Rapiscan® systems

An OSI Systems Company

METOR 6M

WALK-THROUGH METAL DETECTOR

Frequently Asked Questions

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METOR 6M

FREQUENTLY ASKED QUESTIONS

What type of applications is the Metor 6M best suited for?

Metor 6M is used primarily for weapons detection. Typical applications are passenger screening at airports and sea-ports, visitor screening at courthouses, federal buildings and prisons, access control in conferences, public buildings, sporting or other special events, stadiums and concerts, employee and visitor screening in power plants or factories, loss prevention in different industrial applications as well as visitor screening in hotels, restaurants, casinos, night clubs, etc.

What is Metor 6M designed to detect?

Metor 6M is a state-of-the-art metal detector designed to detect ferrous and nonferrous handguns – either complete or dismantled – and knives as well as other threat items.

What kind of environment can the Metor 6M be used in?

Metor 6M is designed to be used in indoor installations or sheltered outdoor installations (protection class IP 55). The ambient operating temperature range is –20 °C to +70 °C (-4 °F to +158 °F).

What does the metal detector weigh?

Metor 6M weighs 66 kg / 146 lbs.

What type of electrical outlet is needed?

The Metor 6M uses a standard electrical outlet.

Why was the unit designed with an external power source?

The use of external power source improves the unit's stability and simplifies maintenance due to an off-the-shelf power supply.

How is tampering of the unit prevented?

All the connections are inside the locked crosspiece. The unit is equipped with a "Power Guard" that prevents tampering with the power source – there are audible and visual alarms when the main power is lost.

How many frequencies are available?

Metor 6M has 10 operating frequencies – all suitable for side-by-side use.

How close can Metor 6M be placed to another walk through metal detector without interference or cross talk?

The recommended minimum distance for side-by-side use of several Metor 6M units is 20 cm (8 in.). Naturally, the minimum distance depends on the surrounding environment and the detection settings.

Can the unit be used in conjunction with an X-Ray?

Yes, Metor 6M can be used in conjunction with an x-ray. The minimum distance is 20 cm (8 in.) when installed next to lead shielding of the x-ray unit. We recommended that the receiver panel is installed away from the x-ray.

How does Metor 6M work with interference?
Metor 6M has excellent immunity against electromagnetic interference as well as other interference sources. This is due to coil design and carefully selected operation frequencies together with advanced digital filtering.

How many zones does Metor 6M have? And how many of these zones are adjustable?
Metor 6M has a zone display that consists of twenty (20) individual vertical light segments, which light up separately to indicate the position of the detected item(s). Zone display is separate from detection coils. When it comes to multi zone detection, the Metor 6M unit has 9 overlapping adjustable detection zones. There are separate overall and floor sensitivity adjustments for fast calibration.

Does the unit come pre-programmed with programs that fulfil international security standards?
Metor 6M has several detection programs standard. Programs are based on real threat items defined by international standards.

How many detections programs are available?
The Metor 6M is delivered with 14 different detection programs. The programs can be divided into three main groups:
• Metor general purpose detection programs
• International security programs
• Material selective programs

Can more than one Metor 6M be linked with MetorNet?
Yes, MetorNet enables networking over Ethernet of 255 Metor 6M units.

Can Metor 6M be linked with other Metor metal detectors using MetorNet?
Yes, Metor 6M can be networked with any Metor walk through metal detector using MetorNet.

Does the system come with a warranty?
Metor 6M comes with the standard Rapiscan Systems 2-year warranty on parts and labor.

How many Metor 6M Metal Detectors can be shipped in one container?
- 40-ft container fits 98 Metor 6M units.
- 20-ft container fits 42 Metor 6M units.

What options are available with Metor 6M?
Metor 6M is available with the following options:
- Battery back-up system to ensure up to 8-hours runtime after main power failure
- Wireless remote control unit to enable easy programming
- Integrated traffic lights
- ADA compliant 32" crosspiece
- Test pieces to assist in calibration and testing
- MetorNet Remote Security Management System for networking over Ethernet

Battery-back up?
Metor 6M is available with optional battery back-up that provides up to 8-hour runtime when no power is available.

Does Metor 6M come with or can it be equipped with a remote control unit?
A wireless remote control unit is an option for the Metor 6M.

