



ASTROPHYSICS™

TOMORROW'S TECHNOLOGY FOR TODAY'S SECURITY



Al-TamKenCo.



HXP-7.5

High Energy Portal

Truck and Cargo Container Inspections



TRANSPORTATION

Airport entrances and perimeters,
air cargo, and checkpoint technology.



PORTS & BORDERS

Border control, sea ports, and
other large cargo sectors.



CRITICAL INFRASTRUCTURE

Access control for prisons, courthouses,
mailrooms, hotel entrances and
military bases.

The HXP-7.5 Integrated Portal System (HXP) enables the rapid and effective screening of trucks and trailers with minimum interruption to the movement of goods. It is designed for ease of operation and maintenance, thus making it a cost-effective solution for transport scanning. This is achieved by using technologies already tested and proven in numerous X-ray systems and deployed at sites all around the world.

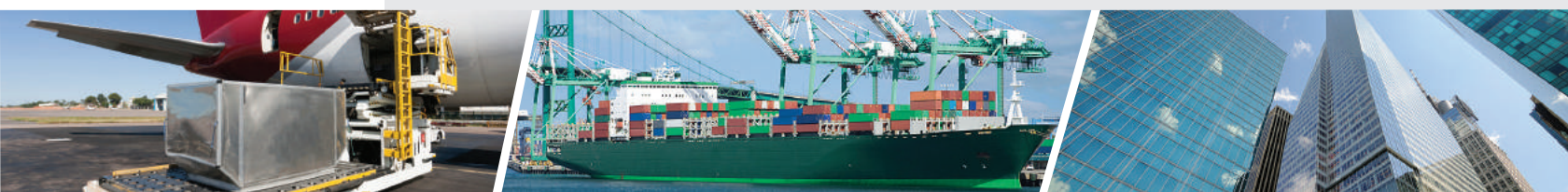
The HXP's Betatron X-ray source is used in similar high-energy cargo screening units and is ideally suited for portal systems. The HXP uses the Betatron to scan entire trucks as they drive through the system. The automatic scan process is configured to scan truck cabins at lower 2 MeV energies resulting in lower radiation exposures for the driver. As the cabin passes through the system the generator automatically switches to a higher 7.5 MeV for better penetration when scanning the trailer.

The system can penetrate 320 mm of steel and achieves spatial resolution of 5 mm. Each HXP is configured with Astrophysics' advanced imaging software and standard features that include Picture Perfect Imaging, Material

Discrimination, and Image Annotation. If a site requires multiple units, HXPs are networkable and can be linked together using the Astrophysics AMS. Optional features including license plate readers and under vehicle inspection systems (UVIS) can be incorporated to ensure each HXP is customized to meet its specific inspection mission.

All Astrophysics X-ray Inspection Systems are equipped with Real-Time Diagnostics, a unique Astrophysics feature which allows users to monitor system health. This software was specifically engineered to save you valuable time and money. If requested, Astrophysics would also be able to connect to the HXP and troubleshoot any issues remotely.

Astrophysics is committed to providing quality products and services around the world. Backed by a team of engineers from our Southern California headquarters, Astrophysics designs cutting-edge X-ray screening technology that protects lives, secures property and helps make the world a safer place.





GENERAL SPECIFICATIONS

- Tunnel Size: 4.20 m x 5.00 m
(W x H) 13.78' x 16.40'
- Dimensions¹: 17.00 m x 10.30 m x 5.44m
(L x W x H) 55.77' x 33.79' x 17.85'
- Max Vehicle Size: 3.50 m x 4.85 m
(W x H) 11.48' x 15.91'
- Net Weight²: 7,257.5 kg (16,000 lbs)
- Scanning Speed: 8 km/hr (5mph) Nominal
11 km/hr (7mph) Capable
- Throughput³: 160 trucks/hr

TECHNICAL

- Detectors: Cadmium Tungstate Scintillator/Photomultiplier
18-bit Digitization
- Steel Penetration: 320 mm
- Spatial Resolution: 5 mm

X-RAY GENERATOR

- Energy: 7.5 MeV
- Beam Direction: Sideways

COMPUTER & VIDEO

- Platform: Windows® OS
- Display Type: 24" LCD Color Monitors
- Display Resolution: 4K Resolution

