



communications

Security & Detection Systems

Linescan® 231 Series

The **Linescan 231** is a large X-ray security screening system with a tunnel opening of 1000 mm (39.4") wide by 800 mm (31.5") high. The **Linescan 231** can accommodate large luggage, parcels and boxes typical of checked baggage at an airport. The system is particularly well suited for airports, customs facilities and transportation operations where high speed processing of large luggage and other items is required.

With its 300 mm (11.8") or 450 mm (17.7") conveyor belt height this system is perfect for applications requiring a low conveyor loading position.

The advanced **Linescan 231/V** is a PC based system that incorporates the latest technology featuring an enhanced modular design. This system seamlessly incorporates advanced computer options including Threat Image Projection (TIP), Operator Assist® (OA) and Image Archiving (IA).

As part of the Security and Detection Systems' family of products, the **Linescan 231** shares in more than 25 years of experience in the manufacture of X-ray security products. With more than 18,000 units in the field worldwide and an extensive service organization to support them, Security and Detection Systems is clearly the world's leading supplier of X-ray security products.



Linescan 231/III

Features

Linescan 231/III

- Dual 17" Color Monitors
- 1.0 m Entry/Exit Conveyor
- Conveyor Belt Height of 300 mm (11.8")
- Remote Console Controls

Standard Features:

- ◆ Variable Gamma
- ◆ Pseudo Color
- ◆ Zoom 2X and 4X
- ◆ Edge Trace
- ◆ High Penetration
- ◆ Reverse Monochrome
- ◆ E-scan® Material Discrimination
- ◆ Organic Stripping
- ◆ Inorganic Stripping

Optional Features:

- ◆ 1.7 m Entry/Exit Conveyors
- ◆ 228 mm (8.9") Entry/Exit Conveyors
- ◆ 1.0 m and 2.0 m Roller Tables
- ◆ Conveyor Belt Height of 450 mm (17.7")
- ◆ Voltage Stabilizer
- ◆ CE Compliance Kit

Linescan 231/V

- All Standard Features of the Linescan 231/III
- Advanced Computer Options

Optional Applications:

- ◆ Threat Image Projection (TIP)
- ◆ Operator Assist® (OA)
- ◆ Image Archiving (IA)

Linescan® 231 Series

Technical Specifications

General

Tunnel Opening:	1000 mm (39.4") W x 800 mm (31.5") H
Conveyor Belt Height:	300 mm (11.8") or 450 mm (17.7")
Power Requirements:	115-120 VAC, 60 Hz (15 amp max) 230-240 VAC, 50 Hz (10 amp max)
Conveyor Speed:	0.23 m per sec (45 feet per min) @60 Hz 0.18 m per sec (36 feet per min) @50 Hz
Conveyor Capacity:	136 kg (300 lb)

X-ray

Voltage:	160 kVp constant potential tube
Duty Cycle:	100%
Cooling:	sealed oil bath
Beam Orientation:	vertically downward
X-ray Sensor:	1600 E-Scan® photo diodes in folded array (L-shaped) configuration

Physical Specifications

Weight (Uncrated):	approx 1136 kg (2500 lb)
Weight (Crated):	approx 1397 kg (3074 lb)
Construction:	steel frame on casters

Environmental

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

Imaging and Performance - Linescan 231/III

Resolution:	36 AWG guaranteed, 38 AWG typical
Penetration:	27 mm steel guaranteed, 29 mm typical
Contrast Sensitivity:	at least 22 levels visible using a step wedge
Video Display:	two 17" SVGA high resolution, low radiation, ergonomic, flicker free displays

Imaging and Performance - Linescan 231/V

Resolution:	36 AWG guaranteed, 38 AWG typical
Penetration:	27 mm steel guaranteed, 29 mm typical
Contrast Sensitivity:	at least 24 levels visible using a step wedge
Video Display:	two 17" SVGA high resolution, low radiation, ergonomic, flicker free displays

Computer Specifications (Minimum)

Processor:	Intel Pentium® III
System Memory:	128 MB Ram
Display:	24 Bit-True Color (16.7 Million Colors)
Hard Disk:	9 GB High Speed SCSI Disk Storage
Additional Drive:	internal Zip™ Drive