Is the unit pass code protected? If yes, how many user levels are available?
Metor 6M has multiple password protected user levels. As user rights are fully configurable, each user level can have individual access rights and passwords.

What kind of alarm indicators Metor 6M has?
Metor 6M has both acoustic and visual alarm indicators. Audible alarm has 9 volume settings with minimum volume setting, 6 tones and adjustable alarm on time. Visual alarm is indicated on display unit and zone display. Both alarm on -time and zone on –time are adjustable.

Can the volume on the unit be lowered to silent?
The alarm volume can be silenced.

How loud is the unit?
The maximum alarm volume of Metor 6M is 90 dBA (measured at d = 100 cm (39 in.), hfloor = 177 cm (70 in.)).

Is the unit available with a 32" crosspiece to meet ADA compliance?
Yes, Metor 6M is available with 32" crosspiece to meet ADA requirements.

Are there mounting brackets?
Mounting brackets are not needed. The Metor 6M can be permanently installed through fixing holes located in boots.

Who are your competitors?
Main competitors are Ceia HI-PE Multizone, Ceia PMD2, Ceia 02PN20 and Garret PD 6500i .

Replaces old Metor models?
Metor 6M will replace Metor 200 and Metor 250. In some application it will also replace Metor 300.

What is a Power Guard?
The Power Guard monitors the input power giving a warning when there is a loss of power.

What is a Calibration Guard?
The Calibration Guard monitors calibration parameters and gives a warning when any of the saved calibration parameter values are changed. This a unique feature to stop tampering.

Traffic Counters?
Metor 6M has intelligent traffic counters as a standard feature. Virtually invisible traffic counters are integrated inside coil panels.

Does the Metor 6M register a ready state violation?
Metor 6M alarms if someone passes the unit when it is not ready.

Are there configurable user levels?
Metor 6M has user levels with fully configurable user rights. This enables multiple user levels with individual access rights and passwords.

Are there UI language versions?
Available on a case-by-case basis.

How do you upgrade the software?
Easy upgrades using an SD card.

Certifications of Approval
Metor 6M has the following third party approvals:
- EMC (Electromagnetic Compatibility) (Nemko)
- Magnetic Field Safety (STUK - Radiation and Nuclear Safety Authority, Finland)
- Electrical Safety (Nemko)
- IP Protection Class IP55 and Vibration (VTT Technical Research Centre of Finland)

Metor 6M

Walk-through Metal Detector

PEOPLE SCREENING

Versatile Applications

Superior Immunity

Automated and Advanced Features for Enhanced Security

The Metor 6M is a multi-purpose multi-zone walk-through metal detector used primarily for weapons detection. Typical applications include passenger screening at airports and seaports, visitor screening at courthouses, federal buildings and prisons, access control in conferences, public buildings, sporting or other special events, stadiums and concerts, employee and visitor screening in power plants or factories, loss prevention in different industrial applications as well as screening in hotels, restaurants, casinos, and night clubs.

INDEPENDENT ZONES PROVIDE FOR:
- Superior discrimination
- Reliable detection of threat items
- High traffic throughput
- Reliable location of threats

ENHANCED SECURITY

The latest features for advanced security are available on the Metor 6M. Calibration guard, power guard and ready-state violation all protect against unwanted tampering to the machine. Fully configurable user levels allow for unprecedented control over who can view and change settings on the Metor 6M.

ENHANCED FEATURES FOR EASIER USABILITY

Automated sensitivity and floor sensitivity functions make the calibration process easy, eliminating the time consuming trial and error method.

Automated frequency function selects the optimum operating frequency for the installation environment or in case of side-by-side use of more than one unit.

Preset Detection Programs – The Metor 6M is delivered with multiple preset detection programs based on international standards, ready to use immediately.

RANDOM ALARM FUNCTION

The Metor 6M has a random alarm function that enables security personnel to randomly choose individuals for an additional security check.

With the new dual random alarm feature, people who cause a normal alarm are also subject to a random alarm.

INTELLIGENT TRAFFIC COUNTERS FOR RELIABLE STATISTICS

Metor 6M is built with intelligent and virtually invisible traffic counters which are integrated inside the coil panels. Counters are bi-directional with a decrease mode. Alarms, passengers and alarm rates can all be counted.

