

## Model 44-38 Beta & Low Energy Gamma Detector





## -udlum Measurements, Inc

## **Specifications**

Part Number: 47-1588

**INDICATED USE**: beta gamma survey

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

**CONNECTOR**: series "C" (others available)

**DETECTOR**: 30–45 mg/cm<sup>2</sup> stainless steel wall halogen quenched GM

**DETECTION RANGE**:  $\pm$  10% up to 50 mR/hr without DTC, and up to 500 mR/hr with DTC

SENSITIVITY: 1200 cpm per mR/hr (137Cs gamma) with window closed

BACKGROUND: 20 cpm closed; 25 cpm open

GAMMA ENERGY RESPONSE (window closed): within 20% of <sup>137</sup>Cs (662 keV) from 60 keV to 1.3 MeV

**DEAD TIME**: typically 95 microseconds **OPERATING VOLTAGE**: typically 900 volts

**CONSTRUCTION**: anodized aluminum housing with rotary beta window

WINDOW CONSTRUCTION: tin shields mounted on aluminum with a solid aluminum gap in the middle

Low Energy Blocking Window: tin and aluminum segments are 1353 mg/cm<sup>2</sup>

Low Energy Pass Through Window: the middle aluminum segment is 610 mg/cm<sup>2</sup>

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

**SIZE**: 3.3 x 16.5 cm (1.3 x 6.5 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.

July 2016

The Netherlands