

# PX-208 X-ray System



## The best in its class for screening a wider spectrum of shapes and sizes

The PX-208 X-ray system meets the needs of security personnel faced with the dilemma of having to accommodate the occasional oversized object in a checkpoint or limited space environment. With generous tunnel dimensions, the PX-208 can handle oversized baggage and large boxes that are not always capable of being screened by conventional-sized 600 mm x 400 mm checkpoint X-ray systems.

Extremely easy to operate, the PX-208 offers the superior image quality and high throughput that are the hallmark of the L-3 product line—helping to provide security professionals the capability to quickly and accurately detect threats, including weapons, narcotics, explosives, and contraband.



### APPLICATIONS

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

### COMPLIANCE

- ISO 9001, CE, EUR 1
- Radiation Safety: U.S (21CFR1020.40)
- 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-208 offers outstanding features and options that enhance the speed and accuracy of threat detection.

### The Operator Interface: Simplicity Redefined

L-3's patented operator interface provides a simple, flexible, and powerful way for users to control the system and make maximum use of imaging information. Ergonomically designed to promote rapid learning and ease of use, the interface combines three-button conveyor control with a touch-sensitive pad that allows continuous heads-up operation using icons displayed on the viewing screen.

### Superior Imaging: See What You've Been Missing

Effective screening starts with advanced imaging capabilities. The PX-208 dual energy folded detector array includes 1,536 diodes, delivering the highest resolution available in a medium-size X-ray screening solution.

Based on research by the International Commission on Illumination (CIE), PX-208 incorporates Transparent Color™, L-3's innovative image processing technique. This unique imaging approach combines the science of the human eye's response to color and the display characteristics of a CRT monitor. With Transparent Color™, operators can interpret threat objects with a much higher degree of confidence due to the crisp, clear, and robust color images that are now possible.

### Networking: Connecting the Dots

Operating on a Windows® platform, the networked PX-208 allows data and images to be accessed in real time by a centralized supervisor workstation. This enables one person to perform key tasks for multiple units, including: second-level screening of suspect objects, centralized monitoring of operators' performance using the Threat Image Projection feature, and administration of all PX-208 systems on the network. The result is that oversight of screening and administrative operations can be streamlined, and costs can be kept in check.

### Operational Flexibility: Go Configure

The PX-208 system 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.
- With a variable-length conveyor, the PX-208 can be deployed in different configurations based on available space.
- Bidirectional operation allows the system to be incorporated, without modification, into environments that require two-way screening, such as mailrooms and loading docks.



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### Operator Tools: Focus on What Matters Most

Numerous features enhance the operator's ability to readily identify and examine suspect objects and detect the subtle but telling details that indicate a true threat, such as the wires associated with explosive devices.

- With diverse image analysis tools, operators can more easily distinguish between organic and inorganic materials and objects having a similar appearance. Image enhancement tools provide varied methods for optimizing images to more readily spot possible threats.
- The Operator Assist option compares scanned objects to data on known threats and highlights suspect items for further examination.
- Threat Image Projection (TIP) inserts fictitious threat images at periodic intervals and tracks operator responses, allowing supervisors to assess the effectiveness of screening operations—and motivating operators to stay alert.
- An Image Archive option supports storage of up to 20,000 images, with image retention determined by user-defined expiration dates or on a first-in, first-out basis.