EASY TO INSTALL AND OPERATE

With its immunity to electromagnetic interference and vibration, the Metor 6M is easy to install in the most demanding environments. Several units can be placed in close proximity to one another, increasing the level of flexibility when planning an installation site.

Options & Accessories

Battery Backup: Up to 8 hours of runtime when no power is available.

Remote Control Unit: A bi-directional remote control unit enables easy programming as well as copying of the parameters from one unit to other units. This control unit, unique only to the Metor brand of walk-through metal detectors, makes programming several detectors fast and easy. The operation of the control unit is secured with passwords and a code-hopping encryption algorithm to prevent unauthorized access.

ADA Compliant Crosspiece: 32 in. crosspieces are available to meet ADA compliance for wheelchair accessibility.

Test Pieces: To assist in calibration and testing.

MetorNet 3 Pro Web: A Remote Security Management System that collects the statistics on traffic flow and alarm data of up to 255 Metor walk-through metal detectors and generates easy-to-read reports.

Traffic Lights: to assist in the smooth flow of people through the machine.

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PEOPLE SCREENING

CUSTOMER SUPPORT

Our team is dedicated to providing a prompt, effective and personalized response that exceeds your expectations. With spare parts inventory and skilled technicians all over the world, you can be certain Rapiscan Systems will always be prepared with a solution to address your requirements. By measuring response time, parts delivery and support status, our team embraces a customer focused philosophy to ensure continual improvement in customer support, products and services.

900 mm (35.4")
760 mm (29.9")
2240 mm (88.2")
2050 mm (80.7")
700 mm (27.6")

CONFORMITY	
Safety Standards	The Metor 6M meets with the limits set by international standards for human safety. Safe for wearers of heart pacemakers, pregnant women and magnetic recording materials.
CE Compliant	Conforms to the applicable international standards for electrical safety and EMC.

SPECIFICATIONS	
Ambient Operating Temperature	From -20 °C to +70 °C (From -4 °F to +158 °F)
Humidity	0 to 95%, no condensation
Protection	IP 55 (EN 60529)
Power Supply	Mains: 90-264V AC/50-60Hz Battery: 12V DC Consumption: 50W (AC), 40W (DC) Fuse: TIA 5x20 mm Power cord length: 2.5 m (8.2 ft).
Alarm	Audible/visible alarm. Alphanumeric display and Zone Display. Relay contact for remote alarm (SPDT)
Sensitivity	100 sensitivity steps in each program. Separate horizontal zones with independently adjustable sensitivity from 0-200%.
Calibration	Automatic or manually set.
Interference Suppression	Digital filtering by signal processor. Several operating frequencies to suppress local electrical noise.
Warranty	Two (2) years, parts and labor
Network Connections	MetorNet Remote Security Monitoring System compatible (Ethernet)
Dimensions	Interior: 760 mm (29.9") Width x Interior: 2050 mm (80.7") Height Exterior: 900 mm (35.4") Width x 2240 mm (88.2") Height x 700 mm (27.6") Depth
Shipping Weight & Volume	Total: shipping weight: 75.5 kg (166.4 lbs) shipping volume: .47 m3 (16.5 cu ft) Net Weight: 58.8 kg (129.6 lbs) Coils: shipping weight: 55.5 kg (122.4 lbs) shipping volume: .35 m3 (12.37 cu ft) Cross bars + electronics: shipping weight: 20 kg (44.1 lbs) shipping volume: .12m3 (4.2 cu ft)

ISO 9001:2008 Certified

M6M-001

APPLICATIONS			
Airports	Prisons	Courthouses	Entertainment Venues
Financial Institutions	Manufacturing Facilities	Loss Prevention	Hospitals
Power Plants	Stadiums	Casinos	Schools

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METOR 6M

TECHNICAL SPECIFICATIONS

General Information

Metor 6M is a state-of-the-art Walk Through Metal Detector developed for demanding security screening applications. The unit has been developed using the latest technology to meet the most demanding security screening requirements. Typical Metor 6M applications include airports and other transportation terminals, public and private buildings such as ministries, embassies, courthouses, schools, corporate security as well as night clubs and casinos. The applications also include visitor screening at conferences and special events.

