PX™ 160 P

Palletized Freight X-ray System

Fast, accurate screening, without breaking up the pallet

For organizations such as air cargo screeners that handle a high volume of palletized freight, the PX 160P X-ray system enables fast, accurate screening of an entire pallet in one efficient operation. Superior performance is ensured by L-3's innovative imaging technology, convenient heads-up operator controls and many features that can be customized for the user's unique environment.

Compared to systems that require pallets to be broken down prior to screening, the PX 160P greatly accelerates the inspection process. Furthermore, by maintaining the integrity of the pallet, the system makes it easier to confirm the contents of a shipment, detect tampering, facilitate storage and more easily ensure security.

An optional high-powered X-ray solution offers the highest level of penetration and resolution. The high level of penetration allows the operator to see through denser items, easing analysis of different commodities such as produce, meats, fish, paper, liquids, metals and more. Higher spatial resolution provides the ability to detect difficult items such as fine wires and electronic circuitry. The high-powered X-ray solution allows operators to clear images faster and reduce the number of goods requiring secondary searches.

The PX 160P includes a heavy-duty conveyor expressly designed to facilitate easy loading and unloading of pallets via forklift. Bi-directional functionality allows for convenient screening. With our multi-language support* capability, operators can interact with a system that speaks their native language.

Monitor included but not shown

APPLICATIONS

- Threat detection
- Manifest and declaration verification
- Contraband detection
- Theft prevention
- Regulatory compliance/inspection

COMPLIANCE

- TSA Air Cargo Qualified
- ISO 9001, CE, EUR 1
- Radiation Safety: U.S. 21 CFR 1020.40
- Film: Ten passes of ISO 1600/33DIN high-speed photographic film
- Operational: U.S. FAA Standards, "Use of X-ray Systems" (Federal Standards 14 CFR 108.17 and 14 CFR 129.26)

The L-3 Advantage. Reflecting L-3's commitment to innovation and its long experience in X-ray solutions, the PX 160P offers outstanding features and options that enhance the speed and accuracy of threat detection.

Image Performance:
Superb Resolution and Clarity

The advanced imaging capability of the PX 160P raises the standard for large X-ray screening systems and delivers an array of features that give operators the information they need to clear suspicious items.

• L-3's latest X-ray source has been optimized to deliver the ultimate in penetration, image resolution and quality.

• Best Image First™ feature automatically selects and presents the optimal view, enhancing throughput by reducing repetitive image adjustments.

• L-3's TRI-MAT imaging allows operators to easily distinguish between organic and inorganic materials and objects having a similar appearance but different chemical composition.

• User-friendly image enhancement tools, including continuously adjustable contrast, sharpening and color overlay, make it easy to optimize images for maximum detection capability.
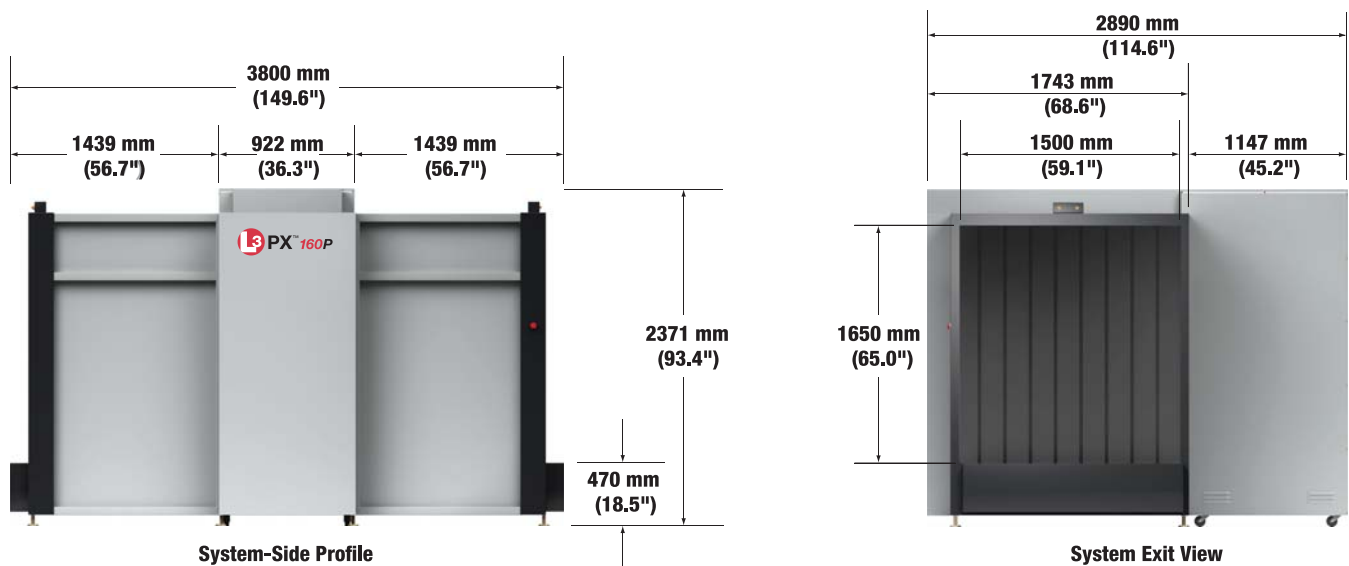
Configurable:
Operational Flexibility

The PX 160P can be tailored to meet a range of needs.

• Easy customization of software-based controls and tools allows the system to be adapted to diverse operational requirements and evolving security challenges.

