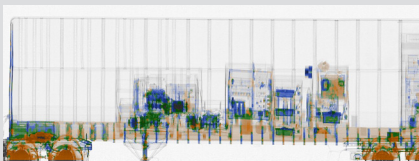
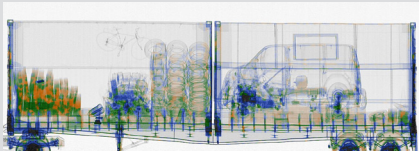


# SENTRY PORTAL

HIGH-THROUGHPUT, HIGH-ENERGY X-RAY INSPECTION SYSTEM

## KEY FEATURES AND BENEFITS

- High throughput of up to 200 trucks per hour
- High-quality imaging with three-color material discrimination
- Significantly lower dose to vehicle occupants than competing systems
- Small exclusion zone without costly shielding walls



Sentry Portal high-energy, dual-energy transmission images

AS&E's Sentry® Portal drive-through inspection system provides high-throughput cargo inspection by quickly and safely scanning trucks, cargo containers, and tankers. With a compact footprint and small exclusion zone that allows for installation in space-constrained areas, the Sentry Portal can scan a high volume of containers at seaports, border crossings, and security checkpoints. Using a high-energy transmission X-ray source, it provides excellent penetration for typical cargo, while minimizing the amount of scattered radiation.

A robust container-locating sub-system ensures safe drive-through operation, so that the driver is never exposed to high-energy X-rays. For maximum detection capability, the Sentry Portal's high-energy view can be combined with the multi-view Z Portal® system. This allows for three-sided Z Backscatter imaging of the entire vehicle (including the cab) and improved detection of organic materials, such as drugs, explosives, and stowaways.

# SPECIFICATIONS

## SENTRY PORTAL

### TYPICAL PERFORMANCE

- **High-energy Penetration:** 300 mm of steel
- **Dual-energy Penetration:** 280 mm of steel

### OPERATING FEATURES

- **X-ray Source:** 7.5 MeV
- **Crew:** Minimum of one operator
- **Scan Modes:** Drive scan activation, automatic cab exclusion, or optional CabScan mode
- **Scan Direction:** Single or optional bi-directional
- **Scanning Speed:** 12 kph nominal scan speed
- **System Throughput:** Up to 200 trucks per hour
- **Power Requirements:**
  - **50 Hz:** 380 V, 30 A, 17 kVA
  - **60 Hz:** 480 V, 25 A, 17 kVA

### SYSTEM DIMENSIONS

- **Width:** 8.2 m (27 ft)
- **Height:** 5.8 m (19 ft)
- **Length:** 3.1 m (10.2 ft)

### Maximum Vehicle Dimensions

- **Width:** 3 m (9.8 ft)
- **Height:** 5 m (16.4 ft)

### ENVIRONMENT

- **Operating Temperature:** -20° C to 50° C (-4° F to 122° F)

### HEALTH AND SAFETY

- **Open Radiation Exclusion Zone (150 trucks per hour):** 16 m x 19 m (52 ft 6 in x 62 ft 4 in)
- **Shielded Radiation Exclusion Zone (150 trucks per hour):** 16 m x 11 m (52 ft 6 in x 36 ft 1 in)
- **Radiation Dose at Exclusion Zone Boundary:** 0.5 µSv in any one hour
- **Radiation Dose to Driver:** Less than 0.006 µSv per scan
- **Radiation Dose to Crew:** Less than 0.5 µSv in any one hour
- **Radiation Dose to Cargo:** Less than 0.5 µSv per scan

### SYSTEM OPTIONS

- **CabScan® Mode:** Safely scan the cab of the truck, from front bumper to start of cargo
- **Air Cargo Scanning:** Allows scanning of air cargo train of unit load devices (ULDs) without scanning tug driver and with segmentation of each ULD trailer as a separate inspection record
- **Z Portal® Co-location:** Complements the Sentry transmission image with AS&E's multi-view Z Portal system, which offers three Z Backscatter imaging modules for left, right, and top-down views of the cargo
- **Bi-directional Scan Mode:** Allows operator to easily switch the direction of traffic flow
- **Radiation Portal Monitor:** Gamma or gamma/neutron
- **Integrated Peripheral Devices:** License/number plate recognition system, container code recognition system, under-vehicle inspection system, and manifest scanner
- **CIM Server Networking Solution:** Enables images from one or more systems to be sent to a centralized database and connects one or more analyst workstations for local or remote image analysis
- **Driver Scan Activation:** Allows scanning a wider variety of vehicle types by having the driver activate scanning after passing through the inactive beam plane

### Operator Alert Tools

- **Transmission Operator Alert Software:** Identifies high-density anomalies

The performance characteristics and photos in this document are indicative and for information only and specifications may vary depending on scan speeds, options and other factors; the specific characteristics of individual systems may differ based upon customer requirements, operation, and supplied options. In addition, due to continual development of Rapiscan Systems and AS&E products, we reserve the right to amend specifications without notice. Please note that due to U.S. laws and regulations, not all products are available for sale in all countries without restriction. Please contact your Rapiscan | AS&E Cargo Scanning & Solutions sales representative for more information or to discuss additional requirements.

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