Portable X-ray Solutions

Solutions designed for client applications

INNOVATIVE COMPACT RUGGED

Analysed Images advanced innovative portable X-ray systems have been designed and developed in the UK to provide an industry-leading range and depth of portable X-ray solutions.

Market sectors and applications include:

BORDER CONTROL

Rapid identification of contraband, illegal substances, weapons, IED's, abandoned and suspicious packages and vehicles giving instant very high quality images for immediate action.

C-IED / EOD

Fast deployment, easy set-up, quick imaging of suspect objects. Instant high quality images delivered either via cabled or wireless communications to your chosen format of Windows-based PC with XTK integration.

FIRST RESPONDERS

Rapid deployment in public areas where speed of imaging, imaging quality and decision making is crucial to public safety and public access. Reliable high-quality images with communications options to transmit images to support staff.

CUSTOMS

Versatile range of non-destructive imaging tools to enabling customs officials to undertake suspicious bag search, detect contraband items, weapons, drugs, alcohol with instant high quality imaging.

Portable X-ray Solutions

Solutions designed for client applications

Our comprehensive suite of portable X-ray systems provides an optimal range of solutions to meet your imaging requirements.

Analysed Images' wide range of high performance X-ray detectors, X-ray sources and X-ray controller (PC) options provides clients with the optimal combination of equipment for their application.

Analysed Images portable X-ray image systems are easy to deploy and use direct radiography techniques to deliver high quality X-ray images rapidly using X-Vision™ software and Windows 10 PC controllers.

YOUR COMPLETE PORTABLE X-RAY SYSTEM INCLUDES:

- Detector panel - select your desired size of ecoSCAN, lineSCAN or ultraSCAN panels)
- Imaging PC - select your desired format of PC (touch-screen tablet, notebook, laptop) with Windows™ 10 and X-Vision™
- X-ray source - select your desired modality (pulsed or constant potential) and the X-ray characteristics that suit your application)
- Communications module – select cabled and/or wireless modules
- Operator and maintenance manuals
- Portable carry case
- Optional accessories and tools to tailor your RPX system to your specific application

DETECTOR PANEL MODALITIES: COMPARISON OF KEY DIFFERENTIATING FEATURES			
Key Features	**ecoSCAN™**	**ultraSCAN™**	**slimSCAN™**
	Budget-friendly fluoroscope panel	Ultra-high resolution a-Si Flat Panel	Flat panel that scans large items
Thin Panel	×	✓	✓
Inexpensive Repair	✓	×	✓
Compatible with Golden Eng. Pulsed Source	✓	✓	×
Light Weight	✓	✓	✓
Near-Edge Imaging	✓	✓	✓
Large Object Scanning Capability	✓ (with X-Pander)	✓ (with X-Pander)	✓
Very Large Object Scanning Capability	✓ (with X-Glider)	×	×

Portable X-ray Detector Panels

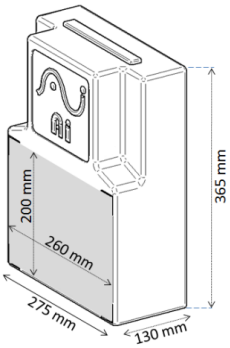
Direct radiography detector panels

OVERVIEW OF PORTABLE DETECTOR PANELS

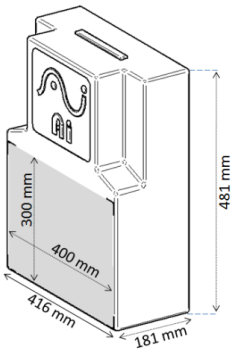
The X-ray detector panel is the primary determinant of image resolution, contrast sensitivity and dynamic range. ultraSCAN™, ecoSCAN™ and slimSCAN™ (in development) detector panels use different technologies to suit each application.

ecoSCAN™ Overview

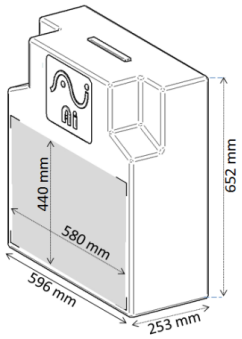
Detector Type	High definition fluoroscope
Power Supply	100 - 250 VAC, removable rechargeable NIMH cells
Construction	Carbon fibre and aluminium



ecoSCAN™ 2620
Weight 4.9kgs (incl battery)



