

Model 375-Dual Dual-Channel Area Monitor Controller

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 is a dual-channel area monitor controller based on the legacy version of the Model 375. It consists of two Model 375 controllers in one wall-mount chassis, each with its own detector connection. A common application is gamma and neutron monitoring: one controller monitors gamma radiation and the other monitors neutron radiation. This instrument may also be used to monitor radiation in two separate locations when used in conjunction with appropriate external detectors.

Each controller features a four-digit LED display that is readable from 9.1 m (30 ft) away. Backlit indicators warn of low radiation alarm (yellow), high radiation alarm (red), instrument failure (red), and low battery (yellow). A green status light indicates the instrument is functioning properly. Calibration parameters are stored in non-volatile memory and protected under calibration covers on each controller.

Detectors are not included and must be purchased separately. See the specifications below for compatible detector types.

Specifications

Part Number: 48-2369

COMPATIBLE DETECTORS: GM, proportional, scintillation, neutron

DISPLAY: 2 each 4-digit LED display with 2 cm (0.8 in.) character height

DISPLAY RANGE: 000.0 to 9999

DISPLAY UNITS: can be made to display in $\mu\text{Sv/h}$, mSv/h , Sv/h , $\mu\text{R/hr}$, mR/hr , R/hr , $\mu\text{rem/hr}$, mrem/hr , rem/hr , cpm , cps , and others

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

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

STATUS INDICATORS:

- **Status:** green light indicates instrument is functioning properly
- **Low Alarm:** yellow light (LOW ALARM) and slow beep (1 per second). Can be set at any point from 0 to 9999.
- **High Alarm:** red light (HIGH ALARM) and fast beep (4 per second). Can be set at any point from 0 to 9999.
- **Detector Fail:** red light (DET FAIL) and constant audible tone > 68 dB at 61 cm (2 ft). For conditions of detector overload, no count from detector, or instrument failure.
- **Low Battery:** yellow light (LOW BAT). Indicates less than two hours of battery life remaining.
- **Overload:** display reading of “-OL-” and audible FAIL alarm indicate detector saturation
- **Overrange:** display reading of “- - -” and activated low and high alarms indicate that the radiation field being measured has exceeded the counting range of the instrument

HIGH VOLTAGE: adjustable from 200 to 2500 V

THRESHOLD: adjustable from 2 to 100 mV

DEAD TIME: adjustable to compensate for dead time of detector and electronics (can be read on display)

DATA OUTPUT: nine-pin connector providing five-decade logarithmic output, RS-232 output, signal ground connection, FAIL, and ALARM signals (current sink), and direct connection to battery and ground

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

REMOTE DISPLAY: can be connected to Model 271 or Model 272 remote display units

POWER: 95 to 135 Vac (178 to 240 Vac available), 50 to 60 Hz single phase (less than 100 mA), 6 volt sealed lead-acid rechargeable battery (built-in)

BATTERY LIFE: typically 18 hours in non-alarm condition; 5 hours in alarm condition

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

CONNECTOR: series “C” (others available)

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: 18.7 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.