## Features

### Imaging Features

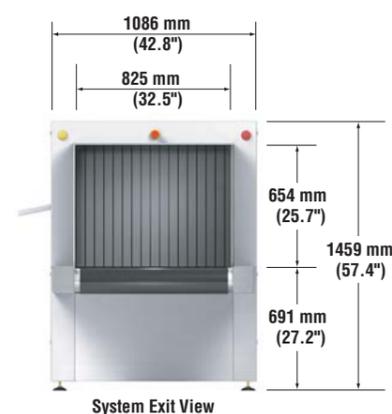
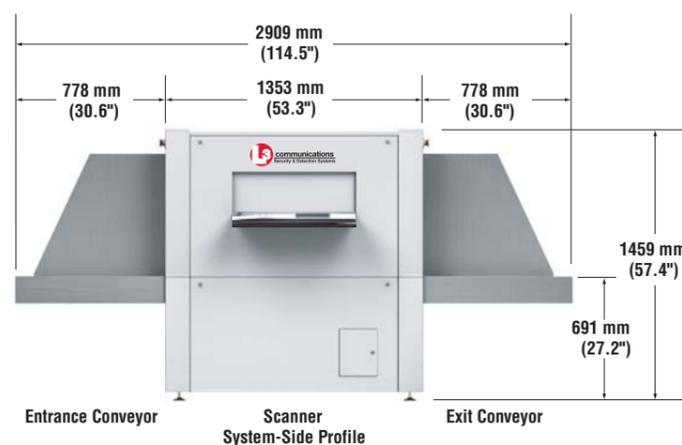
- Continuously variable contrast adjustment
- Tri-material discrimination
- Pseudo color imaging
- Zoom 2X - 16X or continuous zoom to 64X
- Edge enhancement
- High/low penetration mode
- Reverse video
- Organic/inorganic stripping
- Transparent Color™
- Best image resolution in its class

### Standard Features

- Uninterruptible power supply (UPS) and input line filter
- Patented, heads-up operator display interface with touch pad control
- Configurable operator interface
- Single 17" color monitor
- Remote desktop operator display

### Optional Features

- Single 22" color monitor
- 0.8m entry/exit conveyor
- 1.0 m & 2.0 m roller tables
- Threat Image Projection (TIP)
- Operator Assist® (OA)
- Image Archiving (IA)
- External UPS
- Color printer



## SPECIFICATIONS:

### GENERAL

Dimensions: 2909 mm (114.5") L x 1459 mm (57.4") H  
x 1086 mm (42.8") W  
Tunnel Opening: 825 mm (32.5") W x 654 mm (25.7") H  
Conveyor Height: 691 mm (27.2")  
Power Requirements: 100-240 VAC  $\pm$ 10% 50/60 Hz  $\pm$ 1% 1.0  
KVA max  
Conveyor Speed: 230mm per second (9.05" per second)  
Conveyor Capacity: 136 kg (300 lb)

### X-RAY

Voltage: 160 kVp constant potential tube  
Duty Cycle: 100%  
Cooling: sealed oil bath  
Beam Orientation: vertically upward  
X-ray Sensor: 1536 photo diodes in folded array  
(L-shaped) configuration

### PHYSICAL SPECIFICATIONS

Weight (Uncrated): approx 1114 kg (2450 lb)  
Weight (Crated): approx 1330 kg (2925 lb)  
Construction: steel frame and panels on casters

### 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)



## L-3 Communications Security and Detection Systems

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### IMAGING AND PERFORMANCE

Resolution: 38 AWG guaranteed, 40 AWG typical  
Penetration: 29 mm of steel guaranteed  
Contrast Sensitivity: 4096 gray level stored  
Video Resolution: 1280 x 1024/24 bits  
Video Display: 17" SVGA high resolution, flicker free display  
Computer Processor: Intel Pentium®

### RADIATION SAFETY

All L-3 Communications Security and 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 (21CFR1020.40) that apply to our products. Typical leakage radiation is less than 0.1 mR/hr compared to maximum of 0.5 mR/hr permitted by the Federal Standard.

### 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).

### FILM SAFETY

Ten passes of ISO 1600/33DIN high speed photographic film.

### DESIGN POLICY

L-3 Communications Security and Detection Systems reserves the right to change specifications in the course of continuous improvement. Specifications are provided for reference only and actual equipment may differ slightly from the description given. Typical dimensions are within  $\pm$  5% of nominal values.

*L-3 Communications Security and Detection Systems' X-ray systems are certified to be in full compliance with all radiation safety requirements and external emissions limits that apply to our products as specified in the United States Code of Federal Regulations, Title 21, Section 1020.40 (21CFR1020.40).*