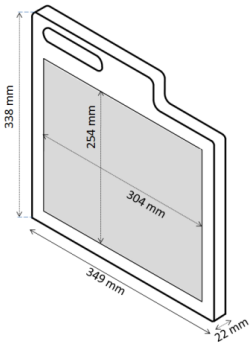
ecoSCAN™ 4030
Weight 7.2kgs (incl battery)



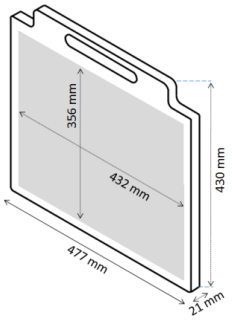
ecoSCAN™ 5844
Weight 13.5kgs (incl battery)

ultraSCAN™ Overview

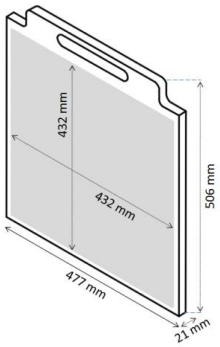
Detector Type	a-Si digital detector array
Power Supply	100 - 250 VAC, removable rechargeable LIPO cells
Construction	Carbon fibre and aluminium



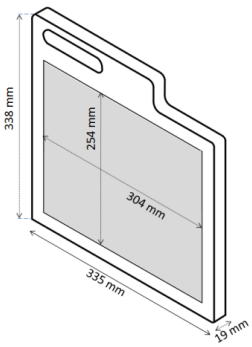
ultraSCAN™ 3025R
Weight 2.4kgs (incl battery)



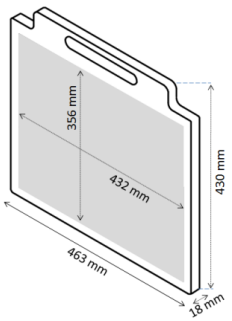
ultraSCAN™ 4336R
Weight 4.8kgs (incl battery)



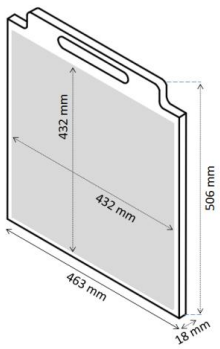
ultraSCAN™ 4343R
Weight 6.0kgs (incl battery)



ultraSCAN™ 3025L
Weight 2.3kgs (incl battery)



ultraSCAN™ 4336L
Weight 4.6kgs (incl battery)



ultraSCAN™ 4343L
Weight 5.8kgs (incl battery)

Portable X-ray Sources

Pulsed and constant potential sources

OVERVIEW OF PORTABLE X_RAY SOURCES

The X-ray source is the primary determinant of your X-ray system's maximum penetration. Portable X-ray sources that offer greater penetration (X-ray energy) are typically heavier and require more battery power. Pulsed X-ray sources are typically used for military IED applications for their high energy to weight ratio. Constant potential X-ray sources are typically used for applications requiring enhanced image quality.

Pulsed X-ray Sources (Golden Engineering)

Max. photon energy	150 kVp / 150 kVp / 270 kVp / 370 kVp
Power Supply	Removable rechargeable cells
Steel penetration	1.0cm / 1.3cm / 2.54cm / 3.81cm
Focal spot	3mm.

XR-150
Weight 2 kgs
(incl battery)

XR-200
Weight 5.5kgs
(incl battery)

XRS-3
Weight 5.4kgs
(incl battery)

XRS-4
Weight 9.5kgs
(incl battery)

Constant Potential X-ray Sources

Max.photo energy	120kVp, 160kVp
Power Supply	Removable rechargeable cells
Steel penetration	1.0cm / 2.1cm / 1.0cm / 1.0cm
Focal spot	0.8 mm standard. Smaller focal spots also available.

CP120
Weight 7.0 kgs
(incl battery)

CP160
Weight 9.2 kgs
(incl battery)

Aero-120
Weight 6.5 kgs
(incl battery)

VJ-120
Weight 5.9 kgs
(incl battery)

Other X-ray Sources

In addition to the above commonly used X-ray sources, other sources are available to suit bespoke applications, including >160kVp energy, isotope sources and 100-250VAC applications.

ecoSCAN™ Detector Panels

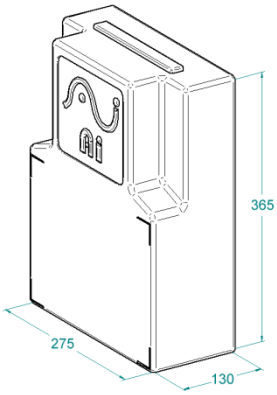
Direct radiography fluoroscope panels

ecoSCAN™ System Features

Class leading spatial resolution and contras
Near-edge imaging
Direct radiography, real time images
Ruggedised detector panel
X-Vision™ software
Cable and wireless options
Ruggedised portable carry case options
Compatible with pulsed X-ray sources
Wide range of application options

