

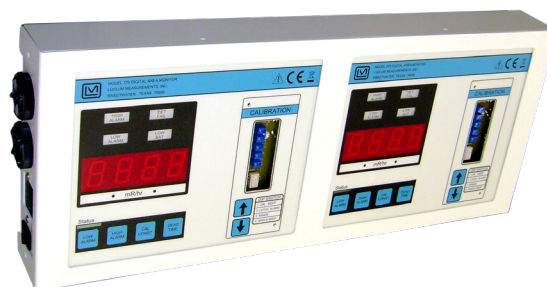
Model 375 Dual Dual-Channel Controller



Ludlum Measurements, Inc.

Features

- Dual LED Digital Display
- Low and High Alarm Indicators
- User Programmable Alarms
- Optional Remote
- Detector Fail Indicators
- 18-Hour Battery Backup
- Data Output/RS-232



Introduction

The Model 375 Dual Area Monitor is designed for visibility and ease of use. Featuring a wall-mount chassis, the Model 375 Dual Area Monitor is essentially two Model 375 instruments mounted together in a single frame – one for detection of gamma radiation and the other for neutron (with appropriate external detectors). The two instruments may also be used to monitor for radiation in two separate locations when used in conjunction with appropriate external detectors.

Each instrument features an easily readable four-digit LED display that is readable from 9.1 m (30 ft) away. Backlit indicators on each instrument warn of low radiation alarm (yellow), high radiation alarm (red), instrument failure (red), and low battery (yellow). Green status lights are a positive indication of instrument operation. Calibration is simple, and the parameters are stored in non-volatile memory and protected under calibration covers.

The Model 375 Dual Area Monitor is typically combined with a Model 133-4 GM (Geiger Mueller) gamma detector and a Model 42-30 neutron detector. Other configurations are available.

Specifications

Part Number: 48-2369

DETECTOR: internal, typically a Model 133-4 GM and a Model 42-30 neutron detector are supplied. (others are available)

SENSITIVITY (Model 133-4): 10 cpm/ μ Sv/h (100 cpm/mR/hr) (^{137}Cs gamma)

SENSITIVITY (Model 42-30): typically 2 cpm/mSv/h (200 cpm/mrem/hr) ($^{241}\text{AmBe}$)

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

DISPLAY RANGE: 000.0 cpm/<units> to 9999 cpm/<units>

RESPONSE: typically 3 seconds from 10% to 90% of final reading

DISPLAY UNITS: can be made to display in μ Sv/h, mSv/h, Sv/h, μ R/hr, mR/hr, R/hr, μ rem/hr, mrem/hr, rem/hr, cpm, cps, and others

LINEARITY: readings within 10% of true value with detectors connected

CALIBRATION CONTROLS: accessible from the front of the instrument (protective cover provided)

STATUS: (green light) instrument functioning properly

LOW ALARM: (yellow LOW ALARM light and slow beep) can be set at any point from 0.0 to 9999

HIGH ALARM: (red HIGH ALARM light and fast beep) can be set at any point from 0.0 to 9999

DET FAIL: (red light and audible tone) indicates detector overload, no count from detectors, or instrument failure

LOW BAT: (yellow light) indicates less than 2 hours of battery power remaining

OVERLOAD: “-OL-” display and audible FAIL alarm indicates detector saturation

OVERRANGE: “- - -” display and activated low and high alarms indicates measured radiation field has exceeded the counting range

ALARM AUDIO OUTPUT: 68 dB at 0.6 m (2 ft) (3kHz)

REMOTE (optional): Ludlum Model 271 or Model 272 remote units

POWER: 95 to 135 Vac (178 to 240 Vac available), 50 to 60 Hz single phase, 6 volt sealed lead-acid rechargeable battery (built-in)

BATTERY LIFE: typically 18 hours in non-alarm condition

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

CONSTRUCTION: aluminum housing with ivory powder coat finish

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

SIZE: electronics: 18.8 x 45.2 x 6.4 cm (7.4 x 17.8 x 2.5 in.) (H x W x D)

WEIGHT: 5.9 kg (13 lb)

Options

Various options are available for Model 375-Series systems, including enclosures, remote displays, alarm annunciators, signal output, and networking options. Visit our website to view the current list of available options.

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

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