

# Model 375P-1000 Outdoor Monitoring System



Ludlum Measurements, Inc.

## Features

- Affordable Digital Controller
- Weatherproof Encased-Shielded Plastic Scintillator Detectors
- User-Adjustable Alarms
- Networkable, Requires Ethernet or Webpage Option
- 24-Hour Battery Backup
- Configurable System with Numerous Options to Customize for Locations



## Introduction

The Model 375P-1000 is a Digital Model 375 Controller coupled to two lead-shielded 7866 cm<sup>3</sup> (480 in<sup>3</sup>) plastic scintillator detectors. The detectors are encased in weathertight enclosures suitable for the outdoor environment, while the 375 Controller is normally mounted to a wall indoors near an operator. This cost-effective solution offers a simple system that is easy to operate and maintain.

The controller supplies local alarms but may also connect to external alarms or be put onto an Ethernet network if desired. It additionally has a 24-hour battery backup to keep the system operational in the event power is lost.

**Vehicle Radiation Monitor:** The Model 357P-1000V (Part Number: 48-3782) is also available. This system includes vehicle presence sensors that prevent the unit from alarming unless a vehicle is being surveyed and the alarm threshold has been exceeded.

## Specifications

Part Number: 48-3470

### SYSTEM INCLUDES

- 1 ea. Model 375P electronics
- 2 ea. 7866 cm<sup>3</sup> (480 in<sup>3</sup>) plastic scintillation detectors with 0.33 cm (0.13 in.) lead shielding in weather-tight housings

**TYPICAL SENSITIVITY (<sup>137</sup>Cs):** 400 cps per  $\mu$ R/hr per detector

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

**STATUS:** (green light) instrument functioning properly

**SIGMA ALARM:** indicated by red ALARM light and audible tone (can be set at any point from 0.0 to 999 Sigma)

**SUM ALARM:** indicated by red ALARM light and audible tone can be set at any point from 0.0 to 9999 kcps)

*Note:* audible alarm annunciators can be configured as a single beep if desired

**DET FAIL:** red light & audible tone greater than 68 dB at 61 cm (24 in.) indicates no counts from detector or instrument failure

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

**OVERRANGE:** ("OL") indicates radiation field being measured exceeds counting range of instrument

**RELAY OUTPUT:** mains (120 or 240 Vac) output on alarm

**DATA OUTPUT:** 9-pin connector providing RS-232 output, signal ground connection, FAIL and ALARM signals (current sink), and direct connection to battery and ground

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

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

**BATTERY LIFE:** typically 24 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

**CONSTRUCTION (ELECTRONICS):** aluminum housing with ivory powder coat

**TEMPERATURE RANGE:** -15 to 50 °C (5 to 122 °F)

**SIZE:** electronics: 26.2 x 24.6 x 8.4 cm (10.3 x 9.7 x 3.3 in.) (H x W x D)

detectors (ea.): 20.3 cm x 183 cm (8 x 72 in.) (Dia x L)

**WEIGHT:** electronics: 4.2 kg (9.3 lb); detectors (ea.) 29.5 kg (65 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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