MTC-XR1010HK

Single-View and Dual-Energy X-ray Intelligent Security Inspection System



General specifications

Size	
Tunnel Size	1000 mm(W) × 1000 mm(H)
Dimension	3279 mm(L) × 1296 mm(W) × 1810 mm(H)
Operation Desk Size	650 mm(L) × 700 mm(W) × 1200 mm(H)
Performance	
Line Resolution(1)	36AWG standard,38AWG typical
Penetration(1) (Steel)	30 mm standard,34mm typical
X-ray Generator	
X-ray Generators	1
Anode Voltage / Current	160kV / 1.0mA (Adjustable)
Cooling / Working cycle	Oil-cooling / Continuous
Orientation	Vertically downward
Radiation	
External Dose Rate(2)	< 1.0 μSv/h (100mm away from the device surface)
Film Safety	Standard of ASA / ISO1600
Conveyor	
Height	300 mm
Speed	0.2 m/s, 0.3 m/s, 0.4 m/s adjustable
Load	200Kg
Monitoring System	
Sensor Type	1/2.8" Progressive Scan CMOS
Cameras	5-ch
Video Compression Standard	H.265 / H.264 / MJPEG
Max. Resolution	1920 × 1080
Video Storage Capability	More than 30 days

Product Highlight

- **AI-Powered Threat Detection:** Intelligent recognition of 35 categories and 64 object types using deep learning technology.
- **High-Performance X-Ray Imaging:** 160 kV X-ray generator with steel penetration up to 34 mm under typical test conditions.
- **Advanced Material Classification:** Dual-energy material discrimination with 3-color standard and optional 6-color display modes.
- **Large Inspection Tunnel:** 1000 × 1000 mm opening accommodates oversized baggage, parcels, and packages.
- **Adjustable Conveyor Speed:** Three selectable speeds of 0.2, 0.3, and 0.4 m/s, supporting a maximum load of 200 kg.
- **Intelligent Image Enhancement:** Multiple processing functions, including organic/inorganic stripping, edge enhancement, and 64× digital zoom.
- **Integrated Video Monitoring:** Five-channel camera system supports baggage-image correlation, video recording, and event playback.
- **Smart Security Management:** Fingerprint/password authentication, inspection data storage, network integration, and real-time alarms.
- **Continuous Operation:** Oil-cooled X-ray generator designed for continuous-duty security inspection.

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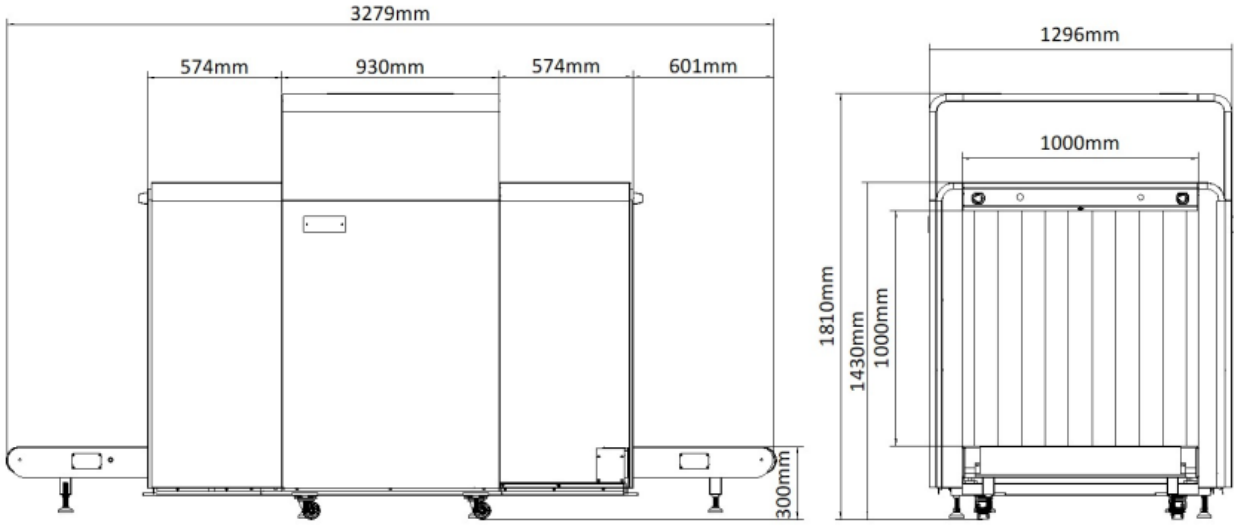
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Display	
Screen Size	21.5", Single-screen
Resolution	1920 × 1080
Intelligent Functions	
AI Detection	35 categories with 64 types
Login Method	Fingerprint / Password
System Functions	
Standard	Time / Date, baggage counting, user management, log management, X-ray on time, power on self-test, enhanced scanning, system information management, built-in system diagnostics, standby mode, training, HCP, organic materials alarm, non-penetration alarm, explosive detection, etc.
Image Processing Functions	
Image Enhancement	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) and Suspect materials enhancement(Z789), 64X zoom in and 3X image magnifier, etc.
Material Classification	3 Colors mode (Default) 6 Colors mode (Optional)
Image Storage Capability	100,000 +
Device Parameters	
Power Consumption	Max. 0.7 kW
Power Supply	AC 220V (-15% to +10%) , 50Hz/60Hz (±3Hz) AC 110V (-15% to +10%) , 50Hz/60Hz (±3Hz)
Noise Level	60dB(A), 1000 mm away from the device surface
Operating Temperature / Humidity	5 °C to 40 °C / 10 % to 95 % (non-condensing)
Storage Temperature / Humidity	-20 °C to 60 °C / 0 % to 95 % (non-condensing)
Weight	Net: approx. 1140 Kg

