TSA CM267

Seamlessly screen bags, boxes or packages on a moving conveyor for radioactive materials.

High Sensitivity Conveyor Monitor

Continuously Screen Moving Parcels or Bags

Gamma and Neutron Radiation Detection Options

Fast, Seamless Integration

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.

Designed to continuously screen moving items on a conveyor belt without the need for frequent calibration or maintenance, the TSA CM267 is intended for application in transportation centers where the relatively low energy emissions from ^{235}U and ^{239}Pu are the main concern. The CM267 also detects other radioactive isotopes present in threat materials.

The TSA CM267 high sensitivity conveyor monitor offers reliable operation in variable background environments. This system covers most conveyor belt applications, and can be adapted to meet specific requirements.

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 20-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.

Standard Features

Programmable Detection Parameters

Audio and Visual Indicators

Relay Outputs for User Interface

Universal Power Supply

Ethernet Connectivity

Universal Mount

TSA RAVEN™ Compatible

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.

Markets

Aviation

Critical Infrastructure

Customs and Border Control

Event Security

Defense

Rapiscan®
systems

An OSI Systems Company

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TSA CM267

Specifications

Sensitivity	Gamma: Will detect 10g of ^{235}U (HEU) or 25g of ^{239}Pu, 50% probability of detection, 95% confidence in 20 uR/hr background at a passage speed of one meter per second Neutron*: Will detect less than 200g of plutonium in a shielded container that reduces the gamma flux to 1% of the unshielded gamma flux.
Detectors	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. (10mm) of lead provides approx. 270 in^3 (4.4 liters^3) of detector volume per system. 2 in. diameter X 36 in. He^3 tubes*.
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	115/230 Vac, 47 - 63 Hz, 400 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	0° to 122° F (-18° to 50°C); designed for sheltered areas.

*For neutron detection please contact your sales representative to determine availabilty and quantity of He^3 tubes.

Options

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.

Heavy Duty Extension Stand - Can be built to site-specific requirements.

Remote Alarm Monitor

TSA RAVEN™ Communications Software

Rapiscan® *s y s t e m s*
An OSI Systems Company

PERRY JOHNSON REGISTRARS, INC.

MGMT. SYS. RvA C118

UKAS QUALITY MANAGEMENT 105-A

Rapiscan Systems is ISO 9001:2008 Certified

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