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B-SCAN™ 16HR-FB

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.**
- **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 dose rate <2.0µSv/inspection**

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

The B-SCAN™ produces a high resolution head to toe whole body image of the person under review in a single pass.
This high resolution image and image enhancement tools allows the operator to accurately and quickly evaluate the image.

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-FB

Function

Material detected includes	Metal, ceramic, plastics, powders, explosives, narcotics
Detection capability	Objects hidden internally and externally on the body
Type of scan	Full body scan in one inspection pass
Primary function	Screen people for contraband and threats
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. 0.12 m/s
Scan method	Person moved through the beam
Scan time	< 7 Seconds
Alarm resolution	Single image review
Conveyor load capacity	>220kg (485 lb)

Installation information

Dimensions	approx. 2585 [L] x 2525 [H] x 1955 [W][mm] (101.8" x 99.4" x 76.9")
Weight	820kg
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	< 2.0 µSv (<0.20 mRem)*
Duty cycle	100%

Image presentation

Result presentation	Post scan still image - Full body image
Grey levels stored	65536
Image display	b/w
Image evaluation functions	zoom, various enhancement and filter functions
Monitor	special colour TFT monitor

Options / Features

Scan and Image Management system (SIM). Configurations include:
- Stand alone
- Networked with central data and image storage
- Connected to customer database

Operator's table
Side wall / side wall with window
Can be configured with image store and load capability
Programmable function keys
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
All models of B-SCAN have been independently tested against the ANSI/HPS N43.17-2009 guideline

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

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