Model 2241-3i
General Purpose Ratemeter/Scaler

Features

- Digital Ratemeter with Built-In Scaler
- Auto Ranging
- Internal GM Detector 10 R/hr
- Stores 3 External Detector Setups for Quickly Swapping Detectors in the Field
- User-Adjustable Alarms
- Accommodates an External Detector
- Overrange & Overload Protection

Introduction

This instrument is a general purpose, digital ratemeter with a built-in scaler that provides timed counts over a user specified period. This system will store detector setup information for up to four detectors so trained personnel can change detectors in the field. The LCD presents readings in a four-digit moving decimal format together with one of a wide range of available units of measure and is accompanied by several operational & alert icons. The LCD backlight can be activated and remains lit for a user-adjustable interval. This instrument features adjustable alert & alarm setpoints for both the Ratemeter & Scaler modes. Front-panel controls include a rotary switch for selecting between Off, internal GM, and three external detector setups, separate switches for selecting between Ratemeter and Scaler Mode, audio on/off and fast/variable response time, plus push buttons for activating the LCD backlight and for either resetting the counts or acknowledging any alarms. Calibration, user configured alarms, scaler count intervals, and detector selection can be configured via an internally housed switchboard or through an RS-232 interface to a PC.

Specifications

Part Number: 48-3358

SUGGESTED DETECTORS: GM, proportional, scintillation
ALERT/ALARM: indicated by annunciation on display (ratemeter mode only) and audible tone
DISPLAY: 4-digit LCD display with 1.3 cm (0.5 in.) high digits, separate annunciators for display units, alert, alarm, low battery, detector overload, counting overflow, and scaler counting
BACKLIGHT: pushbutton to activate
RATEMETER: can display in R/hr, Sv/h, cpm, or cps when selector switch is in RATE position
DISPLAY RANGE: auto ranging from 0.0 µR/hr–9999 R/hr; 0.000 µSv/h–9999 Sv/h; 0 cpm–999 kcpm; or 0 cps–100 kcps
SCALER: adjustable from 1–9999 seconds (in 1-second intervals)
HIGH VOLTAGE: adjustable from 400–2500 volts
DISCRIMINATOR: adjustable from 2–100 mV
RS-232 PORT: allows for programming and non-volatile storage of operating parameters, including display units, display range, alarm setpoints, dead time correction, click-per-event divide-by, LCD backlight On time, Fixed or Variable response time, and count overflow visual alarm. The switch board can be removed after entering or changing parameter to prevent tampering with setup values.
POWER: 2 "D" cell batteries housed in an externally accessible sealed compartment
BATTERY LIFE: typically 200 hours with alkaline batteries (low battery warning on LCD)
SIZE: 16.5 x 8.9 x 21.6 cm (6.5 x 3.5 x 8.5 in.) (H x W x L)
WEIGHT: 1.6 kg (3.5 lb), including batteries

ALSO AVAILABLE: Model 2241-3 is identical to Model 2241-3i, but has been configured to select an internal GM detector by rotating the five-position switch to the INT (formerly (DET4) position (Part Number 48-2864)

Ludlum Measurements, Inc.