

CBS-XR5030C Dual-energy X-ray Security Inspection

The CBS-XR5030C Dual-energy X-ray Security Inspection Machine is a dual-energy X-ray screening device independently developed and manufactured in-house. It is designed for the inspection of briefcases, handbags, mailbags, and small to medium-sized parcels. It is widely used in courts, procuratorates, correctional facilities, hotels, museums, stadiums, and other public security inspection environments.



Key Features

Modular Design

The internal circuitry adopts a modular design with optimized layout, effectively improving anti-interference capability, ensuring stable operation, and facilitating maintenance.

Digital Technology

The hardware system adopts an advanced ASIC-based fully digital design combined with in-depth data acquisition technology. Compared with conventional analog acquisition systems, it offers higher integration, stronger anti-interference capability, and clearer imaging performance.

Intelligent Functions

The system integrates multiple intelligent functions, including RTOS-based real-time image processing, TIP (Threat Image Projection) for threat simulation, auxiliary alarm for suspicious items, remote control and management, as well

as fast image storage and backup.

Automated Operation

The system features automated functions including one-touch power on and off, infrared energy-saving sensing, emergency alarm alerts, as well as automatic fault self-diagnosis, ensuring efficient and reliable operation.

Professional Design

The system is designed with a user-friendly interface, efficient and practical image processing functions, and a customized dedicated security inspection keyboard, providing a professional and convenient user experience.

Basic Specifications

Chamber Dimensions:	505 × 305 mm (W × H)	Conveyor belt speed:	0.22 m/s
Conveyor belt load capacity:	120 kg (uniform load)	Steel penetration:	≥38 mm
Wire resolution:	> 38 AWG	Spatial resolution:	1.0 mm (Horizontal/Vertical)

X-ray Source

Control Interface:	Analog Interface	Tube Voltage:	140 kV (adjustable)
Tube Current:	0.6 mA (adjustable)	Cooling Method:	Sealed oil cooling with industrial forced air cooling
Duty Cycle:	100%, no warm-up required	Protection Functions:	Overvoltage, overcurrent and overtemperature protection

Radiation Safety Indicators

Leakage dose rate:	< 0.5 μGy/h (at a distance of 5 cm from the casing)	Single dose:	< 5.0 μGy
Safety:	Safe for photographic film, chips and electronic devices		
Radiation Shielding:	The entrance and exit of the passage are shielded with a double-layer, eco-friendly lead curtain (0.5 mm Pb), while the main body is shielded with 2–4 mm lead plates, ensuring that external radiation from the equipment complies with national safety standards		

Installation Data

Noise Level:	< 58 dB(A)	Weight:	380 kg (including wooden crate)
Power Consumption:	0.4 kW (MAX)	Power supply:	AC 220 V ±10%, 60 Hz ±5 Hz
Passage Height:	750 mm	Dimensions:	1520 mm (L) × 770 mm (W) × 1100 mm (H)
Crate Dimensions:	1620 mm (L) × 830 mm (W) × 1260 mm (H)		
Optional Modules			

- 1、Multi-angle monitoring system
- 2、Remote operation management system
- 3、Dedicated security inspection keyboard
- 4、Energy-saving sensor
- 5、Adjustable-speed conveyor belt
- 6、Extended entry/exit item collection table
- 7、Face recognition