

DUAL VIEW TECHNOLOGY



Astrophysics Inc. is a leading designer, developer and manufacturer of x-ray inspection equipment for baggage, cargo and person screening in security applications.

The XIS-100XDV uses Dual View Technology that allows for the viewing of objects from two different angles - an "up shooting" view from beneath the object and a "side shooting" view from the side of the object. The benefit is an improved ability to view odd shaped objects (i.e. triangular or L-shaped), and thus allow the operator to identify potential threats more quickly and easily than a single view system. The tunnel size of 1000 mm (39.4 in) wide by 1000 mm (39.4 in) allows for the scanning of larger parcels at airports, government offices and other applications.

PC-Based System

The XIS-100XDV is a PC-based system, which runs on Windows XP Professional. The XIS combines the latest software and hardware technologies to provide superior image clarity, resolution and processing power.

Networking

The XIS-100XDV is designed to network with other inspection systems using high-speed ethernet TCP/IP data communication. Images from any XIS model can be sent through the network to a central server where they can be viewed, stored, and printed.

Standard Features

- Automatic Image Archiving - up to 50,000 images
- Automatic Z-number Measurement
- Baggage Counter
- Color and Black and White Imaging
- Density Alert
- Edge-Enhancement Imaging
- Forward & Backward Conveyor Movement
- Geometric Image Distortion Correction
- High Penetration Function
- Horizontal and Vertical Imaging
- Image Annotation
- Image Review - for up to last 100 images
- Manual Archiving of Images in Bitmap Format
- Manual Archiving of Suspect Images
- Organic & Inorganic Imaging
- Picture Perfect - for improved resolution / penetration
- Print Image
- Programmable Penetration / Contrast Levels
- Pseudocolor and Reverse Monochrome
- Real Time Image Manipulation
- Three 17 Inch LCD Flat Panel Color Monitors
- User-Defined Access to Image Archive
- User-Selectable Zoom-In 2X to 32X

X-Ray Generator

Voltage	160kV - operating at 148 kV
Tube Current	0.7mA
Cooling	Sealed Oil Bath
Duty Cycle	100%
Beam Direction	Horizontal & Vertically Upward

Technical Specifications

Sensitivity	42 Gauge Wire Typical / 40 Guaranteed
Spatial Resolution	1.25 mm both Horizontal and Vertical
Penetration	32 mm Steel Typical / 30 mm Guaranteed
Contrast Sensitivity	24 Visible Levels, 4096 Gray Level
Power Requirements	220 VAC +/- 10%, 20 Amps Max. 110 VAC +/- 10%, 30 Amps Max.

X-Ray Detector

4608 Channels

Physical Specifications

Net Weight	Approx. 1,700 Kg (3,750 lbs)
Gross Weight	Approx. 1,895 Kg (4,200 lbs)
Tunnel Opening	100 cm (39.4 in) x 100 cm (39.4 in)
Conveyor Speed	13.7 m/min.
Conveyor Height	690 mm (27.5 in)
Conveyor Capacity	200 Kg Distributed Load (440 lbs)
Dimensions	3140 mm x 1740 mm x 1900 mm 124 in x 68.5 in x 75 in

Environmental Conditions

Operating Temperature	0 to 50 C / 32 to 122 F deg
Storage Temperature	-20 to 60 C / -4 to 140 F deg
Humidity	up to 95% non-condensing

Computer Specifications

At a minimum: Core II Duo 2.4 GHz, 1 GB RAM, 80GB HDD, 256MB VGA, UPS to support PC and electronics.

Health & Safety

Complies with published international standards including the U.S.F.D.A., Center for Devices and Radiation Health performance standards for cabinet X-Ray systems (Federal Standard 21-CFR 1020.40). Typical leakage radiation is less than 0.1mR/hr, compared with maximum leakage at 0.5mR/hr permitted by the Federal Standard. Film safety guaranteed for high speed films up to ISO 1600.

Video Display

Three 17 in. high resolution, low radiation, ergonomic, LCD color monitors. Display resolution: 1280 x 1024; 24 bit/pixel color representation.

Operational Standards

Complies with published international standards including the U.S. Federal Aviation Administration Standards "Use of X-Ray Systems" (Federal Standards 14 CFR 108.17 and 14 CFR 129.26).

Optional Accessories and Features

- Advanced Continuous Diagnostics
- Advance Image Archiving - Based on additional hard drive space
- Entry/Exit Rollers (1.0m or 1.5m long)
- Exit Table (1.0m long)
- Fourth Monitor - 17 Inch LCD Color Monitor
- Inclined Mortorized Conveyors
- Localized Language Capability
- Long Conveyor (LC) option extends conveyors to 1.0m on each side
- Network Supervisor Station
- Operator Training Program (OTP)
- Remote Operator Workstation
- Screener Assist Threat Detection
- Search / Suspect Station
- Variable Conveyor Speed
- 180 kV Generator for High Penetration (Guaranteed 35mm steel)

ISO 9001: 2000

Astrophysics Inc is an ISO 9001:2000 certified organization.

Design Policy

Astrophysics Inc. pursues continuous product development and improvement. Astrophysics Inc. reserves the right to make changes in specifications without notice.

