

**ThruScan**<sup>®</sup> Metal Detectors

# Renaissance in Metal Detection

**NIJ** and **ECAC**  
Compliance

\***ECAC** (European Civil Aviation Conference)  
**NIJ** (National Institute of Justice - USA)



**ThruScan**<sup>®</sup>  
Metal Detectors



**SINCE 1978**

Yesterday, today, tomorrow...  
Always with you!..

Elektral A.S. was founded by Mr. Sayil Dincsoy M.Sc. in 1978. Starting from the beginning high technology based productions with quality certificates are committed with the production integration. These can be expressed as Research & Development, Electronics, SMT Production Lines, Electromechanical & Mechanical Workshops, Moulding Workshops, Plastic Injection / Thermo-forming Groups, Metal Press Groups ... etc.

With the encouragement of the State Planning Organization of the Republic of Turkey, we have recently reached to 3 factories of a closed 20.000 sqm production area. Most of our products have been produced for the first time in Turkey and have gained remarkable reputation. Today with a wide range of production spectrum our products are being sold in national and international markets (in more than 60 countries). Elektral, as a representative and a co-producer, cooperates with EU, Germany, USA, Europe / Far East and Asian Companies on co-production, OEM, ODM, Representation and Import/Export basis.

Our company continues with its research and development studies under ISO 9001:2008 procedures in the fully equipped R & D Laboratory. The production is in conformity with NILECJ 0601, NIJ 0601.02, NIJ 0601.03, American Standards, ECAC (European Civil Aviation Conference) Doc 30 Latest Standards, complies to CE Norms and ISO 9001:2008 QMS procedures.

The products are custom designed in consideration of the end user expectations. Easy mounting features, user friendly programming and flexible operation provides installation comfort to technicians without any previous training. All connections are being pre-adjusted to prevent wrong operations.

Elektral A.S. contributes to International Security & Defence sectors with its dense R&D activities and production of Walk-Through & Hand-Held Metal Detectors for a sustainable growth. We strongly believe that a real expansion can only be possible with a global thinking, and this understanding motivates our personnel. We dedicate ourselves to manufacture Top Quality, High-Tech Products in the global competition.

 **ELEKTRAL**<sup>®</sup>

# ThruScan sX-i

**ThruScan**<sup>®</sup>  
Metal Detectors

Meets International Norms



ThruScan fully complies with Internationally accepted Security Standards such as ECAC Std1-Std2-Std3, NIJ 0601.02 SMALL- MEDIUM-LARGE Objects, NIJ 0601.03, CE European Union Norms and is produced under ISO 9001: 2015 QMS.



ULTRA HIGH SENSITIVITY, Ferrous / Non-Ferrous, Magnetic /Anti-Magnetic Metals and Mixed Alloys, Small-Medium-Large Objects Detected Easily with High Accuracy.



Excellent Reliability and Discrimination Capability, High Efficiency. Detects threat objects and warns with alarm, allows non-threat objects



State of the art Mobile/Tablet Application for remote control and easy adjustments.



Wi-fi Connection



Ethernet Connection



USB Connection



Eliminating Environmental Interferences using AUTOMATIC FREQUENCY SELECTION feature. Not affected by Two-way Radios & Walkie Talkies Distortion Effect



Due to the Auto Calibration and Auto Configuration feature, it does not need re-calibration when the detector is relocated or new Magnetic Objects brought Near-By.



Automatic Installation System feature simplifying setup to one-touch of a button.



60 persons per minute passing speed, Transit Speed Detection, Fast / Slow Speed Alarm warning



Communication capability using Mobile Phone, Tablet or PC through Wi-Fi, Ethernet, USB, RS-232, RS-422, RS-485 allowing access (through Mobile Network and/or Internet) to settings and statistics from any location all over the world.



One device can connect to and control MULTIPLE NUMBER of Walk Through Metal Detectors.



Smart Counter feature providing the elimination of repeated/fake counts during WTMD scans in airports.

