE OF OPERATION	ETHERNET	USB	INFRARED	BLUETOOTH	RS-232
Maintenance	○	○		●	●
Remote Control	○		●	●	●
Remote Data collection	○				

STANDARD ● OPTION ○

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.

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

720 / 820
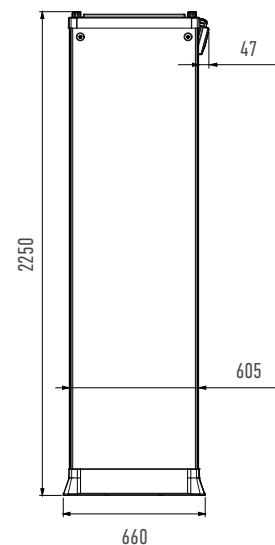(passage width)

2050

TOP

876 / 976

LATERAL

47

2250

605

660
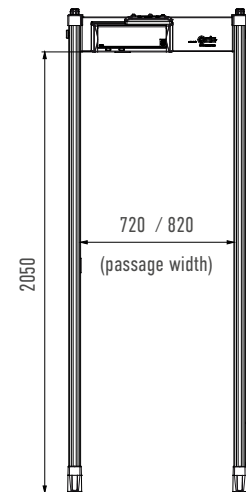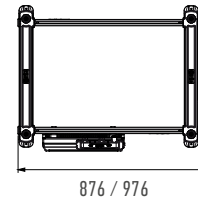
OPTIONS / UPGRADE KITS

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)

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