

Model 375/1 Area Monitor

Radiation Detection for a Safer World



Ludlum Measurements, Inc.

Features

- Affordable Area Monitor
- Compact, Integrated Design
- Low Background Sensitivity
- Audio & Visual Alarm
- Networkable



Part Number: 48-3831

Introduction

The Model 375/1 Digital Wall-Mount Area Monitor is designed for visibility and ease of use. This monitor incorporates an internally housed 18 mm CsI scintillator with a sensitivity of approximately 120 cpm/ μ R/hr. It features a wall-mount chassis and a four-digit LED display that is readable from 9 meters (30 feet) away. Backlit indicators warn of low radiation (yellow), high radiation (red), instrument failure (red), and low battery (yellow), along with an alarm. A green status light is a positive indication of instrument operation.

Parameters are protected under a calibration cover that provide access to adjusting the calibration constant, dead time correction, and alarm point parameters. Parameters are stored in non-volatile memory (retained even with power disconnected). A five-decade logarithmic analog output is provided.

Options available include remote displays, Ethernet port, alarm relay output, and NEMA 4 outdoor enclosure.

Specifications

DETECTORS: 18 mm CsI detector

SENSITIVITY: 120 cpm/ μ R/hr

DISPLAY: 4-digit LED display with 2 cm (0.8 in.) characters

DISPLAY UNITS: μ R/hr (other units available upon request)

STATUS INDICATORS:

- INSTRUMENT STATUS: green light, instrument functioning properly
- LOW ALARM: yellow light, slow audible beep (1/sec) audible tone (can be set at any point from 0.0-9999)
- HIGH ALARM: red light, fast beep (4/sec) audible tone (can be set at any point from 0.0-9999)
- OVERLOAD: senses detector saturation (indicated by display reading "-OL-")
- OVERRANGE: indicates radiation field being measured has exceeded counting range of instrument

ALARM AUDIO OUTPUT: Intensity can vary from approximately 69 dB to 100 dB through operation of the external rotary baffle and the internal voltage connection. Frequency is approximately 3 kHz.

REMOTE (optional): allows for connection of red strobe for remote indication of an alarm

BATTERY LIFE: typically 48 hours in non-alarm condition, 12 hours in alarm condition

BATTERY CHARGER: battery is continuously trickle charged when instrument is connected to line power and turned on

POWER: 9 Vdc wall-mount adapter, handles any mains voltage in the world, supplied with four sets of prongs for almost any style wall receptacle, 6-volt lead-acid rechargeable battery (built-in)

CONSTRUCTION: aluminum housing with ivory powder coat paint

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

SIZE: 18.7 x 24.6 x 6.4 cm (7.5 x 9.7 x 2.5 in.) (H x W x L)

WEIGHT: 2.1 kg (4.7 lb)