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Your Alternative
To The Obvious

Model 3001
Multi-Detector Survey Meter

Features

- 4 Selectable & Configurable Detector Settings
- Large Backlit LCD for Ease of Reading
- Autoranging
- Rate, Max, and Count Modes of Operation
- Splash-Resistant Construction for Outdoor Use
- 4-Button Intuitive Interface for Easy Operation
- All-Digital Calibration
- USB Port
- Lighter Weight and Ruggedly Built
- Data logging and Headphone Options

Front Panel Controls

Part No. 48-4036

Introduction

The Ludlum Model 3001 is a versatile, lightweight, ergonomically-designed instrument with up to four external detectors used for alpha, beta, or gamma radiation survey. Three modes of operation – RATE, MAX, and COUNT– are available. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, mR/hr, or µSv/h units. Users can switch between two sets of chosen units by simply pressing the Units button. The DETECTOR button selects the colour coded detector and activates the corresponding colour LED.

An internal switch is used to enable or disable the front-panel setup feature to protect desired settings from inadvertent modification. Setup is also available via software available from Pycko Scientific. This instrument features a large, easily-readable LCD (liquid crystal display), a piercing audio warning tone, and easy, intuitive, user-friendly design. Splash resistant construction allows the Model 3001 to be used outdoors. The unit body is made of lightweight, durable, high impact plastic. The Model 3001 is shipped ready to use with batteries and calibration certificate.

Specifications

DETECTOR: may be Geiger-Mueller (GM), scintillator, or proportional

ALARMS: count rate, exposure/dose, and scaler alarm setpoints adjustable over the display range

OVERLOAD: high count rate saturation protection prevents false display of lower count rates

LOSS OF COUNT ALARM PROTECTION: after preselected time interval (default 60 seconds) of no pulses from detector, audible and visual alarms will be activated

LCD DISPLAY: 3 digit LCD with large 20 mm (0.8 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, (µ)(m)R(/h), (µ)(m)Sv(/h), low-battery indicator, MAX, ALARM, AUDIO

DISPLAY RANGE: 0.0 cps to 99.9 kcps; 0.00 cpm to 999 kcpm; 0.00 Bq to 99.9 kBq; 0.00 dpm to 999 kdpm; 0.00 µR/h to 999 R/h; 0.00 µSv/h to 999 Sv/h. Max Display can be set to limit display to calibrated range

BACKLIGHT: built-in ambient light sensor automatically activates LED backlight, unless internal dipswitch is set to continuous-On (will reduce battery life)

USER CONTROLS:

- ON/ACK - press to turn ON, tap to acknowledge alarms and silence alarm tone, press to reset Sigma Audio alarm, hold for OFF
- MODE - alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes). Number of modes can be reduced in setup.
- DETECTOR: selects active detector
- UNITS - changes the units between count rate (cpm, cps), dose/exposure (µSv/h, mR/h), or disintegration (dpm, Bq)

RESPONSE TIME: user-selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW

AUDIO: greater than 75 dB at 0.6 m (2 ft), approximately 4.5 kHz

POWER: four alkaline or four rechargeable "AA" batteries (instrument does not support in-device charging)

BATTERY LIFE: approximately 500 hours (as low as 100 hours with backlight configured for continuous-on), 16-hour low battery warning

CONSTRUCTION: high-impact plastic with water-resistant rubber seals and separate battery compartment

TEMPERATURE RANGE: -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

ENVIRONMENTAL RATING: NEMA (National Electrical Manufacturers Association) rating of 4x or IP (Ingress Protection) rating of 65

PHYSICAL: SIZE: 16.5 x 11.4 x 21.6 cm (6.5 x 4.5 x 8.5 in.) (H x W x L); **WEIGHT:** 0.9 kg (2.0 lb)