Benefits

Metor 6M is a very high quality Walk Through Metal Detector with excellent operational performance and versatile capabilities. The key benefits include
- High efficiency screening capability
- Suitability for versatile applications
- Superior immunity
- Built-in advanced features for enhanced security and usability
- IP 55 protection class against intrusion of foreign objects and water

Operation Principle

True Multi-Zone Metal Detection Technology
The Metor 6M uses a unique coil design consisting of nine (9) independent detection zones. These overlapping detection zones are independently adjustable and located vertically on top of each other.
- Moving metal objects cause alarm when the signal exceeds the alarm threshold
- Location of detected object(s) is displayed by the zone display

Continuously Active

The Metor 6M is continuously active. At no time is it possible to toss, pass or slide a weapon through undetected. No photoelectric, infrared, or other sensor device is used to enable and disable the detection circuitry and thus mask the impact of external interference.

Metor 6M Features

High Throughput Rate
Metor 6M is capable of a maximum throughput rate of over 50 persons per minute. The throughput rate is not limited by the performance of the detector but the human factor during the check process (walking speed of people, time spent to check the people who caused alarm, etc.)

Easy Assembly
- Metor 6M's integrated construction allows installation of the unit in 5-10 minutes.
- Crosspiece fits either way.
- Polarized, easy to use connectors.

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Metor 6M Features

Zone Display

Metor 6M has an integrated full-length vertical zone display located on exit side of the transmitter coil panel to indicate the location of the detected metal object(s) being carried through the gate. The zone display timing is adjustable and the display can be enabled or disabled.

Intelligent Traffic Counters

Metor 6M incorporates fully integrated, intelligent traffic counters as a standard feature. The counters are fully integrated inside the coil panels meaning they are completely invisible. The desired direction of travel can be selected and the number of people, number of alarms and alarm percentage can be displayed on the alphanumeric display. The traffic counter can be set to increase the count in one direction and decrease the count in the opposite direction. This type of counter gives a more accurate traffic count, especially when passengers are asked to step back through the gate to divest themselves of alarming metallic items. Alternatively the counters can be set to increase the count in one direction and have no effect in the opposite direction.

Traffic Lights (optional accessory)

The traffic lights facilitate controlling the traffic flow through the checkpoint. The Metor 6M has traffic lights that utilize international signs for "STOP" and "GO". The traffic lights are integrated into the crosspiece in order to provide the best possible visibility. The timing of the traffic lights is adjustable and the lights can be enabled or disabled.

Power Indicator

The top segment of the zone display flashes to indicate that the power is on. This feature can be switched On or Off.

Random Alarm for non-alarming/alarming

Metor 6M can be set to randomly alarm for selected percentage (0-100%) of non-alarming people passing through the metal detector. Random alarms are generated with 1% accuracy. This feature can be switched On or Off. The audio/visual indication of the random alarm can be set to be distinct from the normal alarm indication.

Metor 6M can be set also to generate a distinct alarm randomly for a selected percentage (0-100%) of alarming people to allow random pat down checking of people who generated a natural alarm due to metal items they carried on them. This feature can be switched On or Off.

Calibration Guard

Calibration Guard observes calibration parameters. When any of the calibration parameters are changed from the saved value a warning message is shown. This feature can be switched On or Off.

Power Guard

Metor 6M is equipped with Power Guard that alarms when the unit loses power, i.e. the power cord is disconnected or power source breaks up.

Ready state violation

Monitors the operation of the Metor 6M and alarms in case of a person accessing when the system is not ready for normal operation.

Noise Measurements

Metor 6M has two special noise measurement functions: EM Noise and Total Noise. EM Noise measures only electromagnetic interferences from the environment. Total Noise measures both electromagnetic interferences and mechanical interferences like vibration and moving metal.

Object Speed Response

Metor 6M Portable operates over a wide object velocity range. The low and high speed response of the unit can be independently adjusted.

Parameter Memory

Non-volatile memory is used to store all of the parameters regardless of the power connection. At no time is a battery system required to maintain the parameters when the main power is disconnected.

I/O Configuration

Metor 6M has two configurable digital Input and Output configurations.

