

## CONVEYOR RADIATION PORTAL MONITOR

HIGH SENSITIVITY

AUTOMATICALLY SCREEN  
MOVING PARCELS OR BAGS

GAMMA AND NEUTRON  
RADIATION DETECTION

FAST, SEAMLESS INTEGRATION

### MARKETS

- Aviation
- Critical Infrastructure
- Customs and Border Control
- Event Security
- Defense



Shown with Optional Heavy Duty Stand

THE TSA CM267 IS A STAND-ALONE CONVEYOR MONITOR WHICH CAN BE POSITIONED ON THE SIDE OR MOUNTED DIRECTLY ABOVE A MOVING BELTWAY.

The CM267 features highly sensitive detection for both gamma and/or neutron radiation.

### ADVANCED DESIGN FEATURES

The TSA CM267 is a self-contained system housed in a single pillar with the gamma and neutron detectors for ease of installation and maintenance. An alarm output relay is standard which may be AC-coupled to stop or divert the conveyor automatically. The system is equipped with ethernet communications capability for integration with the operator interface.

### PROGRAMMABLE DETECTION PARAMETERS

Selectable settings for sensitivity, energy discrimination, and fault levels may be entered by the administrator.

### EASY-TO-OPERATE

In the field, after site preparation, the CM267 can be installed and operating in less than an hour. When powered up, the system first acquires an initial background, typically within 120-seconds and is ready to run indefinitely. When the CM267 senses items on the conveyor the system starts comparing the current count to the most recent background data. Alarm comparisons are made every 200ms. If the count exceeds the alarm level, both audible and visual alarms will be triggered. The system monitors itself and indicates low and high background conditions.

### FLEXIBLE DETECTION OPTIONS

The TSA CM267 is available in three configurations; Gamma, Neutron or a combination of Gamma and Neutron detection. Gamma provides detection of ionizing radiation and Neutron provides detection of Special Nuclear Materials (SNM) while the combined Gamma and Neutron provides the most powerful detection capabilities for radioactive isotopes even in shielded materials.

### INTERFACE OPTIONS

With the optional Remote Alarm Panel operators can view alarms up to 300m from the monitor. The TSA CM267 is compatible with TSA RAVEN™ communications software designed to both capture and view data and video images relating to a radiological detection incident.



TSA RAVEN™ (Radiation Alarm and Video Event Notification) communications software is used remotely to assist response personnel in the field to pinpoint radioactive sources. RAVEN can monitor multiple detectors and aid in managing individual detector activity.

# TSA CM267

# Rapiscan® systems

An OSI Systems Company

## PHYSICAL SPECIFICATIONS

|                    |  |
|--------------------|--|
| Dimensions:        | Length: 6,366 mm (250.6 in.)<br>Length with Conveyors: 8,496 mm (334.5 in.)<br>Width: 3,379 mm (133.0 in.)<br>Height: 3,181 mm (125.2 in.)   |
| Sensitivity        | Gamma: Will detect 10g of 235U (HEU) or 25g of 239Pu in 20 uR/hr background at a passage speed of one meter per second<br>Neutron*: At a distance of 1 m, will detect less than 200g of plutonium in a shielded container that reduces the gamma flux to 1% of the unshielded gamma flux.  |
| Detectors          | Standard Gamma and Neutron: One 30 h x 6 w x 1.5 d in. (76 x 15 x 4 cm) organic plastic scintillation detector, shielded on four sides with 0.375 in. (10 mm) of lead provides approx. 270 in3 (4.4 liters) of detector volume per system. One B-10 detector or one 2 in. diameter x 36 in He3 detector*.<br>High Sensitivity Gamma and Neutron: One 30 h x 6 w x 1.5 d in. (76 x 15 x 4 cm) organic plastic scintillation detector, shielded on four sides with 0.375 in. (10 mm) of lead provides approx. 270 in3 (4.4 liters) of detector volume per system. TOne B-10 detector or two 2 in diameter x 36 in He-3 He3 detectors*. |
| Alarm Indication   | Gamma alarms are indicated by a red strobe light mounted on the light tower; high and low faults by an amber light, and neutron alarms by a blue strobe light. Separate audio alarms are triggered for gamma and neutron alarm conditions.   |
| Display            | Numeric LCD, 4 lines x 16 characters.  |
| Communications     | Equipped with Ethernet communications capability   |
| Power Requirements | 190-250 Vac, 47-63 Hz, 100 VA  |
| Dimensions         | 70.5 l x 18.5 w x 12 d in. (179 x 47 x 30.5 cm) including mounting flanges   |
| Weight             | approximately 371 lbs. (168 kg)  |
| Environmental      | -4° to 122° F (-20° to 50°C); designed for sheltered areas.  |

## STANDARD FEATURES

- Programmable Detection Parameters
- Audio and Visual Indicators
- Relay Outputs for User Interface
- Universal Power Supply
- Ethernet Connectivity
- Universal Mount
- TSA RAVEN™ Compatible

## DEFINITIONS

- Gamma Detection - For the detection of ionizing radiation.
- Neutron Detection - Typically used to detect Special Nuclear Materials (SNM).
- Gamma and Neutron Detection - For full spectrum detection capabilities.

## OPTIONS

- Heavy Duty Extension Stand - Can be built to site-specific requirements.
- Remote Alarm Monitor
- TSA RAVEN™ Communications Software
- Wireless Output Capabilities

With continual development of our products Rapiscan Systems reserves the right to amend specifications without notice. Product pictures are for general reference. Please note that due to US laws and regulations, not all Rapiscan products are available for sale in all countries without restriction. Please contact your Rapiscan Systems sales representative for more information.

\*For neutron detection B10 detectors are standard with He<sup>3</sup> detectors optional.

### AMERICAS, CARIBBEAN

2805 Columbia Street  
Torrance,  
California  
90503

UNITED STATES of AMERICA

Tel: +1 310-978-1457

Fax: +1 310-349-2491

### EUROPE, MIDDLE EAST, AFRICA

X-Ray House  
Bonehurst Road  
Salfords  
Surrey RH1 5GG

UNITED KINGDOM

Tel: +44 (0) 870-7774301

Fax: +44 (0) 870-7774302

### ASIA

240 Macpherson Road  
#07-01 Pines Industrial Building  
Singapore  
348574

SINGAPORE

Tel: +65-6846-3511

Fax: +65-6743-9915



Rapiscan Systems is ISO 9001:2008 Certified

[sales@rapiscansystems.com](mailto:sales@rapiscansystems.com)

[www.rapiscansystems.com](http://www.rapiscansystems.com)