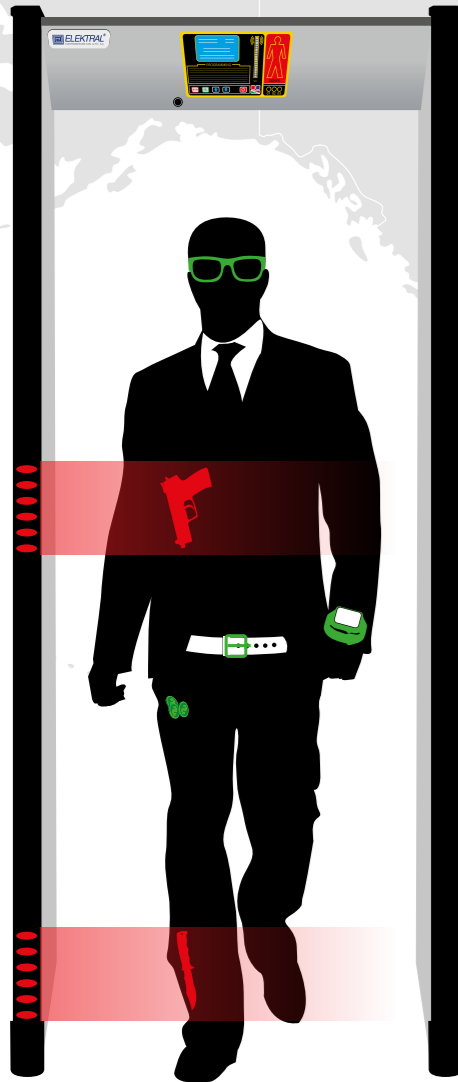


User Friendly Interface and Very Easy to Mount and Assemble



# ThruScan sX-i

**ThruScan**<sup>®</sup>  
Metal Detectors



**DISCRIMINATION**

**Distinguishes non-threat objects**

**Warns for threat objects with alarm**

The Excellent Discrimination ability of the detector allows to easily distinguish between Threat Objects and Non-Threat Objects from the top to the bottom of the Walk Through Metal Detector.

Adjustable Total Alarm rate according to the pre-set Random Alarm Rate and if required optionally selected ETD Alarm Rate ratio, also allowing different alarm tones.

45 sensitivity levels with 300 adjustable sensitivity steps at each, several Sensitivity Program and 20 pre-set Security Programs.

Separate Sensitivity Adjustment for Different Detection Zones, Individual Detection and/or in Combination Detection capability. Secondary adjustable Alarm Level for Threat Objects

0-100% adjustable Random Alarm Feature enabling to scan required number of clean visitors.

Adjustable ETD Alarm Rate (0-100%) allowing to set the WTMD to randomly alarm with a different tone for persons with or without triggering metal alarms.

Fast Scanning from top to bottom and high performance achieved by accurately pointing at the area where metals are detected on the people passing through.

Optional REAL-TIME VIDEO PROSECUTION UNIT / FACE RECOGNITION UNIT enabling recording of Alarmed /All Visitors photos or videos.

The immunity of the detector to the Environmental Interferences and Environmental Noise makes it suitable to be used in all sorts of environments, especially in Military Premises, Courts and Airports.

**LNG** Standard menu language in English, German, Spanish, (Optional Russian, Japanese, Polish, Bulgarian... etc.)

64 x 128 GLCD, Seven digits IN/OUT counter, Metal Density Display by 10-level-VU meter, Green / Red bi-colour traffic LEDs.

Human Health friendly Very Low Frequency (VLF) technology, No harm caused to Pace Makers, Pregnant and Magnetic Media.

Weather Resistant IP 65 Protection (EN 60529), EN 60068, EN 60950 Class1, Certified in Compliance to EN 61000-6-3, EN 61000-6-1 regulations and in compliance with DIRECTIVE 2002/95/EC.

Real Time Environmental Magnetic Noise Level Graphical Display and BITE - Built In test Equipment allowing automatic display of failures.

Built-in UPS enabling 2 hours operation without mains and Non-Volatile Micro-Processor Memory Settings.

Multi-Zone Detection.

35 different alarm tones 10 Volume Levels

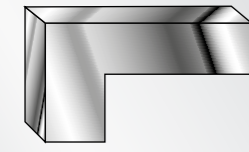
Four-digit changeable digital Pin Code and Mechanical Lock.