Radiation Safety

All 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

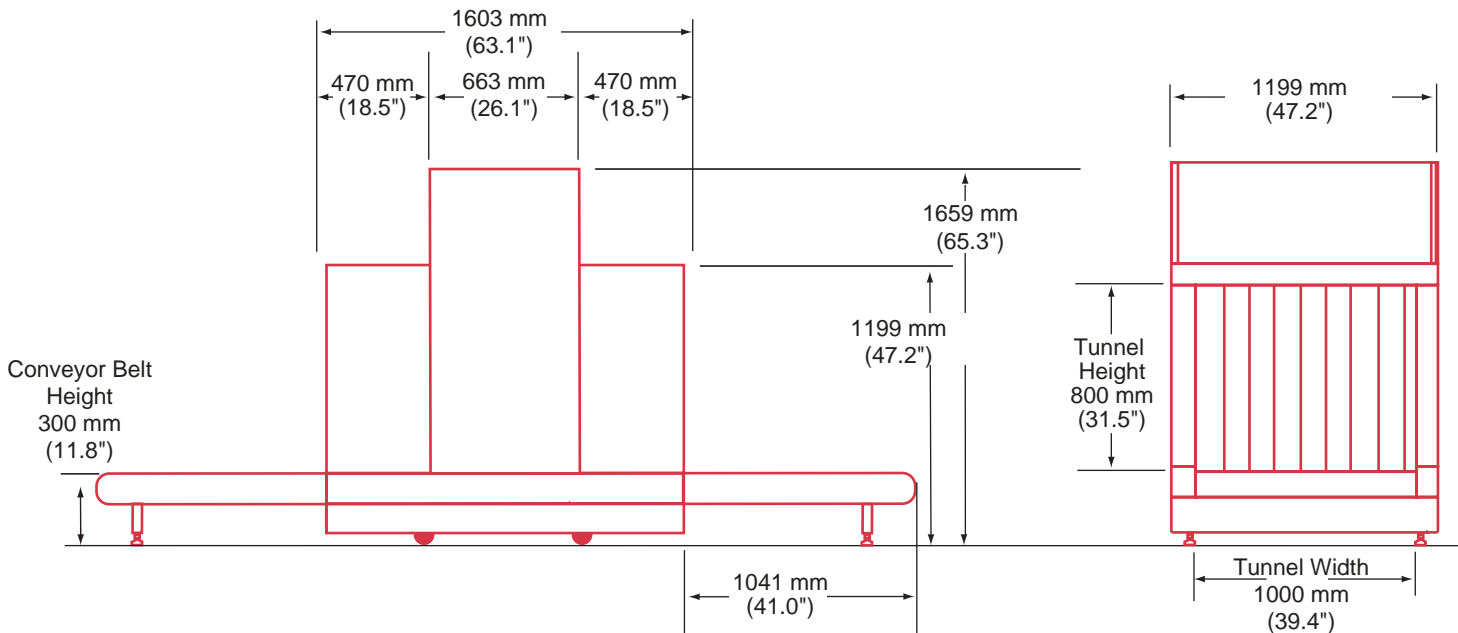
Complies with published International Standards including the U.S. Federal Aviation Administration Standards, "Use of X-Ray Systems" (Federal Standards 14 CFR 108.17 and 14 CFR 129.26).

Film Safety

Guaranteed for high speed films up to ISO 1600.

Design Policy

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.



communications

Security & Detection Systems

L-3 Communications Security and Detection Systems

In the USA • 10 Commerce Way, Woburn, MA 01801, Tel: 1.781.938.7800, 1.888.848.4319, Fax: 1.781.939.3993

In the UK • Unit 2, Brants Bridge, Bracknell, Berkshire, RG12 9HW, England, Tel: 44.1344.477900, Fax: 44.1344.477901

In Asia • 16-18 Kingsley Close, Rowville, Melbourne VIC 3178, Australia, Tel: 61.3.9212.8500, Fax: 61.3.9212.8595

www.l-3com.com

Rev 7/02-5K