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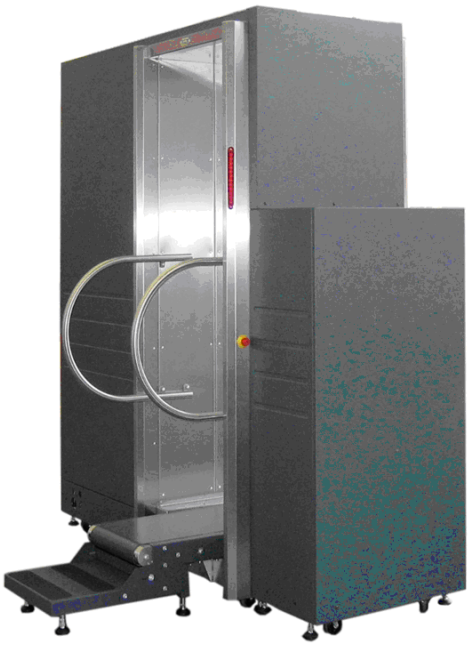
B-SCAN™ 16HR-DV

TRANSMISSION X-RAY PEOPLE SCREENING TECHNOLOGY



Feature Highlights

- **Detects objects concealed internally in or externally on the body.**
- **Contraband and threat detection including: weapons, explosives (plastic and powder), detonators, narcotics, electronic devices, diamonds, precious stones/metals and mobile phones.**
- **High throughput – scan time less than 7 seconds.**
- **Dual view – full body and additional high resolution torso scan at the same time**
- **Complete head to toe inspection in one short inspection cycle.**
- **State of the art image processing software and zoom functions facilitates efficient image evaluation**
- **Low radiation dose <4.5µSv/scan**

B-SCAN™ uses transmission x-ray technology employing very low dose rates to screen people. This non-intrusive approach to people screening enables the detection of objects concealed internally in body cavities, on a person beneath clothing, or in artificial limbs.

The 16HR-DV model of B-SCAN™ simultaneously creates two images of the person being scanned. These are a fully body head to toe image and a high resolution torso image.

The 16HR-DV produces an enhanced view of the more difficult torso area with its high resolution image and second viewing angle. This gives more detailed information to assist the operator in their task. The 16HR-DV model of B-SCAN is the only dual view transmission x-ray people screening system on the market.

The B-SCAN™ system is used to detect contraband and threat objects in applications including prisons, customs and border crossings.

High resolution images, a second viewing angle and image enhancement tools allow the 16HR-DV dual view B-SCAN™ operator to accurately and quickly evaluate the images.

Using specially adapted image processing software B-SCAN™ provides security checks of unequalled quality.

B-SCAN™ uses state of the art safety systems to monitor the radiation generation and dose.

With over ten years of field experience B-SCAN™ is proven as a well engineered and reliable screening system.

Technical Data **B-SCAN** 16HR-DV

Function

Material detected includes	Metal, ceramic, plastics, powders, explosives, narcotics
Detection capability	Objects hidden internal and external on the body
Type of scan	Full body scan in one inspection pass
Primary function	Screen people for contraband and threats
Resolution (wire detectability)	standard: 36 AWG (0.13 mm) • typical: 38 AWG (0.10 mm)
Technology	Low dose transmission x-ray

Operational Data

Physical format	Open tunnel - In line with checkpoint flow
Start up time	<2 minutes
Belt speed	Approx. 0.1 m/s
Scan method	Person moved through the beam
Scan time	< 7 Seconds
Alarm resolution	Dual image review
Image one	Full body – Head to toe
Image two	High resolution torso image - enhances detection capability

Installation information

Dimensions	approx. 2585 [L] x 2525 [H] x 2350 [W][mm] (101.8" x 99.4" x 92.5")
Weight	990kg
Humidity	10% - 90% (non condensing)
Storage temperature	-20°C to 60°C
Operating temperature	0°C to 40°C
Power consumption	< 0.9 kVA
Mechanical construction	Metal body (aluminium, steel)
Sound pressure	< 70 dB (A)
Power supply (standard)	230 VAC / 120VAC +10% / -15% 50 Hz / 60 Hz

Image generation

Generator cooling	Oil cooled, closed circuit
Scan format	Fan beam line scan
Generator	160kV cp, Hermetically sealed oil bath.
X-ray converter	High resolution semiconductor detector lines
Dose per inspection	< 4.5 µSv (<0.45 mRem)*
Duty cycle	100%

Image presentation

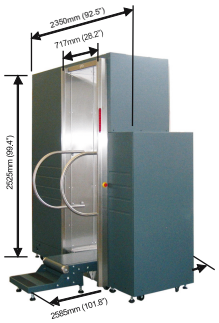
Result presentation	Two post scan still images Dual images - Fully body and high resolution torso
Grey levels stored	65536
Image display	b/w
Image evaluation functions	zoom, various enhancement and filter functions
Monitor	special colour TFT monitor

Options / Features

Operator's table
Side wall / side wall with window
Reference images
Can be configured with image store and load capability
Programmable function keys
Site or centralised system to manage personnel dose control
Remote operator privacy solution
Software for instantaneous offsite independent image assessment

Other B-SCAN™ models available with different dose per inspection

* Measured in the centre of the tunnel
All applicable national regulations, requirements and approvals need to be considered and addressed by the customer



For product information, sales or service, please go to www.smithsdetection.com/locations

Smiths Heimann GmbH, Im Herzen 4, 65205 Wiesbaden, Germany

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