## Technical Features

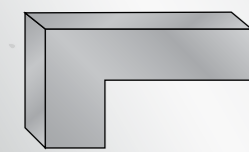
**Ambient Temperature:** -20°C to+70°C  
**Opr. Voltage:**70VAC-270VAC/50Hz-60Hz  
**Power:** 10W Standby-20W Alarm  
**Net Passage:** 72 x 68 x 200 cm  
**External:** 83 x 68 x 220 mm  
**Package Dimensions (W x L x H):**  
**Box 1:** 81 x 235 x 21 cm (65 Kg)  
**Box 2:** 43 x 81 x 27 cm (14 Kg)  
**Net Weight:** 61 Kg  
**Gross Weight:** 79 Kg

# ThruScan sX-i MD Class 1 Objects Test

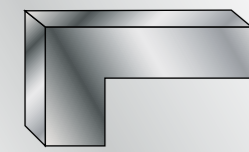
## MD Class 1 Objects (Large Size Objects Considered as Threat Objects)



Steel Pistol



Zinc Pistol

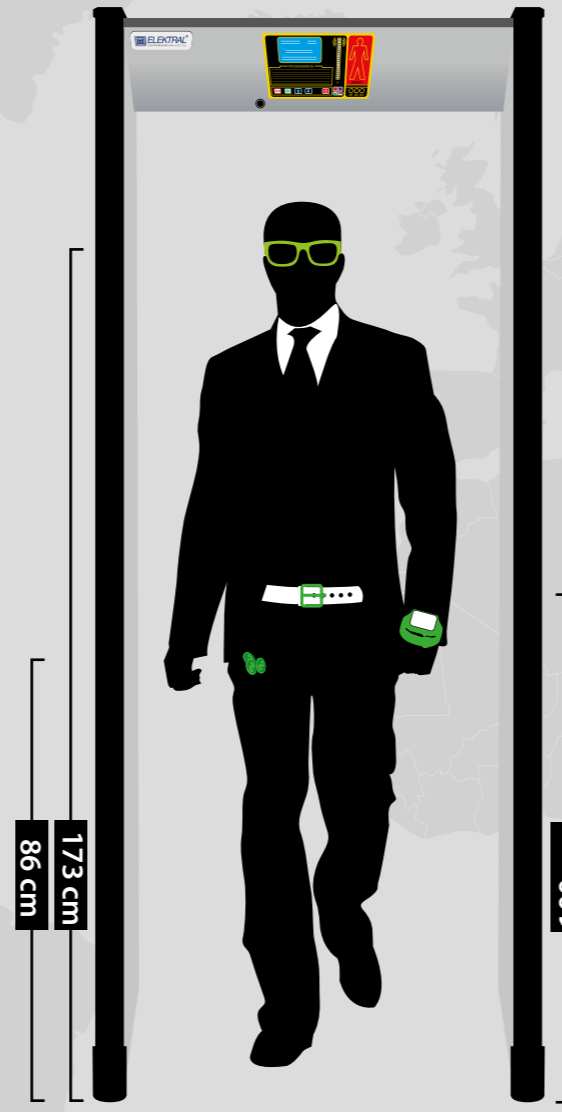


Aluminum Pistol



**CLEAN TEST**

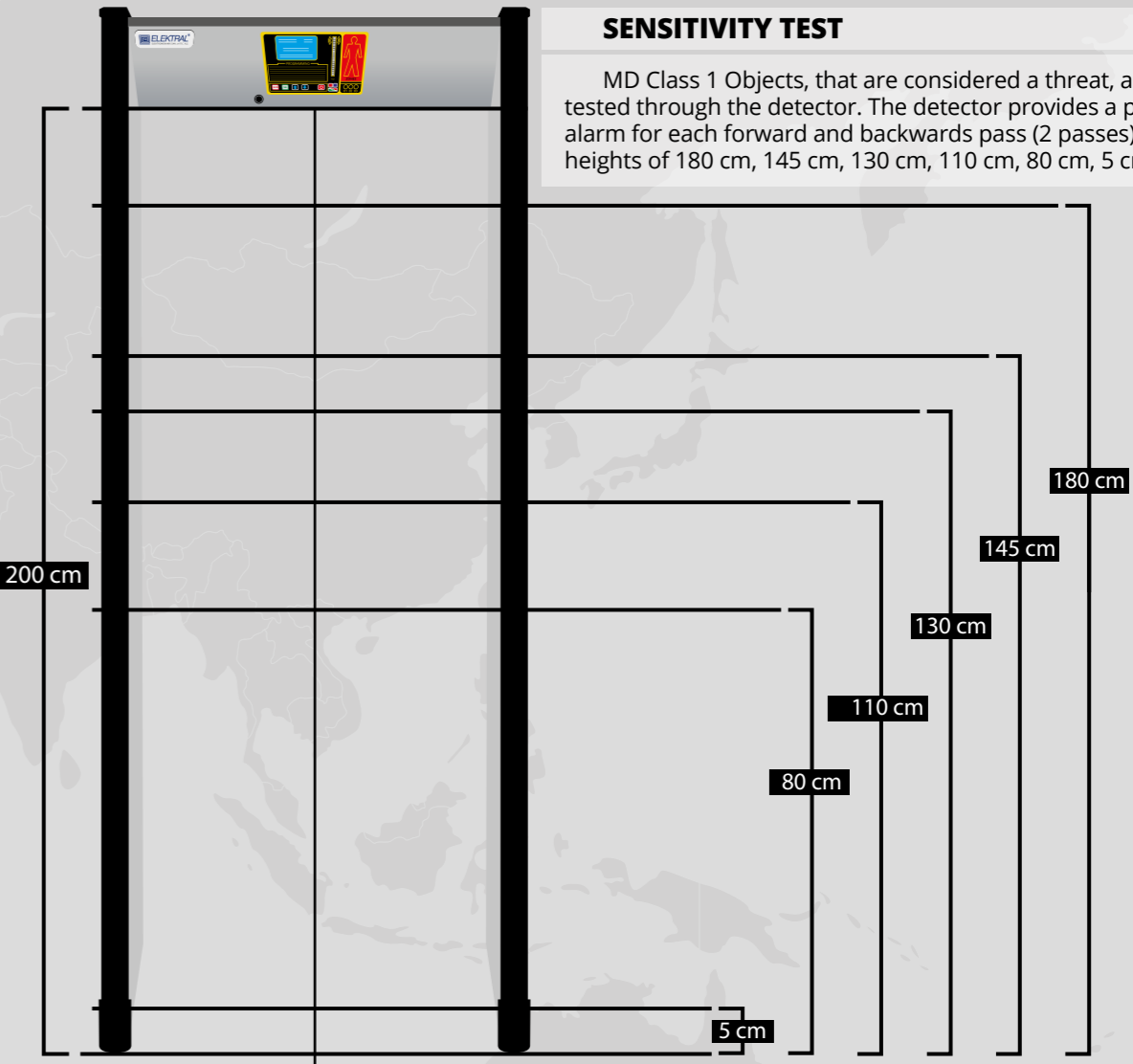
During the MD Class 1 CLEAN Test, a Clean tester (a person not carrying any electrically conductive objects such as metallic belt buckle, a cardiac pacemaker, jewelry, metallic surgical implants, or similar) passes 4 times at the speed of 0,5...1,0...1,5 m/s and the detector does not provide a positive alarm.



**INNOCUOUS ITEMS TEST**

During the MD Class 1 Test (Large Objects Test) without readjustments, ThruScan sX-i Walk Through Metal Detector does not provide more than 5 positive alarm indications for 25 consecutive trials when tested with the non-threat test objects of Eyeglasses, Coins, Watch and Belt Buckle on the person, passing through at a walking speed of 0,5...1,0...1,5 m/s.

The test is carried out while non-threat object Belt Buckle is at 100 cm, Coins at 86 cm, Watch at 90 cm and the Eyeglasses are at 173 cm position. This test shows that the probability of false alarm is less than 0.2 (or 20 %).



**SENSITIVITY TEST**

MD Class 1 Objects, that are considered a threat, are tested through the detector. The detector provides a positive alarm for each forward and backwards pass (2 passes) at the heights of 180 cm, 145 cm, 130 cm, 110 cm, 80 cm, 5 cm.

