AI-Based X-Ray Baggage Inspection System

AI-Based	Fingerprint Login	One Key Turn Off	Baggage Recording	High Resolution Color Display	Sound & Light Alarm	Multi Energy

The IDT100100(AI) X-ray Security Inspection System is a next-generation solution equipped with advanced features like intelligent detection, baggage tracking, and high-resolution display. Designed for versatile applications, it is ideal for deployment in customs, transportation terminals, office complexes, large-scale events, courts, prisons, embassies, factories, schools, hospitals, and other public spaces. Its tunnel size is optimized to handle large suitcases, oversized parcels, extra-large backpacks, and handbags with ease.

- **Material Classification:** Advanced material discrimination technology to recognize different materials and assign different colors (3 or 6 colors).
- **Intelligent Recognition:** Integrated with the advanced detection algorithm, which could detect more than 35 major types of target objects and alarm on them automatically.
- **HD Image:** Integrated with the new generation of image processing system, which could provide with a clearer X-ray image with high resolution.
- **Variable Speed:** One-click to switch the conveyor speed to fit different application scenarios.
- **Remote Management:** Network integration supported real time status, X-ray images, videos, alarm information can be viewed remotely through network, and report can be viewed and downloaded remotely for better management process.

SPECIFICATIONS

Dimension

Tunnel Dimension	1000 mm (W) × 1000 mm (H)
System Dimension	3276 mm (L) × 1296 mm (W) × 1810 mm (H)

General Specifications

Conveyor Height	300 mm
Conveyor Speed	0.2 m/s, 0.3 m/s, 0.4m/s adjustable
Max. Conveyor Capacity	200 kg

Performance

Wire Resolution	38/40 AWG
Penetration (Steel)	34/36 mm

X-ray Generator

Number of Generators	1
Anode Voltage / Current	160KV
Cooling / Working cycle	Oil-cooling / Continuous

Health and Safety

External dose rate	< 0.5 µSv/h (50mm Distance to the Housing)
Film Safe	Guaranteed up to ISO1600

Detection Algorithm

Prohibited Goods	35 Major Types, over 64 categories
Detection Others	Shield Alarms, etc.

Integrated Cameras

Cameras	5 camera, Resolution: 1920 x 1080 1/2.8"
Sensor Type	Progressive Scan CMOS H.265 / H.264 /
Video Compression Standard	MJPEG

Installation Data

Power Consumption	< 0.8 KVA
Power Supply	AC 220V (-15% to +10%) , 50Hz/60Hz (±3Hz); AC 110V (-15% to +10%) , 50Hz/60Hz (±3Hz);
Noise level	< 60 dB

Environment

Operating Temperature / Humidity	5°C to 40°C / 5 % to 95 % (non-condensing)
Storage Temperature / Humidity	-20°C to 60°C / 5 % to 95 % (non-condensing)
Weight	1000 Kg

Additional Features

Image Processing	Color / Black & White(C/B&W), Organic Stripping(ORG-), Inorganic Stripping(INORG-), Negative, High / Low penetration (H/L), Absorptivity increase(ABS+), Absorptivity decrease(ABS-), Super Enhancement(SEN), Edge Enhancement (Edge), 64x seamless zoom in and out, etc.
Software Functions	Professional TIP system, Operation Intro, Photo and X-ray image connection, etc

Operation Display	21.5 inch
Storage	1,00,000 +

DIMENSION DRAWING
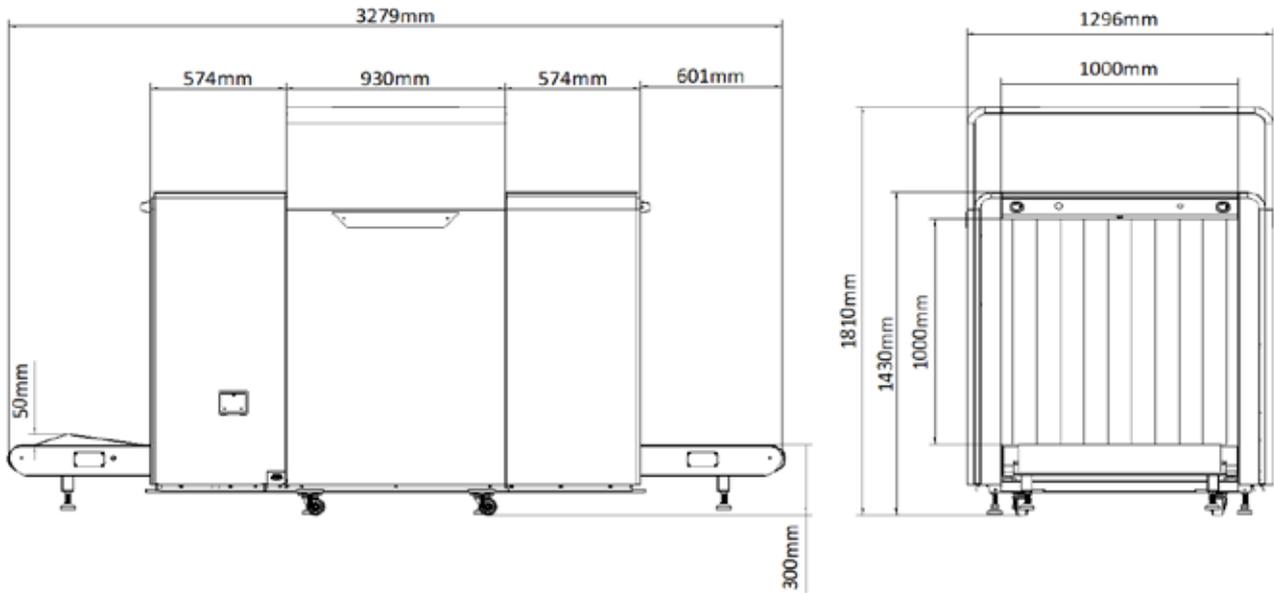
ORDER INFORMATION

Part Number	IDT.100100AI

The product specifications and descriptions listed in the specification sheet are subject to change anytime without notice.