

LUDLUM MEASUREMENTS, INC.

Model 44-2 Gamma Detector



(Two views shown of Model 44-2)

Specifications

Part Number: 47-1532

INDICATED USE: low-level, wide-energy gamma survey

DETECTOR TYPE: scintillator, 2.5 x 2.5 cm (1 x 1 in.) (Dia x thickness)

SUGGESTED INSTRUMENTS: general purpose survey meters, ratemeters, and scalers

EFFICIENCY: ¹²⁵I for 7%; ⁵⁷Co for 10%; ¹³⁷Cs for 3%; ⁶⁰Co for 3%

SENSITIVITY: typically 175 cpm/ μ R/hr (¹³⁷Cs gamma)

RECOMMENDED ENERGY RANGE: 20 keV – 1.5 MeV

ENERGY RESPONSE: energy dependent

BACKGROUND: 1800 cpm (in 10 μ R/hr field)

PHOTOMULTIPLIER TUBE: 2.9 cm (1.1 in.) diameter, magnetically shielded

OPERATING VOLTAGE: typically 500 to 1200 V

TEMPERATURE RANGE: -15 to 50 °C (5 to 122 °F); may be certified to operate from -40 to 65 °C (-40 to 150 °F)

ENVIRONMENTAL RATING: IP65

CONNECTOR: series "C" (others available)

CONSTRUCTION: aluminum housing with beige powder coat finish

SIZE: 5.1 X 21 cm (2 x 8.25 in.) (Dia x L)

WEIGHT: 0.5 kg (1 lb)

Options

Sample Holders: Model 180-1, Model 180-1L, and Model 180-24 sample holders provide repeatable geometry for counting wipes, filter paper, or slides at user-selectable spacing of 0.32, 0.64, 1.3, 2.5, and 5.1 cm (0.125, 0.25, 0.5, 1, and 2 in.) from the detector.

Model 180-1: anodized aluminum frame, sample tray, and collimator (P/N 47-1675)

Model 180-1L: as above, but with 0.64 cm (0.25 in.) painted lead collimator (P/N 47-2988)

Model 180-24: anodized aluminum frame and sample tray (no collimator) (P/N 47-2631)

Planchets: 5.1 cm x 3.2 mm (2.0 x 0.125 in.) (Dia x thickness) in stainless steel or aluminum, minimum order quantity of 500
Stainless Steel (P/N 7525-371-01); Aluminum (P/N 7525-371)

Collimator: lead shielding/collimator for 5.1 cm (2 in.) OD detectors (P/N 4002-227)

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Note: specifications subject to change without notification. We are not responsible for errors or omissions.

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