ForensicSCAN™

High-resolution whole-body radiographs in under a minute



ForensicSCAN™ is an innovative digital radiography system designed for forensic medical examiners and coroners.

ForensicSCAN™ delivers high resolution, whole-body radiographs with AP and lateral projections in a single scan without image stitching. ForensicSCAN™ uses non-invasive imaging to produce high-quality, dual-view radiographs in an intuitive 2D image format. With ForensicSCAN™ subjects from paediatrics to adult bariatrics up to 2.1m tall are imaged quickly and comprehensively without subject repositioning.

When used as a **non-invasive digital autopsy** tool at the beginning of the autopsy process, the whole-body information generated by ForensicSCAN™ can be used to determine whether further investigation is required and the nature of any further investigations, thereby generating **substantial operational efficiencies** in the autopsy process and case management process.

ForensicSCAN™ performs a dual-view scan within 1 minute and instantly presents twin whole-body radiographs for radiographer review. Upon completion of a scan, ForensicSCAN™ is ready to perform the next scan without a prescribed cool-down period.

X-Vision™ software inside each ForensicSCAN™ system delivers a suite of user-friendly image analysis tools. ForensicSCAN™ is inherently network capable with compliance to DICOM 3.0.

KEY FEATURES

- Easy operation
- High resolution imaging
- Dual-projection scans performed simultaneously in under a minute
- Low-dose X-ray system minimises radiation scatter for improved imaging
- Versatile format from paediatric imaging to bariatric imaging
- Real-time image processing using future-proofed X-Vision™ and Windows™ 10 software



Above is an actual image of the dual-view (AP and lateral) system with gurney

ForensicSCAN™

Specifications



GENERAL SPECIFICATIONS

External dimensions (mm): Refer sketches below

Net weight (mainframe): \sim 650 Kg Net weight (workstation): \sim 50 Kg Net weight (gurney): \sim 80 Kg

Gurney max. load: 250 Kg supine body weight Monitor (dual images): 32"/40" UHD LED, 300 cd/m²,

1,000:1 contrast ratio

X-RAY CHARACTERISTICS

Nominal anode voltage: 60 – 160 kV

X-ray current: Variable with speed

X-ray tube focal spot: 1.2 mm Duty cycle: 100% No. of generators 1 or 2

Cooling: Hermitically sealed oil bath with

forced air radiator

OPERATING CHARACTERISTICS

Power requirements: 230VAC +-5%, 50-60Hz,

single phase

Current consumption: 20A (max) @ 230V
Operating/Storage temp: 0°C to 35°C / 0°C to 60°C
Humidity: 10% to 90% non-condensing
Throughput: <1 minute for dual-view scan
ISO9001:2015, DICOM 3.0

FCC Part 18 305 Class A

FCC Part 18.305 Class A FCC Part 18.307 Class A

IMAGING PERFORMANCE

Active imaging area (mm): 2,100(L) x 870 (W)

Detectors: 4,352 pixels per linear array

Spatial resolution: 2.5 lp/mm

Contrast sensitivity: 16 bit / 65,535 grey levels
Whole body scan resolution
Imaging software: 16 bit / 65,535 grey levels
4,352 x 10,000 pixels per scan
X-Vision™ on Windows™ 10

KEY OPTIONS

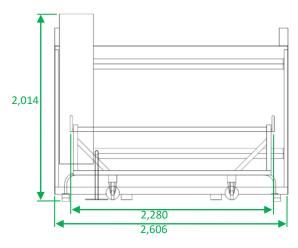
- AP or AP & lateral projections
- Left-to-right or right-to-left scan motion
- Mobile radiation-safe cabin for field deployment
- Remote access (DICOM 3.0 compliant) for multiple users

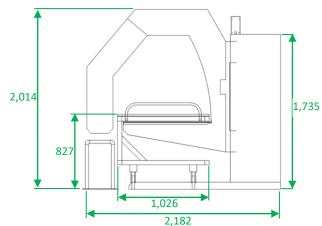
KEY OPTIONS

- Selection of monitor sizes and specs, incl. Touchscreen
- Walk-in radiation cabinet (side-entry / end-entry)
- Overhead G-arm camera
- Fingerprint patient identification reader

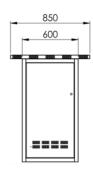
MECHANICAL DIMENSIONS (mm)

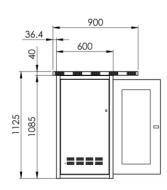
Mainframe & Gurney





Operator Workstation





Specifications are current at the time of first publication and are subject to change with continuing product enhancement.

ForensicSCAN™

The ForensicSCAN Advantage



Whole-Body Imaging

High quality whole-body images facilitate a **complete skeletal survey**, making it **easier to locate injuries**, **foreign objects and identifying features**. Skeletal, chest and pelvic pathologies are accurately visualised in a single imaging pass.

Versatility

ForensicSCAN™ whole-body images span paediatric and bariatric imaging. The highly collimated X-ray beam minimises scatter from large bodies and improves image quality.

High Speed, Multi-Planar Imaging

ForensicSCAN™ G-arm design delivers simultaneous whole-body radiographs in AP and lateral projections in less than 1 minute. Images are presented immediately, automatically archived and the system is ready to produce its next scan.

Image Quality

ForensicSCAN™ dual-view whole-body images are derived from dual linear arrays each of **4,352 pixels** with **200** µm pitch delivering 16 bit contrast resolution.

Digital Autopsy

ForensicSCAN™ high resolution, whole-body enables easy location of foreign objects in the body. ForensicSCAN™ can facilitate diagnosis of non-accidental injuries in children and causal analysis of sudden unexpected death in infants.

Ease of Use

ForensicSCAN™ is easy to operate. **Non-specialised personnel can perform procedures delivering** dual-view images with the click of a button.

Intuitive 2-D transmission X-ray radiographs enable the **inspection of radiographs for contrast and density** by non-specialised radiographers.

Instant imaging results and an **overhead optical viewing camera** provide **clear and timely feedback** to the operator whilst the subject is in position.

X-Vision™ and Windows 10™

At the heart of each ForensicSCAN[™] system is X-Vision[™] image processing software which processes images in **real-time.** X-Vision[™] is constantly updated with new tools and works on a Windows[™] 10 platform, ensuring that your investment in ForensicSCAN[™] is future-proofed.

Operational Efficiencies with Outstanding Returns on Investment

The rapid operation and versatility of ForensicSCAN™ facilitates efficient examination of all subjects, and provides Medical Examiners with powerful information at the beginning of the autopsy process that can enhance productivity and produce outstanding returns on investment.