



# MSD

**aerotech**  
Soluções em tecnologia

**TARGET PINPOINTING  
INDICATION**

**ONE-PIECE AND  
LIGHTWEIGHT DESIGN**  
[TOTAL WEIGHT  
ONLY 9,5 KG]

**FULL-HEIGHT,  
360° DETECTION**  
[HORIZONTAL  
AND VERTICAL]

**READY FOR  
IMMEDIATE USE**



## HIGHLY PORTABLE **CELL PHONE, FERROUS WEAPON AND CONTRABAND DETECTOR**

- **Detection of all cell phones and ferrous contraband** concealed on the person or in body cavities [including **keyfob cell phones, smart phones, radio transceivers, etc.**]
- **Constant Sensitivity across the detection area** in pass-through operations
- **Multi-Zone targeting indication** identifies location of contraband on the body
- Covert operation through use of BT wireless headset
- Fully weather proof for outdoor use [IP65 certified]
- 26 hours continuous use on embedded battery operation
- Unmatched detection in all environments without adjustment
- Extremely durable design
- No assembly required: set-up in less than 10 seconds



[www.ceia.net](http://www.ceia.net)



*Threat Detection through Electromagnetics*

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.

**The illegal use of cell phones is a growing and dangerous problem in correctional institutions worldwide. These devices are a significant threat to prison security and circumvent the monitoring processes in prisons, while allowing inmates to commit new crimes both inside and outside the facility.**

**The MSD was specifically designed to detect all cell phones and ferrous contraband concealed on the person or in body cavities quickly and easily. The one-piece design allows the MSD to be easily transported and operational in 10 seconds.**

## BENEFITS

- Detection of magnets and ferromagnetic metals
- Full-height, 360° detection (horizontal & vertical)
- 5 individual zones for pinpointing locations of contraband on the body
- Covert operation through use of BT wireless headset (included)
- Fully weather proof for outdoor use
- 24 hours typical / 26 hours max. of continuous battery operation with 4.5 hours charge
- One-piece and lightweight design (total weight only 9,5 kg with batteries included) easily transportable by one person
- Unmatched detection in all environments without adjustment
- Extremely durable design using stainless steel and high impact reinforced plastics
- Anti-tip suction cups for securing to smooth floor surfaces (included)
- Non-emitting device: safe for use for pace-makers and other medical implants
- Throughput: 60+ people per minute (based on uninterrupted flow, separately alarms resolution)



## CARRYING CASE FOR PERSONAL TRANSPORT AND STORAGE

- Heavy-duty lightweight carry system
- Custom fit to the MSD shape
- Dedicated pocket for accessories
- Space-saving
- Included parts:
  - MSD Ferromagnetic Detector unit
  - Test sample
  - External AC/DC battery charger adapter
  - Carrying case

