peo DETECTION

Model 375P-1000
Outdoor Monitoring System

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 cm³ (480 in³) 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 cm³ (480 in³) plastic scintillation detectors with 0.33 cm (0.13 in.) lead shielding in weather-tight housings

TYPICAL SENSITIVITY (137Cs): 400 cps per µR/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

ENVIRONMENTAL RATING: Detectors: IP66; Electronics: IP51 (IP66 with Model 375P environmental enclosure)

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.

Ludlum Measurements, Inc.