

3DX-RAY



ThreatScan2®-LS1

TWICE THE RESOLUTION

- Suspect item inspection
- EOD evaluation
- Customs control
- Vehicle scanning
- Large format panel

Portable, real-time x-ray scanning system

ThreatScan2®-LS1 is a lightweight, portable, battery powered x-ray scanning system designed in co-operation with first responders and EOD teams to meet the needs of the field operative.

Quick and simple to deploy, the system produces high quality real-time x-ray images for rapid and accurate decision making.

The slim detector panel is positioned behind the target, the generator is placed in front, and the scan is activated from the imaging station.

The large 600mm x 460mm imaging area of the panel enables the operator to scan typical bags and packages in a single scan.

The I-Gen can penetrate up to 40mm steel at 120kV and up to 60mm at 150kV.

The LS1 system produces sub-millimetre resolution images and there is a range of sophisticated image processing functions available including materials discrimination, pan, zoom, DeepFocus™, 3D Emboss, measurement and annotation.

These options and the high quality images enable the operator to interpret the image quickly and accurately.

The software can also communicate the image on screen to a remote command centre and save images in JPEG and other common file formats.

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The standard package comprises a large format x-ray detector panel (using linear photo-diode array), 120kV or 150kV x-ray generator, laptop computer, ThreatSpect software, batteries, chargers, wireless communication and transport cases.

Options include tripod, repeater stations, spare batteries and chargers, soft carry cases, wired and fibre optic cable sets.

Ideal for use by First Responders, EOD teams, Counter Surveillance, and Customs and Security Operatives

The system comprises

- A large resilient detector panel
- A portable and robust x-ray generator (120kV or 150kV)
- A laptop imaging station
- Batteries and chargers
- Wireless communication
- Carry cases
- ThreatSpect software

Features

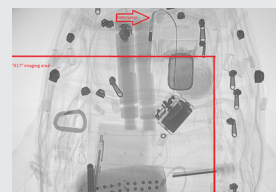
- High penetration with sub-millimetre resolution
- Large area, thin detector panel
- Real-time images
- Designed for rapid deployment and ease of use
- Powerful image enhancement and analysis tools
- Intuitive, user-friendly ThreatSpect software
- Scans to 3mm above floor level



Sub range enhancement function



X-ray of drugs in pipes in fuel tank

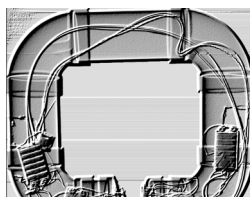


Comparison with 14"x17" detector



Set of IED devices

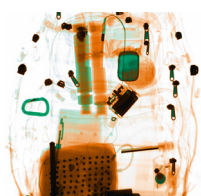
ThreatScan2®-LS1



3D Emboss



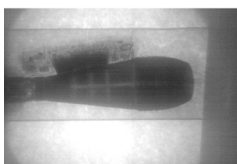
Invert



Materials discrimination



Optional I-Gen stand (360° rotation)



Superb penetration - 25cm concrete

X-Ray Detector Panel (LS1)

| | |
|--------------------------------|--|
| Image / detector resolution | 2304 pixels, 44AWG, 200 micron |
| Dynamic range | 65536 (16-bit) |
| Image acquisition / scan speed | 5 seconds |
| Detector dimensions | 753mm x 478mm x 25mm (external) (L x H x D) |
| Imaging / scanning area | 600mm x 460mm / scans to 3mm above floor level |
| Weight | 5kg (5.5kg including battery and handle) |
| Power | Self contained rechargeable lithium ion battery (8-hr standby) |
| Communication protocols | Wireless 802.11 a/b/g/n Wired or fibre optic options, TCP/IP ethernet |
| Operating temperature | -20°C to +55°C / MIL-STD-810F 501.4 and 502.4 |
| Storage temperature | -40°C to +80°C / MIL-STD-810F 501.4 and 502.4 |
| Humidity | 0% to 95% non-condensing |

X-Ray Generator (I-Gen)

| | 120kV | 150kV |
|------------------------------|---|-------------------------------|
| Type | 120kV (30-120kV) 1mA | 150kV (30-150kV) 1mA |
| Penetration | 38mm guaranteed, 40mm typical | 55mm guaranteed, 60mm typical |
| Focal spot size / Beam angle | 0.5 x 0.5mm / 40° x 40° | |
| Pre-warn | 0-99 seconds | |
| Power | Self contained rechargeable cells (2500mAh) Up to 225 images on one charge (2 hour charge) Mains power option | |
| Weight (without battery) | 5.5 kg (6.6kg including battery and handle) | |
| Size (L x W x H) | 245mm x 180mm x 80mm | |

Communications

| | |
|------------------------|--|
| Wireless (as standard) | 802.11g / up to 120m range (extendable with repeaters) |
| Fibre optic (option) | 100m, 150m, 200m |
| Ethernet (option) | 25m, 50m |

Imaging Station*

| | |
|------------------|--|
| Type | Laptop computer (ruggedised / tablet options available) <i>* PC specification to be confirmed and agreed at order stage</i> |
| Processor | Intel Core i5-4200U, Dual Core |
| Display | 15.6" Full High Definition (1366x768) LED Display with AntiGlare |
| Memory | 4GB 1600MHz DDR3L (RAM) |
| Hard Drive | 500GB Serial ATA Hard Drive |
| Operating System | English MS Windows |

Software Features

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|---|
| Adjustable x-ray source parameters (kV, mA & time) |
| Standard, Inverted and False Colour images |
| Rotate, Histogram, Pan, Zoom, DeepFocus™ |
| On-screen Measurement and Annotation (options) |
| Materials Discrimination and 3D Emboss (options) |
| Image Stitching (option) |
| Multi-file format import (option) |
| Multi-touch functionality for tablet based operation (option) |

Safety

| |
|---|
| Physical safety interlock plus key switch |
| Audible & visible warning signs |
| CE compliant |

Certification & Codes

| | |
|------|-----------------------------------|
| NATO | Codification NSN 6350-99-464-9827 |
|------|-----------------------------------|

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