# ThruScan sX-i MD Class 2 Objects Test

## MD Class 2 Objects (Medium Size Objects Considered as Threat Objects)



Steel Knife

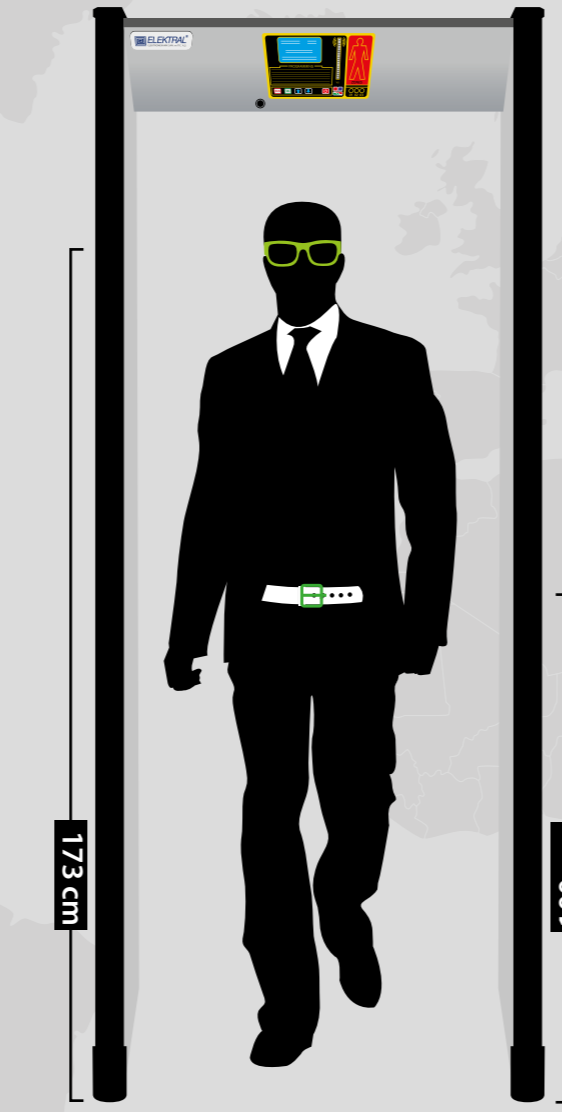


Aluminum Knife



**CLEAN TEST**

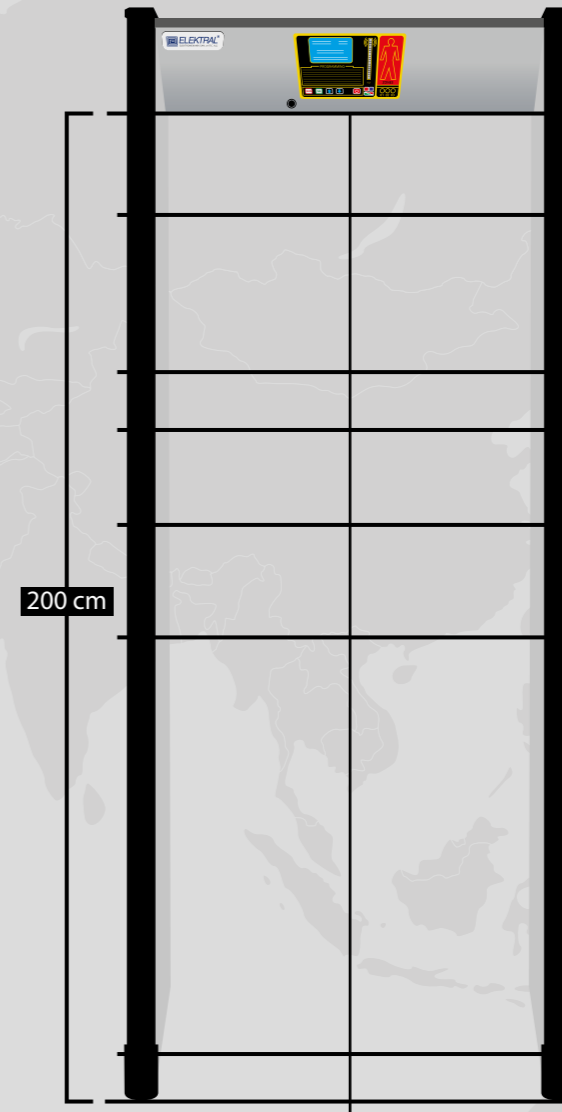
During the MD Class 2 CLEAN Test, a Clean tester (a person not carrying any electrically conductive objects such as metallic belt buckle, a cardiac pacemaker, jewelry, metallic surgical implants, or similar) passes 4 times at the speed of 0,5...1,0...1,5 m/s and the detector does not provide a positive alarm as same as in MD Class 1 Objects Clean Test.