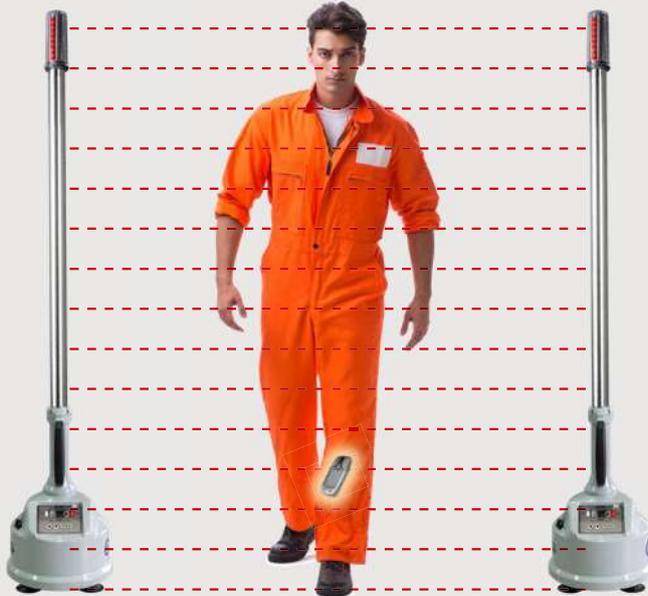




### MSD EVO™ OPTION

Even though the MSD is typically used as a stand-alone single pole, the **new MSD Pass-through configuration with EVO option** defines now the possibility to operate on a transit width **up to 180 cm with constant detection sensitivity from pole to pole**. Moreover, **this new uniform solution allows the reliable screening of in-mates transiting through a corridor, the surveillance of large transit openings and an extremely accurate investigation of mattresses and other objects that could hide contraband.**

### MSD EVO™ PASS-THROUGH CONFIGURATION



Thanks to the special EVO analyses, the access point configuration works with uniform detection sensitivity over the entire transit area.



Accurate investigation of mattresses and other objects that could hide contraband.

### BRIGHT MULTI-COLOR STATUS INDICATOR



#### GREEN LIGHT

NORMAL OPERATION, NO DETECTION.

#### YELLOW LIGHT

WARNING PROPORTIONAL INDICATION: TARGET DETECTION UNDER THE ALARM THRESHOLD.

#### RED LIGHT

ALARM PROPORTIONAL INDICATION: TARGET DETECTION OVER THE ALARM THRESHOLD.

#### BLUE LIGHT

CONNECTING BT DEVICE IN PROGRESS.

### COVERT ALARM SIGNALING VIA BT HEADSET (OPTIONAL)

Warning indication for signal under the alarm threshold, with fixed or proportional pitch



Match each single MSD unit or MSD EVO pass-through gate

Alarm indication for signal over the alarm threshold, with fixed or proportional pitch

Warning and alarm indications adjustable in continuous/pulsed tone and volume

Low battery: double beep

Self-diagnosis alert: intermittent tone

## SPECIFICATIONS

### CONTROLS AND INDICATORS

ON/OFF push-button									
4-key keypad, for programming and status readout									
Programming of operational parameters and downloading of data logger by smartphone or portable PC									
SECURITY	<ul style="list-style-type: none"> <li>• Password protected programming at User and Supervisor level</li> </ul>								
MULTI-COLOR STATUS AND ALARM WARNING LIGHT	<table border="0"> <tr> <td style="background-color: #008000; color: white; padding: 2px;">GREEN LIGHT</td> <td>• Normal operation, no alarm</td> </tr> <tr> <td style="background-color: #FFD700; color: black; padding: 2px;">YELLOW LIGHT</td> <td>• Detection of ferromagnetic object below alarm threshold</td> </tr> <tr> <td style="background-color: #FF0000; color: white; padding: 2px;">RED LIGHT</td> <td>• Detection of ferromagnetic object above alarm threshold:                             <ul style="list-style-type: none"> <li>- Full height alarm indication</li> <li>- Indication proportional to signal intensity</li> <li>- Alarm indication with 5 different localization zones</li> <li>- Full height alarm indication, followed by zonal signalling</li> </ul> </td> </tr> <tr> <td style="background-color: #0000FF; color: white; padding: 2px;">BLUE LIGHT</td> <td>• Connecting BT wireless device in progress</td> </tr> </table>	GREEN LIGHT	• Normal operation, no alarm	YELLOW LIGHT	• Detection of ferromagnetic object below alarm threshold	RED LIGHT	• Detection of ferromagnetic object above alarm threshold: <ul style="list-style-type: none"> <li>- Full height alarm indication</li> <li>- Indication proportional to signal intensity</li> <li>- Alarm indication with 5 different localization zones</li> <li>- Full height alarm indication, followed by zonal signalling</li> </ul>	BLUE LIGHT	• Connecting BT wireless device in progress
GREEN LIGHT	• Normal operation, no alarm								
YELLOW LIGHT	• Detection of ferromagnetic object below alarm threshold								
RED LIGHT	• Detection of ferromagnetic object above alarm threshold: <ul style="list-style-type: none"> <li>- Full height alarm indication</li> <li>- Indication proportional to signal intensity</li> <li>- Alarm indication with 5 different localization zones</li> <li>- Full height alarm indication, followed by zonal signalling</li> </ul>								
BLUE LIGHT	• Connecting BT wireless device in progress								
ALARM SOUNDER	<ul style="list-style-type: none"> <li>• Alarm indication for target over the alarm threshold:                             <ul style="list-style-type: none"> <li>- Fixed tone</li> <li>- Tone proportional to signal intensity</li> <li>- Single pulse for pinpointing target</li> </ul> </li> <li>• Alarm tone can be selected, continuous and intermittent</li> <li>• Self-diagnostics signal: intermittent tone</li> </ul>								
BT HEADSET (ACCESSORY)	<ul style="list-style-type: none"> <li>• Copies all acoustic indications, with the addition of checking BT connection</li> </ul>								