Excellent Interference Immunity

- *Static Metal Compensation:* Static metal close to the Metor 6M is compensated by digital filtering.
- *Influence of Moving Metal:* The Metor 6M detection coil design is designed to maximize the ratio between moving metal inside and moving metal outside the detector.
- *Immunity to Mechanical Vibration:* The mechanical construction of the Metor 6M enables an excellent immunity against mechanical vibration.
- *Influence of Electromagnetic Interference:* The carefully selected operating frequencies, together with effective digital filtering, allows for excellent immunity to electromagnetic interference. Furthermore, the coil design of the Metor 6M is optimized to minimize external electromagnetic interference. Metor 6M meets with the requirements of applicable standards for Electromagnetic Compatibility.

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Metor 6M Features

Self Diagnostics

A comprehensive self-diagnostics system continuously monitors the unit's operation. If a fault condition occurs, an alphanumeric readout shall display the exact nature of the problem. Operating personnel cannot override a fault condition prior to it being corrected.

Warranty

Metor 6M has a two-year warranty for parts and labor.

Metor 6M User Interface

Display unit

The display of Metor 6M is equipped with alphanumeric display, keypad, including standby button, status LEDs and audible indicator.

Alphanumeric Display

The alphanumeric display is a 2x20 character display. It indicates the relative size of the metal object on bar graph. All programming and statistical, as well as error information, is shown with explicit text format on the display.

Keypad

The Metor 6M display unit is equipped with a keypad. Keypad has the same function keys as the optional remote control unit.

Standby Button

The Metor 6M's display unit incorporates a standby button. During standby mode metal detection is disabled, traffic lights, display and other possible power indications are turned off. The standby button can be enabled/disabled from the user interface (requires super user privileges).

Status LEDs

The status LEDs consist of Alarm/Wait/Standby LEDs. Alarm/Standby LEDs indicate normal operation. The Wait LEDs indicates that the Metor 6M is in programming mode.
User Interface Menu Structure
The menu structure of the user interface resembles the one widely used in mobile phones. Thus it is already familiar and easy-to-use for most of the users.

Build-in Help Texts

The build-in help text guides the user when navigating through the menu structure. Metor 6M is easy to use even without the manual.

Bi-directional Wireless Remote Control Unit (optional accessory)

Metor 6M can be equipped with a wireless bi-directional remote control unit for programming. Bi-directional function enables loading parameters from one Metor 6M and sending the same parameters to other Metor 6M's. This makes the programming of multiple Metor 6M units easy.
One remote control unit can be programmed to operate several detectors or up to six remote control units can be tuned to a specific Metor 6M.
For programming the Metor 6M there is also a keyboard on the display unit.

Security

In the design of Metor 6M, security of operation has been a high priority.

Secure Connections

All the cabling and connections except external power supply are located inside the locked crosspiece. The crosspiece is key-locked preventing any unauthorized access to the electronics unit or remote control unit.
Metor 6M is equipped with one On/Off switch. The power switch is accessible by opening the crosspiece lid – accessed only with a key.

Access Code Protection

Parameter adjustments are access code protected. Access code protection eliminates any unauthorized tampering with parameters. Only authorized personnel can change the access code.
The user interface locks down after entering a wrong access code three times.
The remote control operation is also secured with code hopping algorithm.
Metor 6M enables both numeric and alphanumeric access codes as user selectable feature.

Fully Configurable User Access Rights

Metor 6M has fully configurable user access rights. This allows different type of users to have access to all or only some specific functions. There are following pre-configured user groups:
Super User
− Access to all parameters
− Access code required for access
User
− View statistical information and clear the counters
− Access code required for access
− Other rights the same as for operator level
Operator
− Read-only level (allowed to read Program and Sensitivity)
− Allowed to adjust volume
− No access code required

Metor 6M has 8 (7+ "User" Group) fully configurable user groups that can have individual access rights. The Super User group is fixed. There can be a total of 99 different users with individual passwords. Each user belongs to one of the 8 configurable user groups or to the Super User group.

Technical Specifications

Mechanical Construction
Metor 6M coil panels use a mechanical construction which gives the whole unit an excellent durability and mechanical stability. The panels are finished in laminate with plastic zone display profiles. The coil panels are equipped with integrated boots that protect the panels against floor washing liquids. The boots include holes for fixing the detector to the floor. The crosspiece is made of aluminum that provides excellent durability in applications requiring multiple installations and dismantles.