**INNOCUOUS ITEMS TEST**

During the MD Class 2 Innocuous Items Test (Medium Objects Test) without readjustments, ThruScan sX-i Walk Through Metal Detector does not provide more than 5 positive alarm indications for 25 consecutive trials when tested with the non-threat test objects of Eyeglasses and Belt Buckle on the person, passing through at a walking speed of 0,5...1,0...1,5 m/s.

The test is carried out while non-threat object Belt Buckle is at 100 cm and the Eyeglasses are at 173 cm position.



**SENSITIVITY TEST**

MD Class 2 Objects, that are considered a threat, are tested through the detector. The detector provides a positive alarm for each forward and backwards pass (2 passes) at the heights of 180 cm, 145 cm, 130 cm, 110 cm, 80 cm, 5 cm.

# ThruScan sX-i MD Class 3 Objects Test

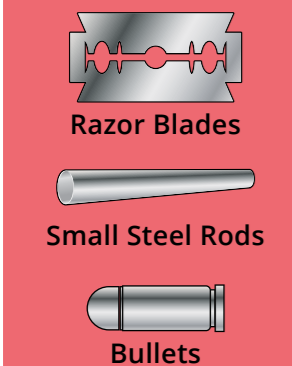
## MD Class 3 Objects

(Small Size Objects Considered as Threat Objects)

NIJ-0601.02

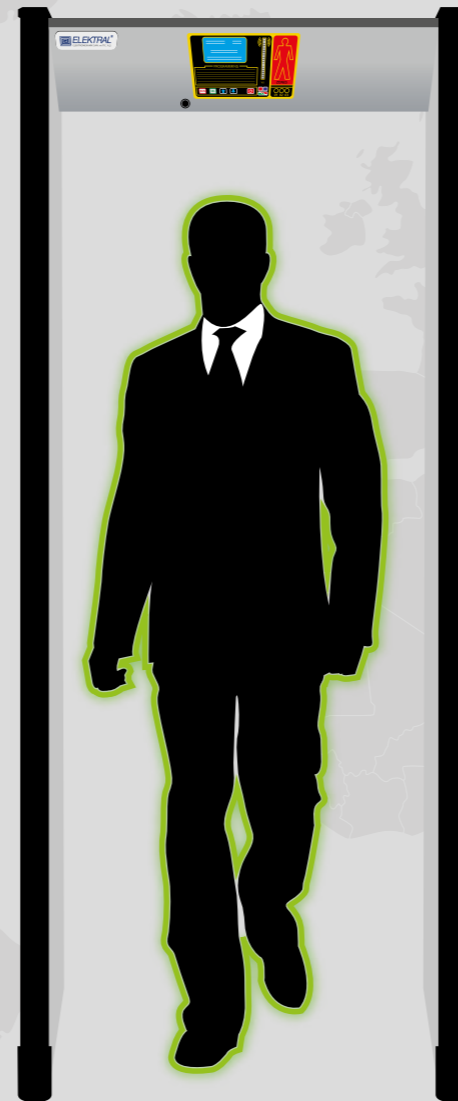


NIJ-0601.03



### CLEAN TEST

During the MD Class 3 CLEAN Test, a Clean tester (a person not carrying any electrically conductive objects such as metallic belt buckle, a cardiac pacemaker, jewelry, metallic surgical implants, or similar) passes 8 times at the speed of 0,5...1,0...1,5 m/s. The detector does not provide a positive alarm during all 8 passes.



