

On a Mission to Help Save Lives

X-ray 6550A with AI Assist



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Manufacturer: **Athena Security**
Model Number: **6550A**

Specifications

Tunnel Size	650 (W) x 500 (H) mm
Belt / Conveyor Speed	0.25 - 0.75 m/s
Conveyor Max Load	150 kg (331 lbs), evenly distributed
Conveyor Height	708 mm
Noise	<60 dB
Weight	480 kg (1058 lbs)

X-Ray Generator

Voltage	160 kV digital source
Wire Detectability	38-40 AWG
Spatial Resolution	1.0 mm horizontal, 1.0 mm vertical
Steel Penetration	35 mm steel typical
Tube Current	1 mA
Cooling	Sealed oil bath with forced air
Duty Cycle	100%; no warm-up procedure required
Beam Direction	Diagonally upward
Detector	1024 channels in an L-shaped array
Dual Energy	Yes

Generator Angle	80°
Colors	7

Operating Environment

Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to 60°C
Humidity	Up to 95%, non-condensing
Power Requirements	120 VAC $\pm$ 10%, 50/60 Hz, 10A max

Computer

Processor	Intel® N3150
Memory	4 GB RAM
Storage	1 TB HDD (standard)
Platform	Windows 10 OS
Display	Single 21.5" LCD color monitor
Display Resolution	1920 x 1080, 24-bit color

Health & Safety

Radiation Standards	Compliant with national radiation safety standards for cabinet X-ray systems
Typical Radiation Leakage	Less than 0.1 mR/hr (1.0 uSv/hr)
Film Safety	Guarantee ISO 1600 (33 DIN)

Dimensions

Overall Height	1382 mm
Base Width (front)	1584 mm
Cabinet Depth (side)	1155 mm
Conveyor Belt Height	708 mm
Length (w/ Roller Stubs)	1158 mm
Tunnel Opening	650 (W) x 500 (H) mm

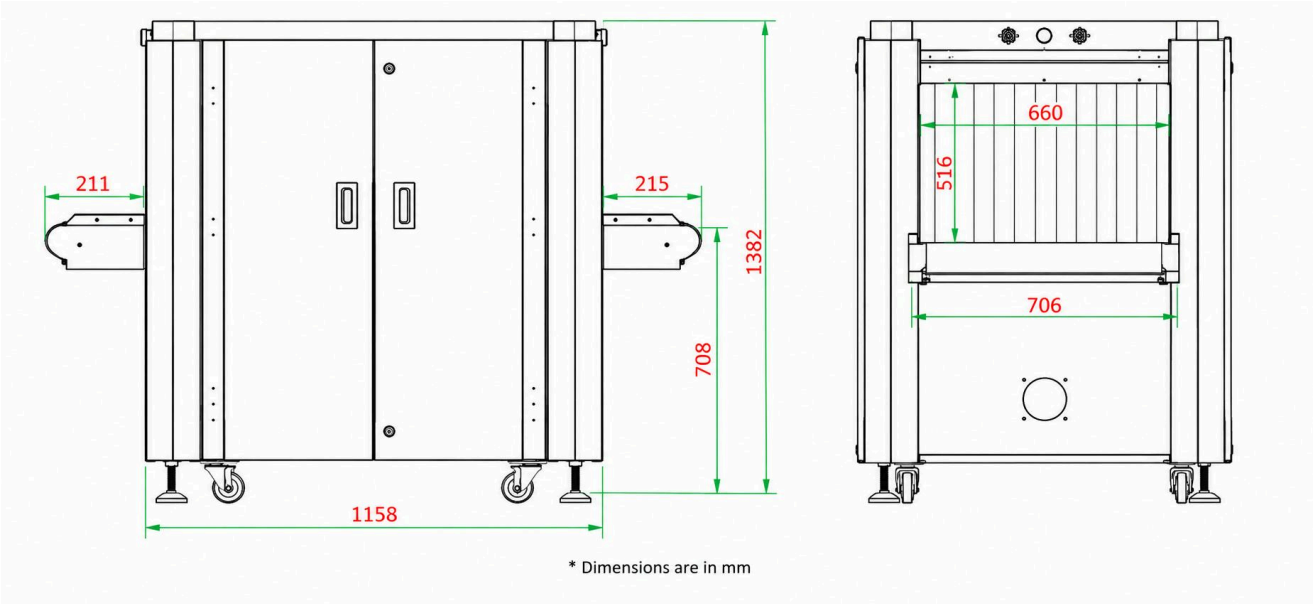


Fig: X-ray 6550A Dimension

AI Assist and Operator Workflow

Athena's AI layer analyzes X-ray imagery to help operators identify potential threats and prohibited items. The current Athena platform supports local AI processing on an Apple iPad Pro, visual threat highlighting, automatic belt stopping for detected threats, crop and zoom tools, and centralized X-ray reporting.

