02PN20/EZHD

ELLiptic, Multi-Zone and Heavy Duty
Enhanced Metal Detector

- Superior Detection and Throughput
- Compliant with the strictest Security Standards
- 60 localization zones:
  - 20 vertical
  - 3 lateral
- Improved Detection, Discrimination, Spatial Resolution and Interference Immunity
- Aesthetic, Unobtrusive and Light Weight
- Water resistant IP65 protection degree
- Rapid Installation: no tools required for assembly

PORTABLE CONFIGURATION AVAILABLE

www.ceia.net

Threat Detection through Electromagnetics

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.
The recent introduction of stringent Federal security standards has prompted CEIA to release a series of walkthrough Metal Detectors expressly designed for high level applications. These metal detectors look similar to other models in CEIA’s product offering, but feature a combination of advanced target detection and state of the art personal object discrimination.

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 02PN20/EZHD 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.
- 60 pinpointing zones with high resolution & precision:
  - 20 Vertical
  - 3 Lateral

MET-IDENTITY TECHNOLOGY
With Met-Identity technology, the 02PN20/EZHD 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.
**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 02PN20/EZHD 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.

- **Very 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 02PN20/EZHD 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.
Rapid Installation

- One touch automatic installation (OTS)
  Innovative function assisting the installation through an automatic step-by-step procedure.
- Highly adaptable for installation in all environments
- Automatic Compensation function to adjust for windy environments
- Continuous self diagnostics assure monitored performance reliability
- Upper tie-down points available for stabilization in case of strong winds (up to 25 mph)

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 02PN20/EZHD. 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 for automatic selection of Security Levels and parameter changes.
Extended Communication Capabilities

Extended communication capabilities including data networking for alarm and status supervision through wireless TCP/IP. The 02PN20/EZHD can be fitted with the APSIM3 Plus Wireless Network Module.

<table>
<thead>
<tr>
<th>TYPE OF OPERATION</th>
<th>Ethernet</th>
<th>Infrared</th>
<th>Bluetooth</th>
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</thead>
<tbody>
<tr>
<td>Maintenance</td>
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<tr>
<td>Remote Control</td>
<td>○</td>
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<tr>
<td>Remote Data collection</td>
<td>○</td>
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</tbody>
</table>

- **STANDARD**
- **OPTION**

The APSIM3 Plus integrates a secure web server and WiFi infrastructure using state of the art SSL and WPA2 security protocols. The APSIM3 Plus can act both as a WiFi client and WiFi access point allowing to set up a local secure wireless network without requiring additional devices. The wireless network covers a 300ft wide area on open site conditions.

Any authorized device capable of wireless connectivity and https browsing [such as tablet pc, smart phones and laptops] can access the following functionalities:

- Automatic monitoring of the auto-diagnostics, battery level and security level of the installed 02PN20/EZHD group [fig. 1].
- Visual representation of the transits flow through the 02PN20/EZHD. The transits data is stored in the APSIM3 Plus for up one year and can be downloaded through date selection [fig. 2].

Fig. 1: Automatic monitoring of the auto-diagnostics, battery level and security level

Fig. 2: Visual representation of the transits flow through the 02PN20/EZHD.
### Model Configuration

