

HI-SCAN™ 10080 EDtS

HEIMANN X-RAY INSPECTION SYSTEM



Screening objects transported in the cargo hold of airplanes has historically represented a major challenge to the aviation industry. The evolution of this requirement to include 100% inspection of these objects has now become a critical element in maintaining

traveler confidence and assuring the future success of the aviation industry. The automatic explosive detection system HI-SCAN 10080 EDtS represents the latest development of the proven Smiths Heimann detection technology.

The abilities of the system help meet all requirements existing within a 100% screening environment. Using the latest developments in this sector, the EDtS offers major technological innovations with regard to the X-ray generator, the X-ray sensors and automatic image evaluation. Thus the EDtS is able to offer the highest detection rate in its class.

tion into automated conveyor systems. The EDtS can be integrated into existing or newly designed conveyor systems. Within the proven multi-level screening concept, all objects to be inspected are screened automatically for explosives by this high speed Level 1 system. Objects cleared by EDtS continue to their determined destination while the X-ray images of objects rejected in Level 1 are automatically diverted to a second security level for further evaluation. Should further inspection be necessary, the image and object are sent to Level 3. With lower throughput requirements for Level 3 screeners, further technologies exist for this application and implementation will depend on the security philosophy and regulations of the airport.

With a tunnel opening of 107 cm in width and 81 cm in height, the system allows for the screening of oversized objects up to a length of 3.8 m, avoiding the need to divert to an alternate screening technology. Due to its detection capability, combined with a low false alarm rate, the system is able to screen up to 1,800 bags per hour – setting a new standard for automated screening technology.

The EDtS, operating at 0.5 m/sec, has been specifically designed to meet the challenges of integra-

Automation of the primary inspection process offers the added benefits of reducing staff requirements and recurring costs.

Feature Highlights

- **Automatic detection of explosives**
- **Analysis of Z_{eff} and density from independent views**
- **High detection capability and low false alarm rate**
- **High belt speed, thus high throughput up to 1,800 items/h**
- **EU standard 2-compliant (acc. to regulation 1448/2006)**
- **Evaluation in real time**
- **Specially designed for multi-level systems**
- **All 5 high-resolution X-ray images available for operator recheck**
- **Fully integratable in automatic conveyor devices and networks for image distribution, system management, archiving and TIP**

Technical Specifications **HI-SCAN 10080 EDtS**

Main Features

Tunnel dimensions (WxH)	1070 x 810 mm, 42.1" x 31.9"
Max. object size (WxHxL)	1060 x 800 x 3800 mm, 41.7" x 31.5" x 149.6"
Unit width	2020 mm, 79.5"
Unit height	2000 mm, 78.7"
Unit length	3335 mm (core unit), 131.3"
Length of X-ray protection tunnel, each	900 mm, 35.4" ²⁾ ; 1400 mm, 55.1" ¹⁾ (can be erected over the conveyor of the existing baggage handling system)
Weight core unit	approx. 3900 kg, 8600 lbs
Weight input-/exit tunnel, each	approx. 500 kg, 1,110 lbs ²⁾
Service area	approx. 635 kg, 1,499 lbs ¹⁾
Conveyor height	1000 mm (both sides), 39.4"
Belt speed	800 mm, 31.5"
	0.5 m/s, 98.5 ft/min

Automatic detection

Throughput	up to 1800 objects per hour (with average object length of 800 mm, 31.5")
Gap between objects	min. 200 mm, 7.9"

X-ray generator

No. of X-ray generators	3
Anode voltage	max. 150 kV cp

Image generating system

X-ray converter	5 L-shaped detector lines
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Installation Data

X-ray leakage	meets all applicable laws and regulations with respect to X-ray emitting devices
Storage temperature	+5 °C to +40 °C
Storage temperature	-15 °C to + 60 °C (without UPS batteries)
Humidity	10% - 90% (non-condensing)
Splash protection	IP 54
Power supply	400 V + 10% / -15%, 16 A (three-phase), 50/60 Hz ± 3 Hz, 8 kVA

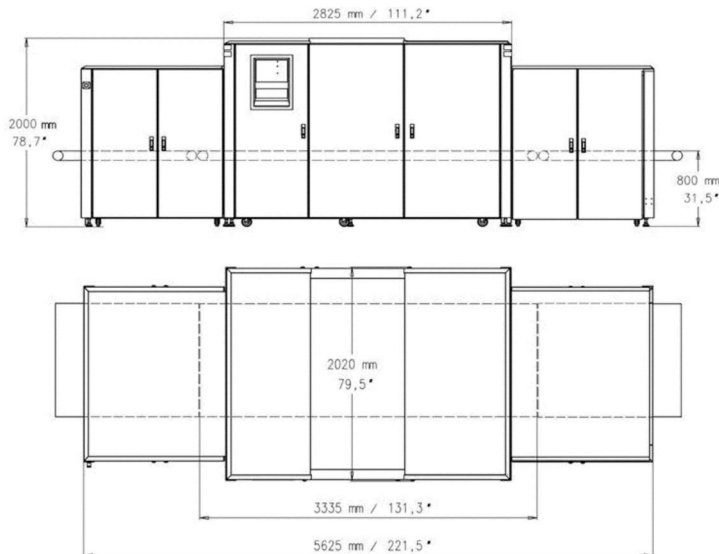
Options

Other power requirements and temperature ranges on request

System integration may be a critical requirement when providing airport security. The EDtS unit can be easily, and cost effectively, integrated into existing systems.

¹⁾ standard unit

²⁾ optional tunnel



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

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