### INNOCUOUS ITEMS TEST

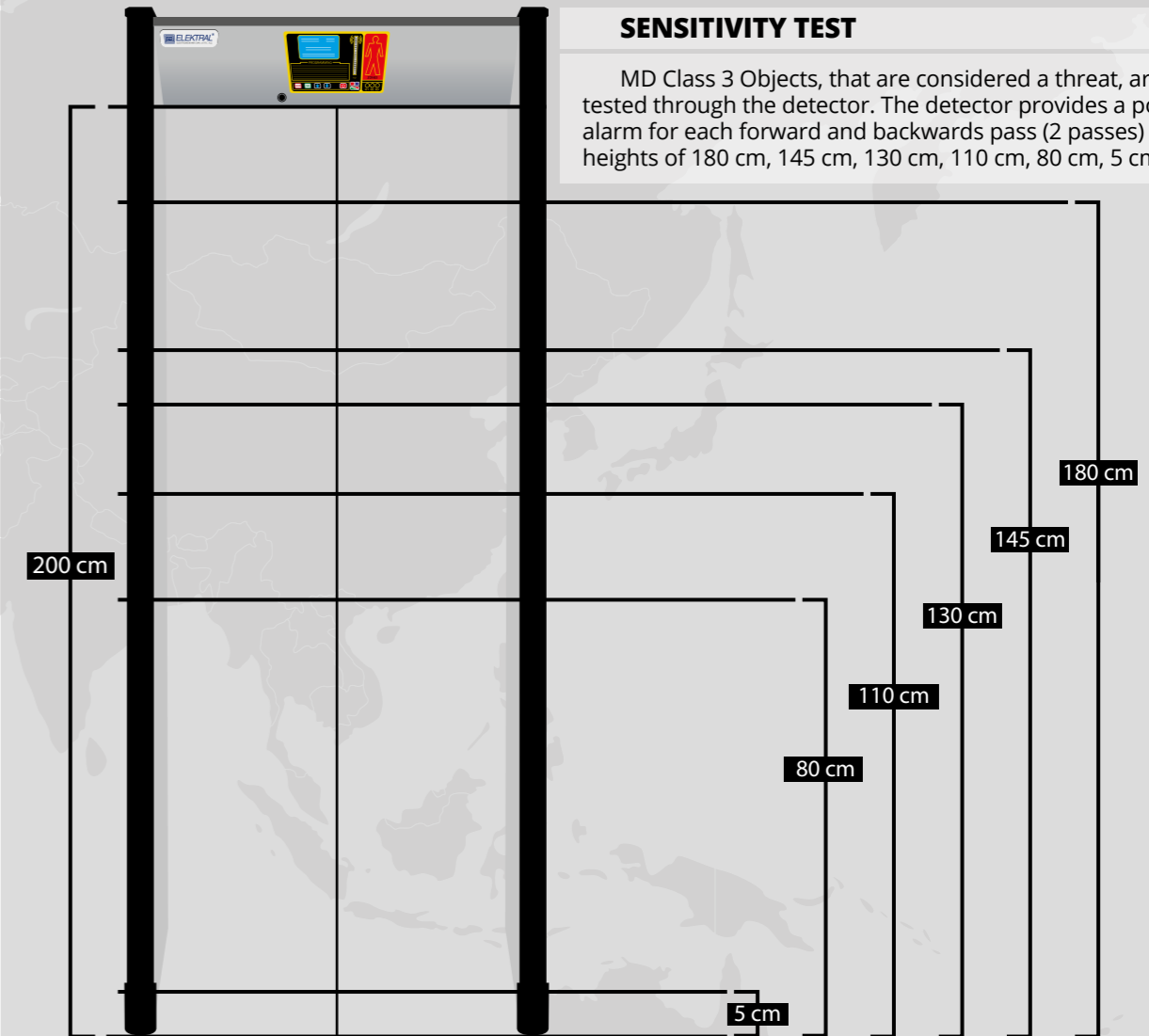
During the MD Class 3 Innocuous Items Test (Small Objects Test) without readjustments, ThruScan sX-i Walk Through Metal Detector does not provide any positive alarm indications for 8 consecutive trials when tested without any items on the person, passing through at a walking speed of 0,5...1,0...1,5 m/s.

This test shows that the Walk Through Metal Detector does not provide a positive alarm when there are no metal items on the person passing through.

In the other hand the detector provides positive alarm if the person carries MD Class 3 (Small Objects) Threat Objects such as Stainless Steel Knife, Handcuff Key, Screwdriver Bit, Razor Blade, Small Stainless Steel Rod or Bullets while passing through.

### SENSITIVITY TEST

MD Class 3 Objects, that are considered a threat, are tested through the detector. The detector provides a positive alarm for each forward and backwards pass (2 passes) at the heights of 180 cm, 145 cm, 130 cm, 110 cm, 80 cm, 5 cm.