<table>
<thead>
<tr>
<th>Features</th>
<th>02PN20/EZHD (Standard version)</th>
<th>02PN20/EZHD-N (Navy reduced height version)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced height for low-ceiling applications</td>
<td></td>
<td>![Checkmark]</td>
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<tr>
<td>4 display bars each programmable as zone indicators and/or pacing lights</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
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<tr>
<td>60 localization zones (20 vertical x 3 lateral) with left, center and right indication</td>
<td>![Checkmark]</td>
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<tr>
<td>Chip Card Reader</td>
<td>![Checkmark]</td>
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<tr>
<td>Bluetooth and infrared communication</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
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<tr>
<td>Programmable Random Alarm capability*</td>
<td>![Checkmark]</td>
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<tr>
<td>3-Level Password and hardware key access protection</td>
<td>![Checkmark]</td>
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<tr>
<td>Met-Identity technology (separate Ferrous and Non-Ferrous alarm signaling)</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
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<tr>
<td>One Touch Automatic Self Installation (OTIS)</td>
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<tr>
<td>Automatic Operational Functional Verification (OFV)</td>
<td>![Checkmark]</td>
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<tr>
<td>Automatic Vibration Compensation (AVS, EVA)</td>
<td>![Checkmark]</td>
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<tr>
<td>Automatic Channel Search (CS)</td>
<td>![Checkmark]</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>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
</tr>
<tr>
<td>Automatic Environmental Noise Compensation (ENA)</td>
<td>![Checkmark]</td>
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<tr>
<td>Powered by safe low voltage DC</td>
<td>![Checkmark]</td>
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<tr>
<td>Weather resistant protection</td>
<td>![Checkmark]</td>
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<tr>
<td>Anti-vandalism, anti-tampering protection</td>
<td>![Checkmark]</td>
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<tr>
<td>IP65 protection (includes weather resistant and anti-vandalism options)</td>
<td>![Checkmark]</td>
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<tr>
<td>Very High precision transit counter (4-beam)</td>
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<tr>
<td>Integrated web-server &amp; logger</td>
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<tr>
<td>Transport case</td>
<td>![Checkmark]</td>
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</tr>
</tbody>
</table>

- STANDARD  [ ] OPTION  *Transit Counter required

### Dimensions (mm)

#### 02PN20/EZHD
- Dimensions (mm): 1128 2255 2065
- Passage width: 720

#### 02PN20/EZHD-N
- Dimensions (mm): 1128 2255 2065
- Passage width: 720

A close-up of tie-down points

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Options

- Integrated Web-server & Logger
  APSiM3 Plus Wireless Network Module, 10/100 baseT Ethernet interface, data logger, real-time clock, integrated web-server, statistical transit data analysis.
  Part # APSiM3Plus/E

- Very high precision transit counter
  Four photocells fitted into the archway allow counting of transits, alarms and percentage of alarms. The 4-beam version increases accuracy in counting and determination of transit direction, even in intense transit conditions. Part # 56109

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-HD
  Separate, compact long life power supply in stainless steel case and high protection degree (IP65), with embedded fast charger (Part # MBSU-2-HD):
  - 13.6 hours typical (10 hours minimum) continuous operation
  - 6.5 hours typical charging time

- MD-Scope2
  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 signaling and programming of CEIA Walk Through Metal Detectors (part # RCU2). The connection is performed via bluetooth (standard) or via cable connection (part # 3618).

- IRC-1
  Infrared Remote Controller for wireless remote programming of the control unit. Part # 47180

- Ceiling power adapter (Part # 63732)

- Transport case
  - Protects the metal detector during transport and storage
  - Facilitates moving the metal detector
  - Set to include all parts and accessories
  - Minimizes storage space
  - Dimensions:
    - 2340 mm x 420 mm x 760 mm
  - Weight (case only): 60 kg
  (Part # 64296)

- Elliptic Gate Protective Cover
  Protective Cover is designed to protect the gate in permanent outdoor installations during periods of inactivity from water, ultraviolet rays, humidity, dirt, sand, temperature spikes and other environmental hazards. The Protective Cover is column-fitted, durable and weatherproof. Yet it is also breathable, allowing moisture to evaporate from inside.
  The cover is simple to install and to remove.
  Part # 64395
  Open the link below to see Elliptic Gate Protective Cover video:
  www.ceia.net/security/EllipticGateProtectiveCover.aspx?lan=us1

- Stabilizing plates
  Comfortable alternative to direct floor mounting.
  - Standard version: part # 46705
  - Outdoor version: part # 46706
  - For uneven floor and mobile applications: part # 46938

- Upper tie-down points
  Part # 64886

- 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
- 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)
- Automatic Operational Functional Verification (OFV)
- Automatic Vibration Compensation (AVS, EVA)
- Automatic Channel Search (CS)
- Automatic Floor Gain Adjustment (FGA)
- Automatic Technical Functional Verification (TFV)

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

WALK-THROUGH GATE STRUCTURE
- State-of-the-art, robust, washable and 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
- Over 40 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
- 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

INSTALLATION DATA
- Automatic synchronisation between two or more metal detectors with distance of down to 15 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 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 (floppy disks, 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