

Vehicle Portal Monitor

Description

TSA's neutron vehicle monitor, model NVM-245, is a highly reliable system for the radiometric protection of special nuclear material (SNM). The NVM-245 is suitable for indoor or outdoor installation.

Each pillar contains four neutron detector assemblies. The master pillar also has a system controller (TSA's SC-770), a battery and charger, load disconnect, alarm lights and buzzer. Both pillars contain single channel analyzers (TSA's SCA-755).

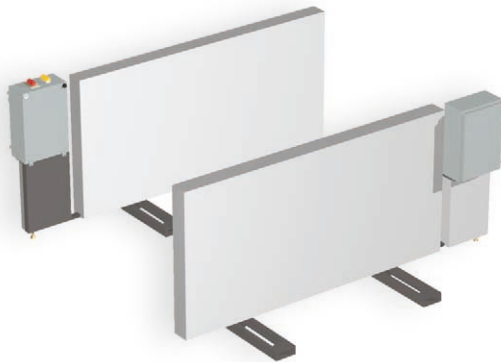
Two user supplied conduits enter near the bottom of the control pillar. One supplies ac power to the charger. The other is used for the optional external alarms and communication output.

The NVM-245 is powered by a battery on a charger, that will provide at least 12 hours of continuous service in case of power failure. The system may be set up in any location where a 90 - 250 Vac, 47 - 63 Hz power source is available. Typical locations might be entrances and exits to access material areas.

The NVM-245 is equipped with tamper switches and loss of power indicators. These conditions may be monitored with the TSA model AM-270 alarm monitor.

When the portal is not occupied, the system will automatically monitor background radiation and periodically update a visual display on the controller. When a vehicle enters the portal, the system begins fast count monitoring and will alarm if the count exceeds a predetermined alarm level. The system will also alarm if the background radiation level fails to meet preset limits.

The detectors and electronics are readily accessible for testing and maintenance. Self-checking routines and easily performed tests simplify board level trouble shooting. The modular design allows quick and easy repair and maintenance.



NVM-245
Neutron vehicle portal monitor

Specifications

Model NVM-245 SPECIFICATIONS

- DETECTORS: Four, 2" diameter x 72" (5 x 183cm) He³ tubes (active) per pillar
- POWER REQUIREMENTS: 12 volt, 7 Ah sealed rechargeable lead-acid battery charged by 90 - 250 Vac line power
- PASSAGE TIME: Normally 5 seconds on a drive through basis
- DIMENSIONS: 54" h x 6.5" w x 120" d (137 x 17 x 305cm) per pillar.
Typical spacing between pillars is 12' (366cm). Each pillar has a 48" (122cm) base for added stability.
- WEIGHT: =400 lb (182kg) per pillar

Applications

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