

Model 25 Series Personal Radiation Monitor

Radiation Detection for a Safer World



Ludlum Measurements, Inc.

Features

- Background to 9.9 Sv/h (999 R/hr) Range
- Lightweight
- Rugged Construction, Shockproof, Water Resistant Design
- Easy to Use
- 6000 Hour Battery Life
- Low Cost
- Audible and Visual Alerts and Alarms
- Intrinsically Safe Versions Available



Introduction

The Ludlum Model 25 series of Personal Radiation Monitor/Dosimeter are small sized devices that can be worn on the belt, a lanyard, or armband. It is a very rugged, stand alone device designed specifically to warn emergency response personnel of any dangerous radiation fields they may encounter. This instrument utilizes a GM detector capable of measuring radiation fields all the way from background up to 10 Sv/h (1000 R/hr). The unit is simple to use and read. The backlit LCD readout displays dose rate, accumulated dose, and time remaining to the dose limit. Visual and audible alarms are available over the entire measurement range. No special equipment is required to either calibrate or set up operational parameters. The Model 25-IS & 25-IS-1 are certified for intrinsic safety for use in areas where explosion safety is a primary concern.

MODEL	DISPLAY RANGE	INTRINSICALLY SAFE	PART NUMBER
25	0.01 mR/hr to 999 R/hr	No	48-3584
25-1	.001 mSv/h to 9.99 Sv/h	No	48-3629
25-IS	0.01 mR/hr to 999 R/hr	Yes	48-3661
25-IS-1	.001 mSv/h to 9.99 Sv/h	Yes	48-3686

Specifications

DETECTOR: internal energy-compensated GM

ENERGY RANGE: 60 keV to 2 MeV

DISPLAY: 3½ digit backlit LCD display with a total range from .001 mR/hr (or mR) to 999 R/hr (or R), also displays time remaining from 19:59 to 00:01 (in hh:mm format)

ALERT & ALARMS: adjustable over entire display range

ALARM INDICATIONS: distinct alerts and alarms for exposure and accumulated dose

AUDIO: built-in speaker (typically 95 dB at 0.3 m [1.0 ft])

LOW BATTERY INDICATION: provides 8 hours warning of low battery

SELF-DIAGNOSTICS: If no pulses are received from the detector in 60 minutes, instrument failure is indicated by an audible and visual alarm, and the display alternating between "0.0" and "F."

CALIBRATION: requires no tools or software

CALIBRATION RANGE: normally calibrated from 2 mR/hr (0.02 mSv/h) to 999 R/hr (9.99 Sv/h)

GAMMA RESPONSE: typically 4.2 cpm per mR/hr (420 cpm per mSv/h)

POWER: 2 each lithium coin cell batteries

BATTERY LIFE: typically 6000 hours

CONSTRUCTION: injection-molded plastic housing with sub-surface printed membrane front panel, completely gasketed for water resistance, supplied with rubber boot and built-in belt feed-through

TEMPERATURE RANGE: -40 to 65 °C (-40 to 150 °F)

SIZE: 7.6 x 5.4 x 1.7 cm (3.0 x 2.1 x 0.69 in.) (H x W x D)

WEIGHT: 144 g (5.1 oz) including batteries

CERTIFICATION: Models 25-IS and 25-IS-1 are intrinsically safe per the following:

- UL 913 Class I, II & III Division 1 Groups A,B,C,D
- CSA 22.22 No. 157
- UL 61010-1 CSA C22.2 No. 61010-1

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