POWER SUPPLY	AC/DC external power adapter	100 ... 240 V~ , 47...63Hz, 40W
	Embedded rechargeable battery	16h typical / 17h max. of continuous operation with 3 h battery charge 24h typical / 26h max. of continuous operation with 4.5 h battery charge

DETECTOR ENVIRONMENTAL CONDITIONS	Working temperature	-10°C to +65°C
	Storage temperature	-37°C to +70°C
	Relative humidity	0 to 95%, non-condensing

WEIGHT	<ul style="list-style-type: none"> <li>• MSD: 9,5 kg</li> <li>• Carrying case: 0,6 Kg</li> <li>• AC/DC adapter: 0,7 Kg</li> <li>• Installation kit: 0,3 kg</li> <li>• BT kit: 0,2 kg (includes battery charger)</li> </ul>
--------	--

MSD DIMENSIONS	Height: 1900 mm	Width: 330 mm
----------------	-----------------	---------------

SHIPPING INFORMATION	Dimensions (WxDxH)	400 mm x 2000 mm x 480 mm
	Weight	24 kg

DEGREE OF PROTECTION IP65 for indoor and outdoor use

AVAILABLE ACCESSORIES	EVO function activation	code 88918	
	BT wireless audio function activation. Includes a headset with AC/DC charger	code 88919	
	MSD-RRU Remote Relay Unit	code MSD-RRU	
	App CEIA FMD: the application allows monitoring of the device, adjustment of the settings and downloading of data logger. Available on Google Play Store. REQUIREMENTS: Android 7.0 or later, BT interface available	-	
	Solid rubber feet	code 88917	
	MSD Demo Kit - Kit of demonstration objects, consisting of: BT wireless headset • Hair pins • Hospital pager • Magnet • Medical scissors • Micro cell phone • Micro smartphone • Needle • Razor blades • Transceiver • Voice recorder	code 89052	
	MSD Maintenance Kit: Set of main spare parts and necessary tools	code 89051	
	MSD Training Kit: Set of innocuous items tampered creating a concealed space for hiding small size threat objects.	code 89054	
	MSD EVO™ Connecting Cable	Length 2.7 m	code 95376
		Length custom, up to 25 m	code 95494
Standing mat: self-adhesive mat with indication of position and rotation	code 94590		



### PASS-BY OPERATION



### PASS-THROUGH OPERATION



### HORIZONTAL OPERATION



### CERTIFICATION AND COMPLIANCE

Passive device: safe for use for pacemakers and other medical implants

Compliant with the applicable electromagnetic Standards on Human Exposure and pacemaker safety

Compliant with and certified to the applicable International Standards for electrical safety and EMC



CEIA - Zona Industriale 54, 52041 Vicinaggio - Arezzo [ITALY]  
T +39 0575 4181 • F +39 0575 418298 • E infosecurity@ceia-spa.com

www.ceia.net

