Model 375P-1000 Landfill / Waste Release Monitor

Features

- Affordable Digital Controller
- Weatherproof Encased-Shielded Plastic Scintillator Detectors
- User-Adjustable Alarms
- Networkable
- 24-Hour Battery Backup

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 simple and 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.

Specifications

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

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 0.0-999 Sigma)

SUM ALARM: indicated by red ALARM light and audible tone can be set at any point from 0.0-9999 kcps) Note: audible alarm annunciations can be configured as a single beep if desired

DET FAIL: red light and audible tone greater than 68 dB at 71 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: 95-135 Vac (178-240 Vac available), 50-60 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): aluminium housing with ivory powder coat paint

TEMPERATURE RANGE: -15 to 50 °C

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)