# ThruScan® Walk-Through Metal Detectors Comparison Chart



NO	FEATURES	ThruScan/s3	ThruScan/s6	ThruScan/s9	ThruScan/sX	ThruScan/s27-i	ThruScan/sX-i	ThruScan/sX-WP
1	Detection Zones	3 Vertical	6 Matrix	9 Matrix	9 Matrix	27 Zones Matrix	Multiple Parallel Zones	9 Matrix
2	Separate Zone Sensitivity & Setting Feature	NO	NO	NO	Yes (Enables adjusting different Sensitivity Levels for Different 3 Height Levels of the WTMD Passage)	Yes (Enables adjusting different Sensitivity Levels for Different 3 Height Levels of the WTMD Passage)	Yes (Enables adjusting different individual settings for Each Zone of the WTMD Passage)	Yes (Enables adjusting different Sensitivity Levels for Different 3 Height Levels of the WTMD Passage)
3	Sensitivity level & Preset security program	10 Levels / 246 Sub Sensitivity Settings 1 Standard preset international security program	10 Levels / 246 Sub Sensitivity Settings 1 Standard preset international security program	10 Levels / 246 Sub Sensitivity Settings 1 Standard preset international security program	20 Levels / 246 Sub Sensitivity Settings, 7 preset international security programs	20 Levels / 246 Sub Sensitivity Settings, 7 preset international security programs	45 Levels / 300 Sub Sensitivity Settings, 20 preset international security programs	20 Levels / 246 Sub Sensitivity Settings 7 preset international security programs
4	Tri-Color Metal Density Display Vu-Meter LED Bar Graph	YES	YES	YES	YES	YES	YES	YES
5	Auto Calibration	YES	YES	YES	YES	YES	YES	YES
6	Environmental Magnetic Noise Level Display Feature	YES	YES	YES	YES, REAL TIME GRAPHICAL DISPLAY	YES, REAL TIME GRAPHICAL DISPLAY	YES, REAL TIME GRAPHICAL DISPLAY	YES, REAL TIME GRAPHICAL DISPLAY
7	Mechanical Lock & PIN Code for Menu Access	NO/4 Digit PIN Code	NO/4 Digit PIN Code	YES MECHANICAL LOCK + 4 Digit PIN Code	YES MECHANICAL LOCK + 4 Digit PIN Code	YES MECHANICAL LOCK + 4 Digit PIN Code	YES MECHANICAL LOCK + 4 Digit PIN Code	YES MECHANICAL LOCK + 4 Digit PIN Code
8	LCD	4*20 Character LCD	4*20 Character LCD	4*20 Character LCD	64*128 Graphic (GLCD)	64*128 Graphic (GLCD)	64*128 Graphic (GLCD)	64*128 Graphic (GLCD)
9	IP Protection Level	IP 20 (EN 60529)	IP 20 (EN 60529)	IP 44 (EN 60529)	IP 44 (EN 60529)	IP 44 (EN 60529)	IP 65 (EN 60529)	IP 65 (EN 60529)
10	Automatic Frequency Selection Feature for Interference	YES	YES	YES	YES	YES	YES	YES







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BELIZE

JAMAICA

HONDURAS

HAITI

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NICARAGUA

COSTA RICA

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ANGOLA

MALAWI

ZAMBIA

ZIMBABWE

MOZAMBIQUE

NAMIBIA

BOTSWANA

SWAZILAND

LESOTHO

SOUTH AFRICA

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UZBEKISTAN

KYRGYZSTAN

TURKMENISTAN

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OMAN

QATAR

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MONGOLIA

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REPUBLIC OF KOREA

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DARUSSALAM

MALAYSIA

SINGAPORE

SRI LANKA

MALDIVES

INDONESIA

PAPUA NEW GUINEA

EAST TIMOR

Christmas (Austr.)

Cocos (Keeling) Islands (Austr.)

MAURITIUS Rodrigues Island

Reunion (Fr.)

Chagos Archipelago

Diego Garsia

SEYCHELLES

Chagos Archipelago

Diego Garsia

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PALAU

PHILIPPINES

TAIWAN

North Mariana Islands

Guam (U.S.A.)

PALAU

PHILIPPINES

TAIWAN

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Guam (U.S.A.)

PALAU

PHILIPPINES

TAIWAN






Elektral® exports to .....



# Walk to Peace with ThruScan

**40**  
*years*  
1978 - 2018

 **ELEKTRAL**<sup>®</sup>

 Izmir Ataturk Industrial Zone - Mustafa Kemal Ataturk Blv. 23-25 Cigli, 35620 Izmir / Turkey  
 +90 232 376 7300  +90232 376 7030  [elektral@elektral.com.tr](mailto:elektral@elektral.com.tr)  [elektral.com](http://elektral.com) / [elektral.com.tr](http://elektral.com.tr)