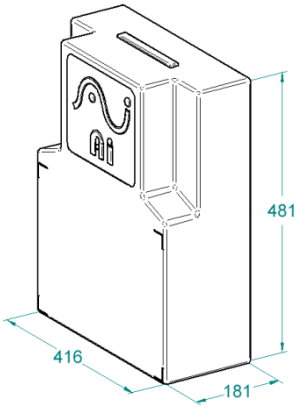
ecoSCAN™ Physical Specifications

ecoSCAN™ 2620



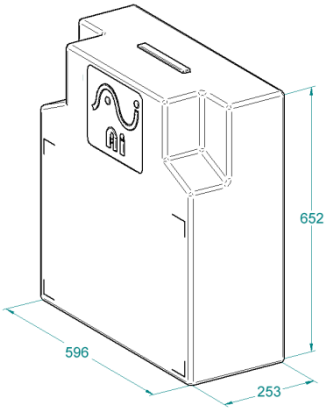
Weight 4.9kgs (incl battery)

ecoSCAN™ 4030



Weight 7.2kgs (incl battery)

ecoSCAN™ 5844



Weight 13.5kgs (incl battery)

ecoSCAN™ Performance Summary

Imaging Category	Direct radiography
Detector Type	Fluoroscope
Image Scan Time	Virtually instantaneous
Power Supply	100 - 250 VAC, removable rechargeable NIMH cells
Battery Life (continuous use)	> 4 hours from full charge
Communications	GigE, 802.11n
Operating Temperature	0˚C to 50˚C
Storage Temperature	-10˚C to +60˚C
Construction	Carbon fibre and aluminium
Near - Edge Imaging	8mm (bottom edge and both sides)
A/D Conversion / Dynamic Range	14 Bit
Image Processing Software	X-Vision™
Image Capture Resolution	1.3MP with 5.30 µm² Pixel Size

ultraSCAN™ Detector Panels

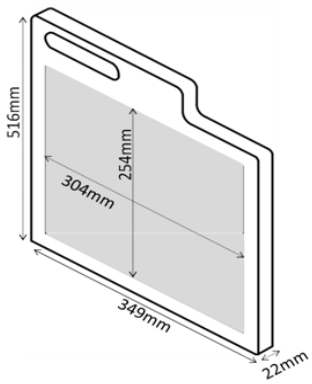
Direct radiography A-Si flat panels

ultraSCAN™ System Features

Ultra thin ruggedized detector panels
Unique auto exposure detection feature
Near-edge imaging
Cable and wireless options
Ruggedised portable carrying case options
Compatible with pulsed X-ray sources

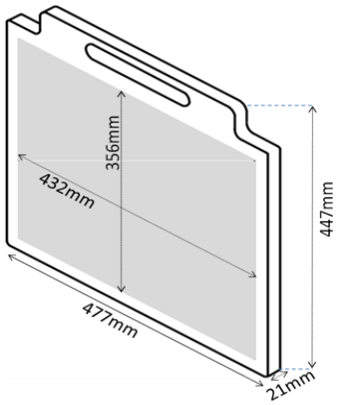
ultraSCAN™ Physical Specifications

ultraSCAN™ 3025R



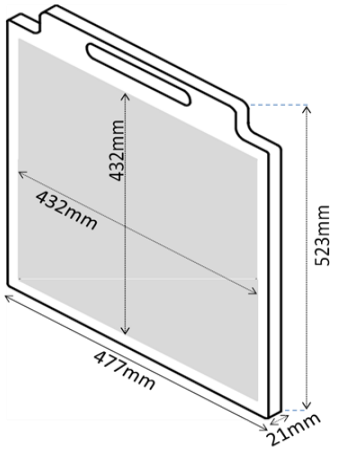
Weight 2.4kgs (incl battery)

ultraSCAN™ 4336R



Weight 4.8kgs (incl battery)

ultraSCAN™ 4343R



Weight 6.0kgs (incl battery)

