TSA PM702
Portable Radiation Portal Monitor

A walk-through portal monitor to automatically screen pedestrian traffic for radioactive materials.

The TSA PM702 personnel portal monitor was designed for monitoring applications that require less sensitivity or for situations that require a semi-portable monitor. While it has adequate sensitivity for security applications, it is primarily designed for use in hospitals, laboratories, and other locations where radioactive Special Nuclear Materials (SNM) need to be monitored.

Cost Effective, Reliable Detection

The TSA PM702 portal monitor is a highly reliable system for the radiometric protection of special nuclear material (SNM). It exceeds the criteria for an ASTM Standard C 1169 Category II* SNM monitor which will detect 10 grams of \(^{235}\text{U}\) (HEU) on a walk-through basis when using the stop feature.

Flexible Design

The TSA PM702 is suitable for indoor or outdoor installation. The system consists of three main components; two vertical pillars each containing an organic plastic scintillator detector, and a crossover pillar. An optional step through feature provides optimal SNM monitoring.

Easy-to-Operate and Manage

A numeric keypad alarm with an LCD display attaches to the pillar and provides both audible and visual alarm indicators. The system operates from an internal battery. Under normal conditions the memory should be adequate to store data for at least 3 months of operation.

Interface Options

The TSA PM702 is compatible with TSA RAVEN™ communications software designed to both capture and view data and video images relating to a radiological detection incident.

FEATURES

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

Sensitivity
Will detect 10g 235U (HEU) or 0.30g 239Pu; when tested in accordance with ASTM Standard C 1169 Category II* for pedestrian SNM monitors.

Detectors
One, 72 h x 3 w x 3 d in. (183 x 8 x 8 cm) organic plastic scintillator detector per pillar; provides approximately 1,296 in3 (21.2 liters) of detector volume per system.

Alarm Level
N*sigma, entered from the numeric keypad

False Alarm Rates
Typically less than 1 in 1,000 passages

Alarm Indication
Audible and visual alarms

Display
LCD, 4 lines x 20 characters

Communications
Serial Port (optional)

Data Storage
Battery backed RAM (128 KB) is used to store average hourly background data and alarm data. Under normal conditions the memory should be adequate to store data for at least 3 months of operation.

Power Requirements
90 - 240 Vac, 50 - 60 Hz, or 6 alkaline D cells which provide approximately 12 hours of operation.

Dimensions
Overall size: 93 h x 53 w x 9 d in. (236 x 135 x 23 cm) The system consists of three main components; two vertical pillars, each one is 6 diameter x 83 h in. (15 x 211 cm), with 6 in. diameter (15 cm) crossover which provides 32 in. (81 cm) pillar spacing.

Weight
≈120 lbs (54 kg) per pillar

*ASTM Standard C 1169 is available from your Rapiscan Systems sales representative or The American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428 (610) 832-9585

Options
- TSA RAVEN™ Communications Software
- Serial Port
- Step Through Grate

APPLICATIONS
- Aviation
- Critical Infrastructure
- Customs and Border Control
- Event Security
- Law Enforcement
- Defense