ThreatScan®-LS1
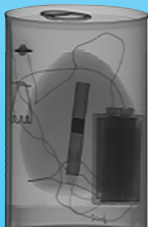
SUSPECT ITEM INSPECTION   EOD EVALUATION
CUSTOMS CONTROL   VEHICLE SCANNING
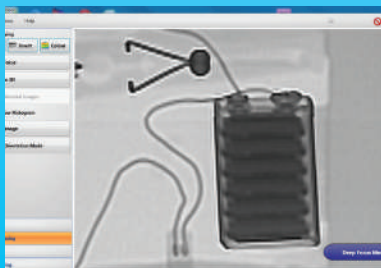
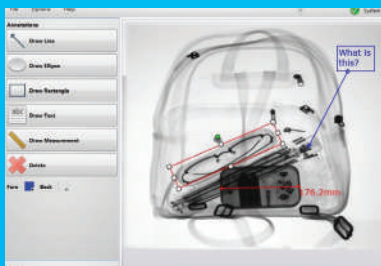## Portable, real-time x-ray scanning system

ThreatScan®-LS1

ThreatScan-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.

X-ray of drugs in pipes in fuel tank

Improvised explosive device in can

Zoom and DeepFocus

Annotated image

The system comprises

- A large resilient detector panel
- A portable and robust x-ray generator
- A laptop imaging station
- Batteries and chargers
- Wireless communication
- Carry cases
- ThreatSpect Software

Options and accessories include:

Tripods, repeater stations, spare batteries and chargers, soft carrying cases, wired and fibre optic cable sets

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

Quick and simple to deploy, the system produces high quality real-time x-ray images for rapid and accurate decision making.
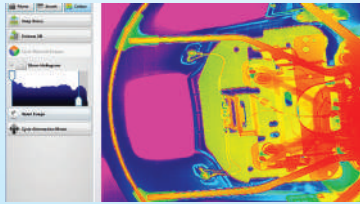
The slim detector panel is positioned behind the target; the generator is placed in front. The scan is activated from the laptop imaging station.

The large 600mm x 460mm imaging area of the ThreatScan-LS1 enables the operator to scan typical bags and packages in a single scan. Penetrating up to 34mm steel at 120kV the ThreatScan-LS1 produces sub-millimetre resolution images.
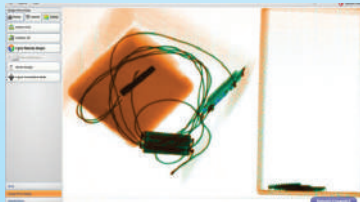
A range of sophisticated image processing functions, including materials discrimination, pan, zoom, DeepFocus™, stitching, 3D Emboss, measurement and annotation, coupled with ThreatScan's high quality images enables the operator to interpret the image quickly and accurately.

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

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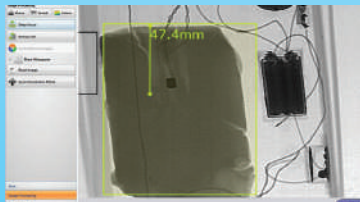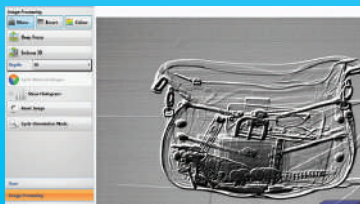
False colour

Material discrimination

I-Gen generator

Measurement

Invert

3D Emboss

Standard Package	
	X-ray detector panel, 120kV x-ray generator, laptop computer, ThreatSpect software, batteries, chargers, wireless communication and transport cases.
X-Ray Detector Panel	
Image / detector resolution	1152 pixels, 40AWG 3.4 lp/mm
Dynamic range	65536 (16-bit)
Image acquisition/scan speed	5 sec
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
Power	Self contained rechargeable lithium battery
Communication protocols	Wireless 802.11 a/b/g/n Wired or fibre optic options, TCP/IP ethernet
Operating temperature	-10˚C to +40˚C MIL-STD-810F 501.4 and 502.4
Humidity	0% to 95% non-condensing
Ingress protection (water, dust)	IP55
I-Gen X-Ray Generator	
Type	1mA constant potential 120kV
Power	Self contained rechargeable cells Up to 180 images on one charge (2 hour charge) Mains power option
Penetration	30mm guaranteed, 34mm typical
Weight (without battery)	5.5 kg
Size (L x W x H)	245mm x 180mm x 80mm
Communications	
Wireless	802.11g, up to 120m range (extendable with repeaters) (standard)
Fibre optic	100m, 150m, 200m (option)
Ethernet	25m, 50m (option)
Imaging Station *	
Type	Laptop computer (ruggedised option / tablet option)
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
Optical Drive	DVD +/-RW Media Bay Drive
Operating system	English MS Windows
Power	Mains and battery
	* PC specification to be confirmed & agreed at order stage.
Software Features	
	Adjustable x-ray source parameters (kV, mA & time)
	Standard, inverted and false colour images
	Rotate, Histogram, Pan, Zoom, DeepFocus™
	On screen-measurements and annotations (option)
	Materials discrimination, stitching, and 3D Emboss (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

In the interest of product development 3DX-RAY Ltd reserves the right to change specifications without notice. Please visit our website for the latest version - www.3dx-ray.com.