

Model 52 Personnel Beta/Gamma Portal Monitor



Ludlum Measurements, Inc.

Features

- Portable
- Simple & Quick Setup and Disassembly
- Easy to Operate
- 18 GM Detectors Scan Head, Sides, Feet
- 81.3 cm (32 in.) Wide Opening
- Meets FEMA-REP-21

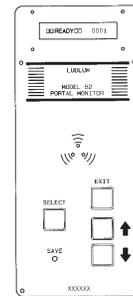
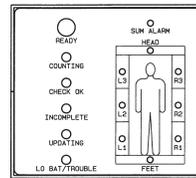
Introduction

The Model 52 Portal Monitor is used for Beta/Gamma personnel contamination monitoring and meets the FEMA standard for Emergency Response Portal Monitoring (FEMA-REP-21). It can be assembled or disassembled quickly and easily using no tools, and includes a rugged, wheeled transportation/storage case.

The non-volatile parameters are preset at the factory to detect a 1.0 μCi ^{137}Cs source in a 10 $\mu\text{R/hr}$ background field. Electronics are microprocessor based for ease of setup and reliability. Status LEDs indicate count-cycle status. Audible signals accompany the LEDs for additional indication. These portal monitors can be operated in a walk-through basis with a quick scan occurring while a person is positioned within the portal.



(wheeled transport & storage case is included)



Specifications

Part Number: 48-2471

SENSITIVITY: This instrument will detect the beta gamma emissions from a 1.0 μCi ^{137}Cs source when it is located at mid-frame of the portal monitor in a 10 $\mu\text{R/hr}$ background (per the suggested standard in FEMA report "Contamination Monitoring Standard for a Portal Monitor Used for Emergency Response," Sept. 1992).

DISPLAY: one-line x 16-character alphanumeric LCD

COUNT TIME: adjustable from 1–60 seconds; background count time from 0–99 seconds

LED INDICATORS:

- Ready (green LED): indicates system is ready for use
- Counting (green LED): indicates count is in process
- Check OK (green LED): indicates count is completed and no alarms sensed
- Incomplete/Updating (amber LED): indicates user stepped off portal before count was complete, or a background update is in progress
- Low Bat/Trouble: (red LED) indicates a low battery or high/low background
- Sum Zones: 8 zones with 3 on the left, 3 on the right, 1 for the head, and 1 for the feet; LEDs are situated around a graphic indicating the relative position to the person

PARAMETERS: all parameters are stored in non-volatile memory, adjustable by administrator with password input

DETECTORS: 18 GM detectors, 14 for head and body area and 4 (2 for each foot) in base

RS-232: allows instrument to be connected to printer or computer

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F)

POWER: 95–135 Vac (178–238 Vac available), or 6 "D" cell batteries

BATTERY LIFE: typically 80 hours in a non-alarm condition

CONSTRUCTION: aluminum housing with beige powder coat

WEATHER PROTECTION: Crystal clear polypropylene tubing is provided to sleeve over monitor whenever protection against wet weather conditions is desired.

PORTAL DIMENSIONS: 203.2 x 104 x 43.2 cm (80 x 41 x 17 in.) (H x W x L)

PORTAL INSIDE DIMENSIONS: 194.3 x 81.3 cm (76.5 x 32 in.) (H x W)

WEIGHT: 29.5 kg (65 lb), 38.6 kg (85 lb) with included case, approximately 42.3 kg (93 lb) shipping weight

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

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