AI Assisted Threat Detection	Supports detection of more than 80 alert types, including firearms, knives, ammunition, drones, vapes, sharp objects and other prohibited items
Local AI Processing	AI can run locally on the operator iPad to reduce cloud dependency and support faster on-site processing.
Automatic Belt Stop	The platform can stop the conveyor when a potential threat is detected so the item can remain inside the scanner for review.
iPad Based Operation	Operators can review X-ray alerts and use touch based controls such as crop and zoom from the iPad interface.
Integrated Screening Workflow	X-ray alerts can be used alongside Athena Weapons Detection System alerts from the operator tablet.
Reporting And Review	Athena Control Center supports X-ray reporting and centralized review workflows.

INSTALLATION NOTES

Place any Weapons Detection System or other electromagnetic field sensitive device at least two feet from the X-ray machine to reduce the risk of interference. Final site planning should account for power, conveyor clearance, operator position and safe cable routing.

Accessories

Powered extension conveyor - entry + exit, daisy-chains to existing unpowered roller table, matched to 0.5 m/s belt

Superior roller tables - height-adjustable; 0.5 m / 0.7 m / 1 m lengths (Part# SE-XR007)

GPU AI object-recognition upgrade

Short protective tunnel cover

NDAA-compliant camera for person + bag linkage

Floor-mount railing / bolt-down kit

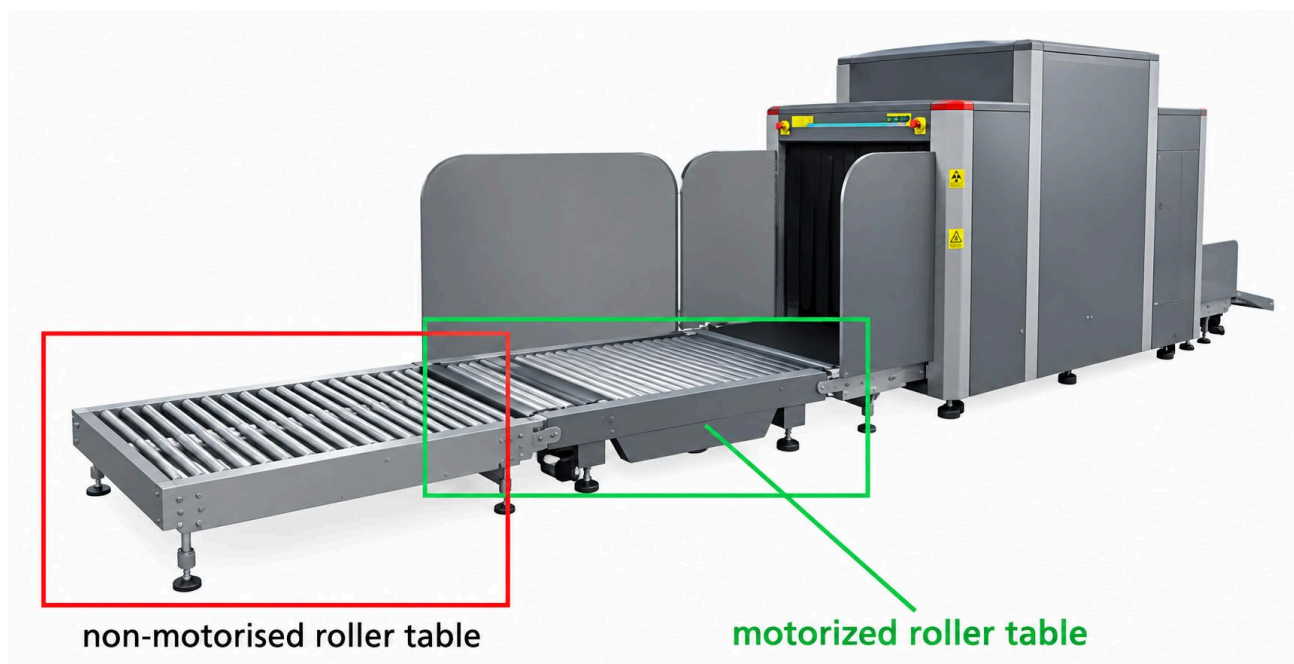
OPTIONAL

Motorized Conveyor Extension

Optional motorized roller conveyor designed to extend the entry or exit side of the AI Assisted X Ray Baggage Scanner for easier baggage handling and improved screening flow. The conveyor direction can be configured to match the X Ray conveyor direction.

Features:

- Motorized roller table for entry or exit extension
- Supports continuous baggage movement
- Conveyor speed designed to align with the X Ray system
- Helps improve baggage handling and screening workflow
- Available in three foot lengths for \$3,000 each





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