



HXP-TotalScan™



PRODUCT HIGHLIGHTS

320 mm Steel Penetration

High Image Resolution

Throughput: 150 Trucks Per Hour

Fully-Automated Drive
Through Portal

Safely Scans Truck & Driver

Low Power Requirements &
No Moving Parts

The HXP-TotalScan™ is a high-energy portal designed for screening trucks and shipping containers at seaports, border crossings, and cargo centers. The portal is fully automated and can process up to 150 trucks an hour. With a tunnel height of almost five meters (16.4 ft.), even oversized cargo can be scanned.

The system is powered by a betatron capable of penetrating 320 mm (12.6") of steel. The high penetration ensures accurate imaging, which makes it easy for operators to identify threats and verify manifests, while the rugged construction ensures cost-effective operation. Betatron systems require less power and have no moving parts, enhancing reliability and allowing the HXP to provide continuous security at busy checkpoints.

The HXP-TotalScan's precision design safely screens both truck and driver. As the driver passes through, the system automatically adjusts the dose rate to a secure level. Once they are clear, the dose rate is increased to scan the cargo, providing operators with a clear view of the truck and its contents.

The Astrophysics HXP-TotalScan is designed and assembled in the United States to the highest quality standards. For nearly twenty years, Astrophysics has led the industry in research and development, creating integrated solutions to advance the critical security missions of our customers and partners.

GENERAL SPECIFICATIONS

Tunnel Size:	3.75 m x 5 m
(WxH)	147.6" x 196.8"
Max Vehicle Size:	3.50 m x 4.85 m
(WxH)	11.48" x 15.91"
Dimensions ¹ :	17 m x 12 m x 5.5 m
(LxWxH)	669" x 78.74" x 216"
Scanning Speed:	8 km/hour (5 mph) Nominal
	12 km/hour (7 mph) Capable
Throughput ² :	150 Trucks/Hour

TECHNICAL

Steel Penetration:	320 mm Typical, 300 Standard
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X-RAY GENERATOR & IMAGE PERFORMANCE

Energy:	2 MeV / 4 MeV / 7.5 MeV
Beam Direction:	Horizontally Sideward
X-Ray Dose:	0.06 µSv/Inspection

COMPUTER & VIDEO

Platform:	Windows® OS
Display Type:	Dual 28" Flat Panel Color Monitors
Display Resolution:	4K Resolution

ENVIRONMENTAL

Operating Temperature:	-30°C to 50°C / -22°F to 122°F
Storage Temperature:	-30°C to 60°C / -22°F to 140°F
Humidity:	Up to 95% Non-Condensing

ELECTRICAL

System Power:	380 VAC, 50Hz, Three Phase 14kVA
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HEALTH & SAFETY

In compliance with ANSI N43.17 for screening of personnel with X-Rays.
 In compliance with ICRP 103, Paragraph 2 of Article 13 of EU Council Directive 96/29/EURATOM, and United States EPA public exposure limits.
 In compliance with United States FDA and WHO food screening limits.
 Typical radiation leakage is 0.003 mSv to cargo and 0.06 usv to the cab (drivers).

STANDARD FEATURES

Black/White Imaging
 Picture Perfect
 Pseudo Color
 Reverse Monochrome

Continuous Zoom Up to 64x

Auto Image Archiving
 Image Review
 Management System
 Manual Bitmap Archive

Image Annotation
 Print Image Capable

Multi-Tier Accessibility
 Network Ready
 Real-Time Self Diagnostics

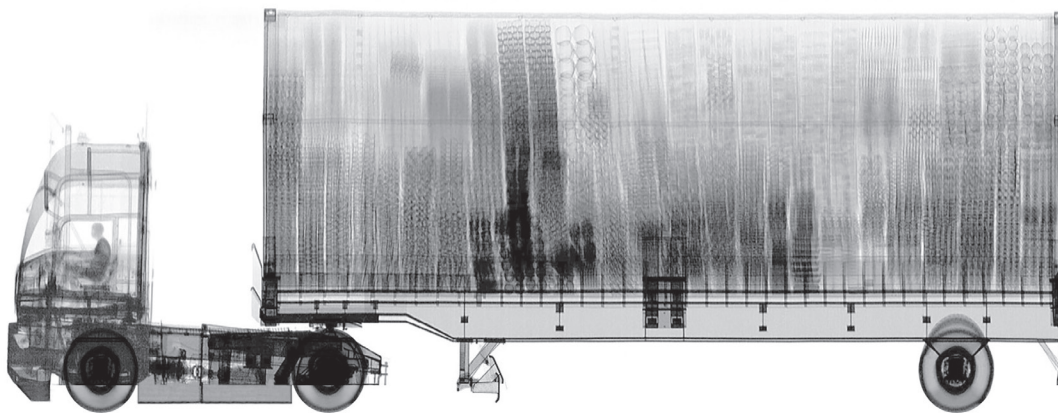
CCTV Camera System
 Inspection Workstation
 Operator Workstation
 Speedometer
 Traffic Signals
 Vehicle Counter

OPTIONAL FEATURES³

Material Discrimination:
 1) 2 Color (Organic/Metal)
 2) 3 Color (Organic/Metal/High-Z)
 Radioactive Material Detector

Local Language
 Higher Archiving Capacity

Additional Image Analyst Workstation
 Container Plate Reader
 Custom Paint
 Environmental Kit
 Inspection Office
 Operator Training
 Radiation Meter
 Remote Inspection Workstation
 Truck Plate Reader



ISO 9001: Certified

¹Weight and dimensions of the system may vary depending on customization. Weight does not include shield walls.

²Throughput is an estimated maximum vehicle count. Actual throughput will depend on system and site configuration.

³Optional features may affect lead time, price, and weight of system. Please contact your Astrophysics Sales Representative for more information.

Due to continued product research and development, Astrophysics Inc. reserves the right to amend all technical specifications without prior notice.

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