

Model 44-172

Beta & Low Energy Gamma Detector



Ludlum Measurements, Inc.



Specifications

Part Number: 47-3543

INDICATED USE: low-energy gamma survey

COMPATIBLE INSTRUMENTS: any Ludlum meters with 500–1200 Vdc and 35 mV input sensitivity

DETECTOR TYPE: scintillator, 2.5 cm (1 in.) diameter YSO (Yttrium Oxyorthosilicate) crystal

WINDOW DENSITY: 1.2 mg/cm²

WINDOW AREA: 5 cm² active and open

BACKGROUND (10 μR/hr): 250 cpm or less

EFFICIENCY (4π): 40%–¹²⁵I; 25%–¹²⁹I; 8%–¹⁴C; 7%–⁵⁵Fe; ¹³⁷Cs–2.5%; ²⁴¹Am–11.2%; ⁵⁷Co–7.4%

NON-UNIFORMITY: less than 10%

RECOMMENDED ENERGY RANGE: 5–145 keV

ENERGY RESPONSE: energy dependent

PHOTOMULTIPLIER TUBE: 2.9 cm (1.125 in.) diameter, magnetically shielded

OPERATING VOLTAGE: typically 500–1200 volts

CONSTRUCTION: aluminum housing with beige powder coat finish

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F), may be certified to operate from -40 to 65 °C (-40 to 150 °F)

CONNECTOR: series "C" (others available)

SIZE: 5.1 x 17.8 cm (2 x 7 in.) (Dia x L)

WEIGHT: 0.5 kg (1.0 lb)

Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

Web: <http://www.ludlums.com> Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4672 / Email: sales@ludlums.com

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

May 2014