[1] Stated performance as measured by MatriXcope Imaging Standard Test Piece.
[2] The X-ray leakage rate reaches the natural environment background level, well comply for US FDA requirements.

Drawing

X-ray security inspection system

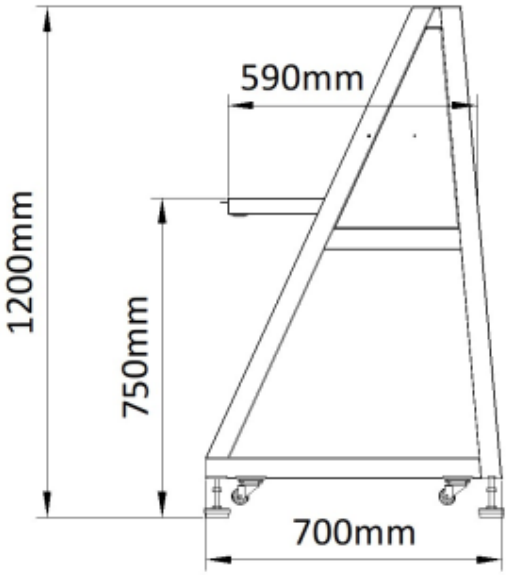


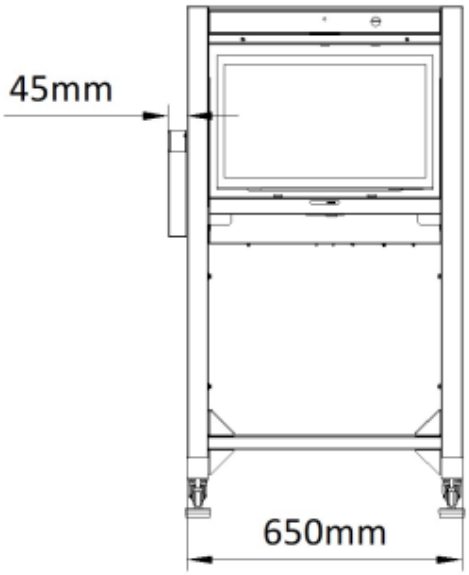
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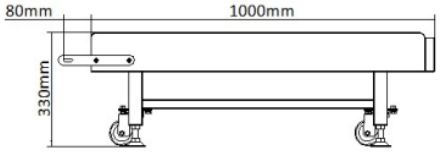
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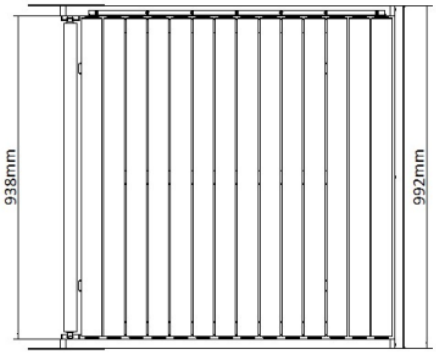
Operation desk

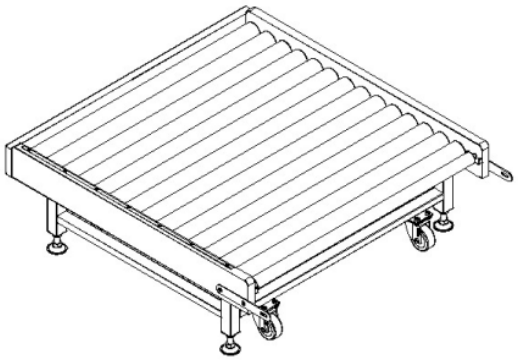




Entrance and Exit roller table







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