

Model 52-8 Series Outdoor Portal Monitor

Features

- Portable Weatherproof Monitor
- Deploys in 5 Minutes
- Vehicle or Personnel Screening Compatibility
- Audible & Visual Alert Signals
- Two sizes: 15.7 or 32.7 L (960 or 2000 in³)

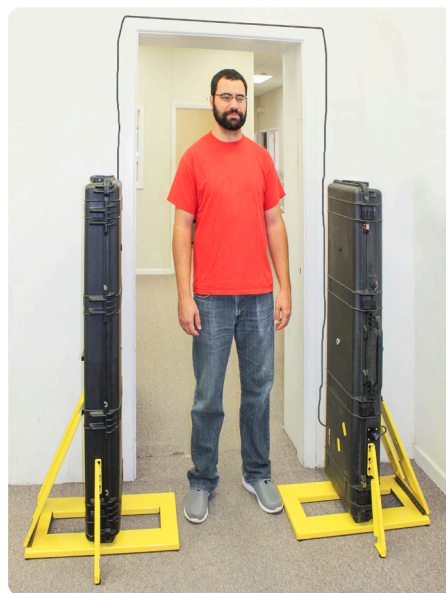


Introduction

The Model 52-8 is a weather-resistant portable scintillation portal monitor used for beta/gamma radiation monitoring of vehicles, as well as monitoring of personnel. Two plastic scintillation detectors, one per side, are housed in weatherproof, dust-tight, impact-resistant cases with wheels and tow handles. Microprocessor-based electronics are housed in a third case with matching characteristics, plus a mounted On/Off toggle switch and an optional red/green strobe light. The system provides high sensitivity for detecting very low levels of radiation coming from personnel or vehicles that move through the portal.

Ease of setup, adjustable audio signals, and user-friendly LCD display that provides detector counts, background levels, and system parameters, and the ability to operate via vehicle cigarette lighter plug or batteries, keep the Model 52-8 applicable to a variety of different situations. This instrument meets the Federal Emergency Management Agency (FEMA) standard for Emergency Management Response Portal Monitoring (FEMA-REP-21).

Use as a vehicle monitor (above) or
as a personnel monitor (below)



Configurations

| Model | Total Detector Volume | Part Number |
|--------|---------------------------------|-------------|
| 52-8/1 | 15.7 L (960 in. ³) | 48-4251 |
| 52-8/2 | 32.7 L (2000 in. ³) | 48-4237 |

Electronics case with
included strobe



Specifications

SENSITIVITY: 1 μCi ^{137}Cs with detectors spaced no more than 1.2 m (48 in.) apart

GAMMA ENERGY RESPONSE: 60 keV to 3 MeV

DISPLAY: 2-line-by-20-character backlit LCD housed inside the electronics case

COUNT TIME: adjustable from 0 to 20 seconds ("0" indicates walk-through mode)

INFRARED SENSOR: senses portal occupancy

OUTPUT: +12 V relay for radiation alarm and failure conditions

AUDIO: an alarm and incomplete audio, and a continuous beeping for Radiation Alarm and Instrument Failure modes

DETECTOR CABLE LENGTH: 9 m (30 ft) standard length (other lengths available)

POWER: +12 Vdc input (with 1A fuse) inside the cigarette adapter plug, or six D cell batteries. Typical battery life is 44 hours using fresh alkaline batteries.

INPUT POWER CABLE LENGTH: 6 m (20 ft)

CONSTRUCTION: waterproof and dustproof polyethylene cases

ENVIRONMENTAL RATING: IP67

DIMENSIONS:

Detector Cases: 40.6 x 20.3 x 142 cm (16 x 8 x 56 in.) (H x W x L)

Electronics Case: 52 x 45 x 22 cm (20.3 x 17.7 x 8.7 in.) (H x W x L)

WEIGHT:

Model 52-8/1 Detector: 23 kg (52 lb) in case

Model 52-8/2 Detector: 32.7 kg (72 lb) in case

Electronics Case: 8 kg (18 lb) with attached cables

Options

Bluetooth® Option (PN: 4215-1140): Internal board that connects to power and serial out, and takes the place of having a printer to log information. It wirelessly transmits data to a remote smart phone, laptop, or other device for logging. Range is approximately 10 m or 33 ft. On startup, the remote device will receive a setup parameter list, and then (depending on firmware) the remote device will get a short report on every occupancy or just those occupancies that cause a radiation alarm.