

Model 52-8 Outdoor Portal Monitor



Ludlum Measurements, Inc.

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).

Photos:

Above: car being driven through portal
Far left: person walking through portal
Left: electronics case (open) shown with optional strobe



Specifications

CONSTRUCTION: waterproof and dustproof polyethylene cases

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

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

+12V INPUT POWER CABLE LENGTH: 6 m (20 ft)

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.

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

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

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

GAMMA ENERGY RESPONSE: 60 keV to 3 MeV

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

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)

DETECTOR WEIGHT & VOLUME: Model 52-8/1: Volume of 15.7 L (960 in³); Weight in case is 23 kg (52 lb)

Model 52-8/2: Volume of 32.7 L (2000 in³); Weight in case is 32.7 kg (72 lb)

ELECTRONICS CASE: Weight 8 kg (18 lb) with attached cables

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Note: specifications subject to change without notification. We are not responsible for errors or omissions.

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