ultraSCAN™ Performance Summary

Imaging Category	Direct radiography
Detector Type	a-Si digital detector array
Image Scan Time	Virtually instantaneous
Power Supply	100 - 250 VAC, removable rechargeable LIPO cells
Battery Life (continuous use)	> 4 hours from full charge (with AED)
Communications	GigE, 802.11n
Operating Temperature	10˚C to 35˚C
Storage Temperature	-10˚C to +70˚C
Construction	Carbon fibre and aluminium
Inactive imaging area – ultraSCAN-R	22mm (on 3 sides)
A/D Conversion / Dynamic Range	16 Bit
Image Processing Software	X-Vision™
Image Capture Resolution	0.1mm

ultraSCAN™ Detector Panels

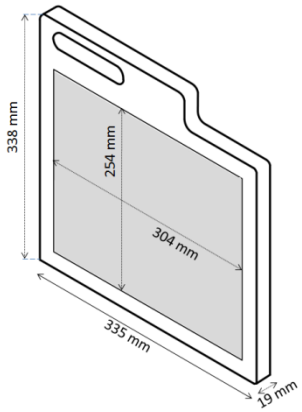
Direct radiography A-Si flat panels

ultraSCAN™ System Features

Ultra thin ruggedized detector panels
Unique auto exposure detection feature
Near-edge imaging
Cable and wireless options
Ruggedised portable carrying case options
Compatible with pulsed X-ray sources

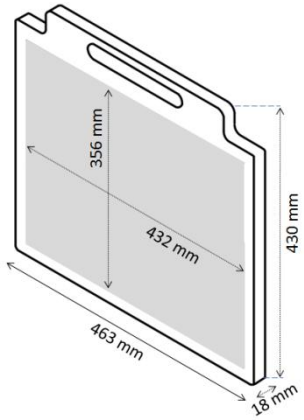
ultraSCAN™ Physical Specifications

ultraSCAN™ 3025L



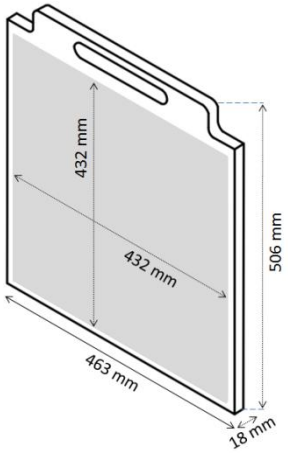
Weight 2.3kgs (incl battery)

ultraSCAN™ 4336L



Weight 4.6kgs (incl battery)

ultraSCAN™ 4343L



Weight 5.8kgs (incl battery)

ultraSCAN™ Performance Summary

Imaging Category	Direct radiography
Detector Type	a-Si digital detector array
Image Scan Time	Virtually instantaneous
Power Supply	100 - 250 VAC, removable rechargeable LIPO cells
Battery Life (continuous use)	> 4 hours from full charge (with AED)
Communications	GigE, 802.11n
Operating Temperature	10˚C to 35˚C
Storage Temperature	-10˚C to +70˚C
Construction	Carbon fibre and aluminium
Inactive imaging area – ultraSCAN-L	15.5mm (on 3 sides)
A/D Conversion / Dynamic Range	16 Bit
Image Processing Software	X-Vision™
Image Capture Resolution	0.1mm

X-Vision™ & Image Control Unit

Delivering imaging excellence with Windows™ 10

OVERVIEW OF X-VISION™ & IMAGE CONTROL UNIT

X-Vision™ and Microsoft Windows 10 work with your selected PC format to integrate your X-ray detector and X-ray source and deliver optimal quality X-ray images to the full potential of your chosen X-ray system components. X-Vision™ instantly delivers high quality X-ray images with a user-friendly customisable interface and a comprehensive suite of imaging tools that drives efficiencies in X-ray imaging operations.

OPTIMISATION OF USER-EXPERIENCE

X-Vision's comprehensive imaging functions and powerful image enhancement tools optimise quick and accurate detection, analysis and investigation.

X-Vision's user-friendly interface incorporates intuitive icon graphics, toolbars and dockers with touch-screen functionality.

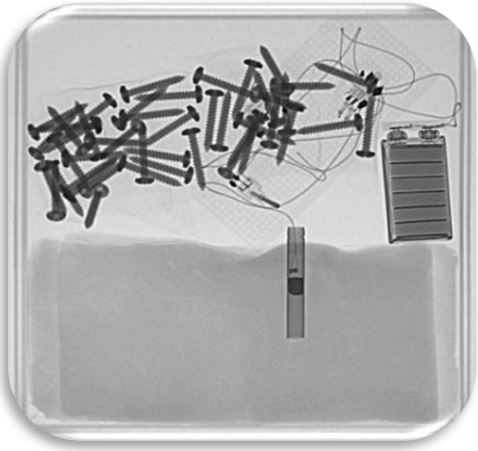
Customisation features ensure that your optimal interface is automatically presented to you.