Hardware
Metor 6M has an electronics unit in a metal enclosure. The electronics enclosure is located inside the lockable aluminum crosspiece.

Software
Metor 6M software includes weapon detection programs to meet the international requirements as well as material specific detection programs. Operations are easy to upgrade using a SD memory card when future software versions are introduced.

Sensitivity
The sensitivity settings are divided to overall sensitivity and zone sensitivity.
- There are 100 sensitivity steps available to adjust overall sensitivity.
- The zone sensitivity of each of the 9 zones can be adjusted independently. The range of the zone sensitivity setting is 0 – 200 % with respect to the overall sensitivity.

Sensitivity can be calibrated either manually or automatically.
Automatic Sensitivity Calibration
An Automatic interactive Sensitivity Calibration Program enables the detector's sensitivity to be automatically selected for a specific weapon or test object. The user can choose the amount of walkthroughs with the test object(s) on which the automatic sensitivity setting is based (minimum 3 passes).

Automatic Floor Sensitivity Calibration
Metor 6M has an Automatic interactive Floor Sensitivity Calibration Program to help floor level calibration. Program enables the detector's floor level sensitivity to be automatically selected for a specific weapon or test object. The user can choose the amount of walkthroughs with the test object(s) on which the automatic sensitivity setting is based (minimum 3 passes).

Operating Frequency
Metor 6M has 10 operating frequency sets. The operating frequency sets have been carefully selected from the noise free frequency band.

Automated Frequency Search
Metor 6M searches automatically suitable operating frequency during start-up or when the feature is activated from the user interface. This feature can be switched On or Off.

Multiple Unit Operation
Two or more Metor 6M metal detectors can be operated in close proximity. Side-by-side use does not require synchronization cables.

Alarm Indication
Display unit indicates alarm with
- Audible alarm
- Alarm LEDs
- Alphanumeric display with signal display relative to signal size

In addition, alarm is indicated with Vertical Zone Display on the Transmitter coil panel.

Network Connection
Metor 6M is connectable to MetorNet 3 Pro Web security monitoring system through ETHERNET.

Power Supply
Mains, nominal: 100 - 240 VAC
Mains, maximum: 90 - 264 VAC
Mains frequency (nominal): 50/60 Hz
Battery (optional): 12 VDC
Max. power consumption: 50 W (AC), 40 W (DC)
Power cord length: 2.5 m
The Metor 6M has the ability to adjust automatically to variations in line voltage from 90 to 264 VAC or 12 VDC without operator intervention. In an installation site where line voltage regulation is a problem, there will be no degradation in WTMD performance.

Battery Back-up Set (optional accessory)
Metor 6M can be equipped with an optional 12 V DC battery to provide up to 8 hours full operation in case of a main voltage failure.

Operating Temperature
Ambient operating temperature range:
-20°C to 70°C (-4°F to 158°F)

Operating Humidity
Ambient operating humidity range:
0 to 95%

Protection
IP 55, against intrusion of foreign objects and water.

Weight
59 kg (130 lbs)

Dimensions
Interior: 760 mm (29.9") Width x Interior: 2050 mm (80.7") Height
Exterior: 900 mm (35.4") Width x 2240 mm (88.2") Height x 700 mm (27.6") Depth

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Regulatory Information

Standards and Directives
- European Electromagnetic Compatibility (EMC) Directive 2004/108/EC
- EMC Standard – IEC/EN 61000-6-3:2006/2007 (Emission)
- EMC Standard – IEC/EN 61000-6-1:2005/2007 (Immunity)
- European Low Voltage Directive 2006/95/EC
- Safety Standard - EN 60950-1 (Electrical Safety)
- Federal Communications Commission Class B Standards for noise emission from electrical equipment

Magnetic field safety
Safe for persons with pacemakers and pregnant women

Complies with the following standards and recommendations
- 1999/519/EC - European Union Council recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)
- 2004/40/EC – European Union Parliament and Council Directive on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields)
- ICNIRP 1998 – Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields up to 300 GHz
- IEEE Std C95.6 (2002) – IEEE standard for Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 0 to 3 khz.
- IEEE Std C95.1 (2005) – IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- ACGIH-0302 (2002) (Occupational) – The American Conference of Governmental Industrial Hygienists guidelines to occupational exposures only.