INSTALLATION & ENVIRONMENTAL

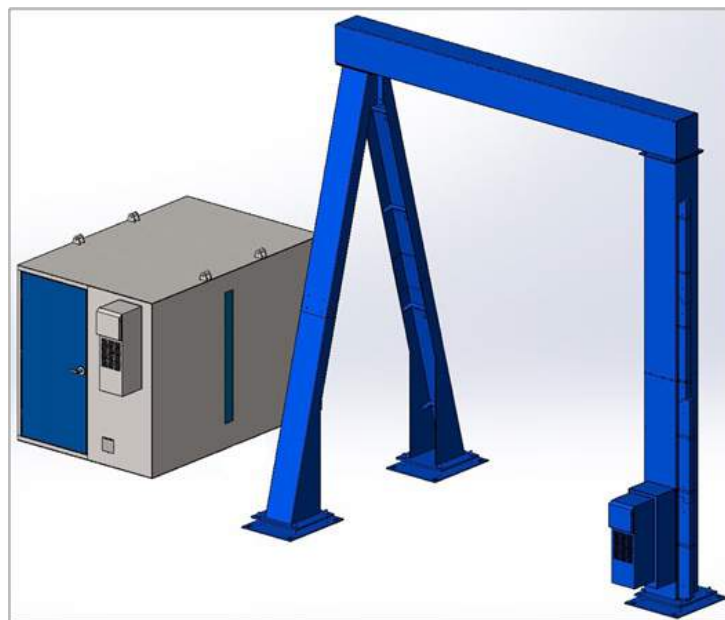
- Exclusion Zone: None if concrete shield walls installed
- Operating Temperature: -10°C - 60°C \ 14°F - 140°F
- Storage Temperature: -20°C - 70°C \ -4°F - 160°F O
- Humidity: to 95% Non-Condensing

ELECTRICAL

- Power Requirements: 380 VAC, 50 Hz, Three Phase
- Power Consumption: 10 kVA

HEALTH AND SAFETY

- Compliant with ANSI N43.17 for screening of personnel with X-rays.
- Compliant with ICRP 103, Paragraph 2 of Article 13 of EU Council Directive 96/29/ EURATOM, and United States EPA public exposure limits. (TotalScan is exception because EU does not allow scanning of the public).
- Compliant with United States FDA and WHO food screening limits.
- Typical radiation leakage is 0.005 mSv to cargo and 0.0001 mSv to the cab (drivers).

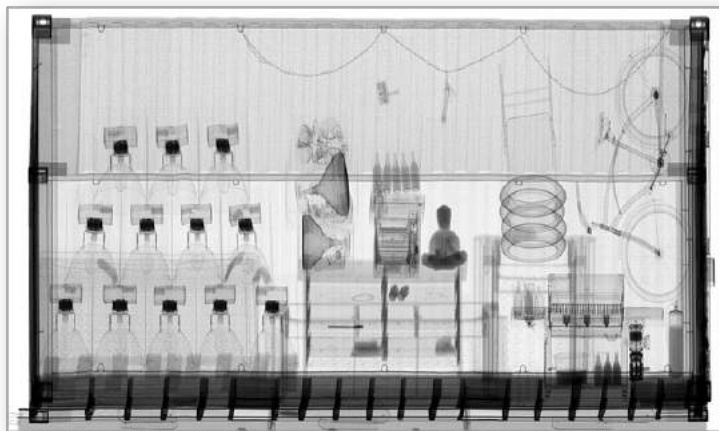


STANDARD FEATURES

- Auto Image Archiving
- CCTV Camera System
- Color and Black/White Imaging
- Continuous Zoom up to 64x
- Control Pedestal
- Display Workstation
- Image Annotation
- Image Review
- Image Server
- Inspection Workstation (up to 100 m away)
- Manual Bitmap Archive
- Material Discrimination
- Multi-Tier Accessibility
- Networkable
- Operator Workstation
- Picture Perfect Imaging
- Print Image Capable
- Pseudo Color
- Real-time Diagnostics
- Reverse Monochrome
- Speedometer
- Vehicle Counter

OPTIONAL FEATURES³

- Custom Paint
- Extreme Climate Operating Kit Upgrade
- Inspection Office
- License/Number Plate Reader
- Local Language Support
- Organic/Inorganic Imaging
- Operator Training
- Radiation Detection System
- Radiation Meter
- Remove Inspection Workstation
- TotalScan (scans cab and cargo)
- Traffic Signals
- Under Vehicle Inspection System (UVIS)



¹ Weight and dimensions of the system may vary depending on customization. Weight does not include shield walls.
² Throughput is an estimated maximum vehicle count. Actual throughput will depend on system and site configuration.
³ Optional 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.