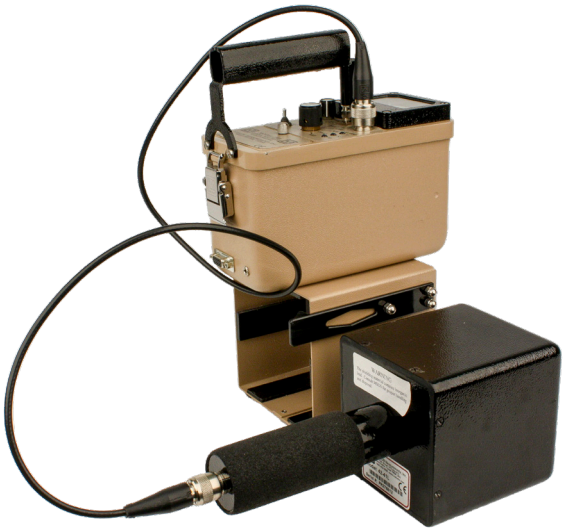
LUDLUM MEASUREMENTS, INC.

Model 2363 with Model 42-41L

Gamma-Neutron Survey Meter

Part Number: 48-3514



Features

- Neutron Dose Rate - Under 4.5 kg (10 lb)
- Scaler & Data Logging Capabilities
- Neutron Detection Range: 1 µSv/h to 10 mSv/h (0.1 mrem/hr to 1 rem/hr)
- Gamma Detection Range: 1 µSv/h to 10 mSv/h (0.1 mR/hr to 1 R/hr)
- Independent Gamma & Neutron Measurements

Model 2363 Specifications

INDICATED USE: gamma and neutron survey
RANGE: four linear range multiples of x0.1, x1, x10, and x100; used in combination with the 0-100 µSv/h (0-10 mrem/hr) meter dial, providing an overall range of 0-10,000 µSv/h (0-1000 mrem/hr)
SENSITIVITY (approximately):
Gamma: 100 cpm/µSv/h (1000 cpm/mR/hr) (internal energy-compensated GM detector)
Neutron: 35 cpm/µSv/h (350 cpm/mrem/hr) (with Model 42-41L)
HIGH VOLTAGE: neutron adjustable from 500 to 1500 Vdc; gamma fixed at 550 Vdc
THRESHOLD: neutron adjustable from 5 to 100 mV; gamma fixed at 50 mV
ADJUSTABLE ALARMS: (indicated by front panel LEDs) gamma, neutron, integrated dose
DATA LOGGER: capable of logging up to 1000 individual data points each with the following identifiers: gamma and neutron sample counts, sample number, date/time stamp, current integrated dose, 10-character location identifier. (All data is stored in non-volatile memory, allowing batteries to be removed without loss of data.)
AUDIO: dual- or single-tone click-per-event through built-in speaker with adjustable volume located on the front panel; headset jack located on the instrument can
DATA OUTPUT: 9-pin RS-232 port for connection to PC for data download and adjustment of setup parameters. A one meter RS-232 to USB adapter cable is included. PC interface software is available for download on our website.
METER DIAL: 0 to 100 µSv/h (0 to 10 mrem/hr), BAT OK
DIGITAL DISPLAY: 6-digit LCD with 0.64 (0.25 in.) digits
SELECTOR SWITCH: toggle switch to select gamma+neutron, gamma only, or neutron only
RESET/READ ID: a two-position momentary action switch that may be moved to select RESET the meter, or toward the READ ID position to read the integrated dose on the digital display
RESPONSE: varies according to number of counts present, typically 2 to 11 seconds from 10 to 90% of final reading
TEMPERATURE RANGE:
Neutron: ± 30% from 0 to 40 °C (32 to 104 °F) (PRESCILA)
Gamma: ± 10% from -20 to 50 °C (-4 to 122 °F) (internal GM)
POWER: two standard "D" cell batteries; approximately 200 hour battery life with fresh batteries

Model 42-41L Specifications

DETECTOR: PRESCILA proton recoil scintillator for neutron survey and dose measurement
ANGULAR DEPENDENCE: within 15% over a wide range of energies
DROP RESISTANCE: survives 100g drops in three orientations
SIZE: 25.7 x 10.8 x 10.8 cm (10.125 x 4.25 x 4.25 in.) (H x W x L)
WEIGHT: 2.2 kg (5 lb)

Combined Specifications

OVERALL SIZE (H x W x L): including connector protrusion
without 42-41L: 19.6 x 8.9 x 21.1 cm (7.7 x 3.5 x 8.3 in.)
with 42-41L: 32.3 x 13.7 x 34.3 cm (12.7 x 5.4 x 13.5 in.)
WEIGHT: including internal detector and batteries
without 42-41L: 2.0 kg (4.5 lb)
with 42-41L: 4.2 kg (9.2 lb)

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