DELIVERING IMAGING EXCELLENCE

X-Vision's cutting edge imaging is supported by a unique range of imaging techniques and sophisticated algorithms.

Analysed Images advanced X-ray systems are available with touch-screen viewing monitors to facilitate reliable and quick screening.

X-Vision's capability includes automation tools (such as automatic threat detection available for certain applications) and on-board user-friendly tools to enhance screening and detection outcomes.



LATEST TECHNOLOGY & CONTINUOUS DEVELOPMENT

Operating on a Windows™ 10 64 bit platform, X-Vision™ incorporates the latest technology platforms keeps us at the forefront of X-ray imaging technology.

X-Vision™ Supports:

- Multiple detector technologies (flat panels and fluoroscopic panels)
- Full 16bit greyscale images (65,536 grey levels)
- Intuitive touch-screen operation
- Wired & Wireless communications
- Multiple tools and accessories to suit specific applications

Components and Accessories

Complementary tools for portable X-ray imaging

OVERVIEW OF COMPONENTS AND ACCESSORIES

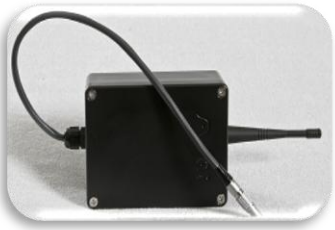
Analysed Images has designed a range of components and accessories to optimise your chosen X-ray system to your bespoke application. A selection of components and accessories is shown below. Contact us (or your local distributor) if you have a specific application for which you would like some specialist advice or optional components.

Image Control Units (PCs)

Choose your desired format of Windows 10 PC for your application. Options include tablets, notebooks, laptops in standard and ruggedised formats.

Remote Trigger Sets

Choose your desired communication module and accessories to suit your application. Options include 50m, 100m and other cable lengths supplied with ergonomic reels and remote trigger systems for X-ray detectors and X-ray generators.



Adjustable Stands and Tripods

Adjustable stands secure your flat panel X-ray detector in an optimal position (mostly upright) on just about any surface. Tripods enable your X-ray source to be raised to an optimal position.

Clamp Stand

The clamp stand provides physical support for flat panel detectors so that they remain upright even when faced with uneven terrain and high winds.

Components and Accessories

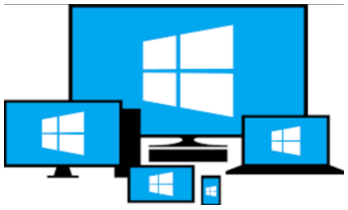
Complementary tools for portable X-ray imaging

Cable Options

A wide range of cable options and lengths are available to suit specific customer applications, including a 24V power supply to power your X-ray detector.

Distributed Imaging to Multiple PCs

Imaging data from the X-ray detector to the primary PC can be shared with multiple secondary PCs (or tablets) using X-Vision's distributed imaging platform. X-Vision on the secondary PCs delivers the same image enhancement functionality as the primary PC.

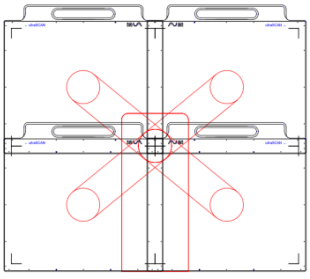


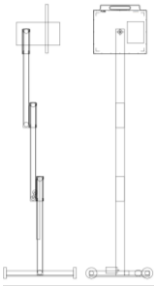
Carry cases and backpacks

Your complete X-ray system can be stored and transported in a wide selection of carry-cases from IP67 Peli cases to tactical backpacks.

Detector Enlargement Tools

The X-Pander expands your detector active imaging area four-fold. This enables an object up to 4x the size of the detector active area to be imaged in a single approach. X-Pander can be figured for ultraSCAN, ecoSCAN, slimSCAN and other systems.





Video System for X-ray Generator

Operators can position the camera kit on the X-ray source and view a visual image of the objects in front of the X-ray source from their PC.
Video system is powered from the X-ray source.

PROUDLY MADE IN GREAT BRITIAN

The Association of Police and Public Security Suppliers

ADS

SAFEcontractor APPROVED