Additional Safety Information
No Metor products will erase, alter, or damage magnetic storage media including credit cards, computer floppy disks, tapes, or IC's. The effects from the operation of the electronics and the low intensity magnetic fields of the Metor Walk Through Metal Detectors are harmless to people with pacemakers, pregnant women, the operator, and general pedestrian traffic.

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	METOR 6M	CEIA PMD2	GARRETT 6500I
Protection class	IP55, Indoor and sheltered outdoor use	IP20 for Indoor use IP65 for sheltered outdoor use available as an option	IP55, Indoor and sheltered outdoor use.
Construction	Coil panels: laminate Cross piece: aluminum	Coil panels: laminate Crosspiece: MDF	Coil panels: laminate Crosspiece: aluminum
Weight	59 kg / 130 lbs	74 kg / 163 lbs	64 kg / 141 lbs
User friendliness	Excellent features: • auto sensitivity, auto floor sensitivity • auto frequency • menu-type GUI • On/standby soft key	• cumbersome menu structure • no automated features	• cumbersome menu structure • no automated features
Continuously Active	Yes, continuously ready to detect items	Yes, continuously ready to detect items but highly susceptible to mechanical vibration	Continuously active operation mode available, but as a standard the unit utilizes operating mode which is active only when someone passes through the gate. This is due to poor interference immunity.
Location display	Accurate location display with multiple items	Location function not accurate with multiple items	Advertised with "33 pinpoint zones" - not accurate with multiple items
Automatic frequency selection	Standard • automated or manual activation • excellent feature e.g. when installing multiple units	Not available	Not available
Automatic sensitivity selection	Standard • sophisticated interactive operation • separate automatic selection for base and floor sensitivity	Not available	Not available
Stand-by mode	Standard • fast operation, only by pressing one button • simultaneous start-up of the WTMD when re-opening the checkpoint • can be deactivated	cumbersome operation, several button presses required	Not available

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	METOR 6M	CEIA PMD2	GARRETT 6500I
Calibration guard	Standard • monitors detection parameter settings • alarms in case of parameter change	Not available	Not available
Power guard	Standard • alarms in case of mains power outage or internal power failure	Not available	Not available
Ready state violation	• alarms in case of person accessing when system not ready to detect	Not available	Not available
Traffic lights	Optionally available • integrated in the crosspiece • clearly visible, international signs	Not available	Standard
Traffic counters	Standard • integrated (invisible) inside the zone display • bi-directional with decrease mode • counts alarms, passengers and alarm rates	Optional • bi-directional	Standard • bi-directional
Wireless remote control unit	Optionally available • bi-directional • can be used to control one or multiple units	Not available	Not available
Security	multiple access codes user interface lock-up in case of feeding faulty access three times all cables & electronics unit inside crosspiece	Cables exposed to tampering key-locked electronics unit 2 password levels, 1 configurable	3 user levels, not configurable tamper alarm in case of faulty access code cables & electronics unit inside crosspiece
Programs	14 detection programs including weapon detection and material selective programs	9 detection programs	18 detection programs including weapon detection and material selective programs
Immunity	Good against electrical interference Good against mechanical interference	Good against electrical interference Poor against mechanical interference	Poor against electrical interference Good against mechanical interference
Random alarm with dual operation	Standard with dual operation • random alarms on selected percentage of non-alarming people • random alarms on selected percentage of alarming people • adjustable from 0-100 percent	Not Available	Standard • adjustable from 0-50 percent
Parameter Copying	Parameters can be copied from 6M to remote control unit (optional) and vice versa.	Parameters can be copied to blank chip cards (option) and then loaded from the chip card to the WTMD.	No
Configurable user levels	1 super user level 8 fully configurable user levels up to 99 users with individual user rights and passwords	1 super user level 1 configurable user level	3 user levels, not configurable
Side-by-side use	excellent side-by-side capability unlimited number of units can be installed side-by-side no synchronization cables required	good no synchronization cables required	synchronization cables required if not connected into the same AC line only two frequencies for side-by-side use, i.e., only two units can operate next to each other without synchronization cable
Battery back-up	Optional • up to 8 hours operating time • locates Inside crosspiece	Optional • 5 hours operating time • external, IP 65 (outdoor)	Optional • 10 hours • locates Inside crosspiece

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