• Bi-directional operation allows the system to be incorporated, without modification, into environments that require two-way screening, such as loading docks.

• Customizable user-defined Image Archiving (IA) stores over 50,000 images.

Networking:
Tying It All Together

The fully networkable PX 160P streamlines decentralized and remote monitoring, reporting and system management to help keep operational costs in line. Supervisors with appropriate network privileges can access and control any scanner or workstation on the LAN to send and receive bag images, TIP images, configuration settings, operator reports, diagnostics and operational metrics. This network capability, common to all L-3 second generation PX systems, has been designed to exceed current and emerging network requirements.

3800 mm
(149.6")

1439 mm
(56.7")

922 mm
(36.3")

1439 mm
(56.7")

2371 mm
(93.4")

470 mm
(18.5")

System-Side Profile

2890 mm
(114.6")

1743 mm
(68.6")

1500 mm
(59.1")

1147 mm
(45.2")

1650 mm
(65.0")

System Exit View

L-3's patented operator interface combines 3-button conveyor control with a touch-sensitive pad that allows continuous heads-up operation using icons displayed on the viewing screen

Operator Interface:
Intuitively Simple

L-3's patented operator interface provides a simple, intuitive and flexible way for users to control the system and make the most of imaging information.

• User-friendly interface combines 3-button conveyor control with a touch-sensitive pad that allows continuous heads-up operation using icons displayed on the viewing screen.

• Ergonomically engineered console minimizes operator fatigue and reduces the physical stress associated with prolonged screening.

• Threat Image Projection (TIP) option inserts fictitious threat images at periodic intervals and tracks operator responses, motivating operators to stay alert and allowing supervisors to assess the effectiveness of screening operations.

• EU-approved TIP image libraries

• Multi-language support presents user interface instructions and messages in the operator's native language.

Features

Imaging Features

• Best Image First™
• Transparent Color™
• Tri-material discrimination
• Organic/inorganic stripping
• Metallic item removal
• Zoom 2X – 16X or continuous zoom to 64X
• Threat alert
• True 32-bit color processing
• Customizable density & size alert
• Pseudo-color overlay
• Edge enhancement
• Reverse video
• Continuously variable contrast adjustment

Standard Features

• Patented heads-up operator display interface with touch pad control
• Operator Assist (OA)
• Image Archiving (IA)
• Configurable operator interface
• Multi-language support
• Bi-directional scanning
• Network ready
• 19" high-resolution LCD
• Remote desktop operator display
• Uninterruptible power supply (UPS) and input line filter

Optional Features

• High-powered X-ray source
• 2.0 m entry/exit roller table
• Remote operator interface (30 m and 100 m)
• LCD Steady Scroll
• Threat Image Projection (TIP)
• EU approved TIP libraries
• Network supervisor workstation
• Network TIP server
• External UPS
• Infrared operator-proximity sensor
• Color printer

SPECIFICATIONS:

GENERAL

Dimensions:	3800 mm (149.6") L x 2890 mm (114.6") W x 2371 mm (93.4") H
Tunnel Opening:	1500 mm (59.1") W x 1650 mm (65.0") H
Conveyor Height:	450 mm (17.7")
Power Requirements:	2 x 220-240 VAC, 50/60 Hz (30 amp, max)
Conveyor Speed:	136 mm per second (5.4" per second)
Conveyor Capacity:	3000 kg (6600 lb)
Weight:	Approx 4000 kg (8818.5 lb)
Weight (Crated):	(1) approx 3835 kg (8454.7 lb); (2) approx 676 kg (1490.3 lb)

X-RAY

Voltage:	160 kVp
Duty Cycle:	100%
Cooling:	Sealed oil bath
Beam Orientation:	Horizontal
X-ray Sensor:	1280 photodiodes in L-shaped folded array configuration

IMAGING AND PERFORMANCE*

Resolution:	34 AWG standard, 36 AWG typical
Penetration:	31 mm of steel standard, 32 mm typical
Contrast Sensitivity:	4096 gray level stored
Display Monitor:	19" high-resolution LCD

OPTIONAL HIGH-POWERED X-RAY IMAGING & PERFORMANCE*

Resolution:	36 AWG standard, 38 AWG typical
Penetration:	36 mm of steel standard, 37 mm typical

ENVIRONMENTAL

Operating Temperature:	0°C to 40°C (32°F to 104° F)
Storage Temperature:	-20°C to 50°C (-4°F to 122°F)
Humidity:	95% non-condensing
Airborne Noise Level:	<70dB (A)

RADIATION SAFETY

All L-3 Communications Security & Detection Systems' X-ray systems are certified to be in full compliance with all radiation safety requirements and external emissions limits as specified in the United States Code of Federal Regulations, Title 21, Section 1020.40 (21 CFR 1020.40) that apply to our products. Typical leakage radiation is less than 0.1 mR/hr.

OPERATIONAL STANDARDS

- Complies with the U.S. Code of Federal Regulations:
  - FAA 14 CFR 108.17 Use of X-ray Systems
  - FAA 14 CFR 129.26 Use of X-ray Systems
  - CDRH 21 CFR 1020.40 Cabinet X-ray Systems
- NRTL certified to ANSI/UL 61010-1, CAN/CSA 22.2 No. 61010-1 and CE compliant.
- Complies with CDRH (FDA) requirements, including all labeling requirements.
- Film Safety: Ten passes of ISO 1600/33DIN high-speed photographic film.
- Designed for TIP1A/TIPII/STIP compliance.

Security & Detection Systems

* With L-3 standard test piece