## **IUDLUM MEASUREMENTS, INC.**

## Model 44-88 Alpha-Beta-Gamma Detector



## Introduction

The Model 44-88 GM (Geiger-Mueller) detector responds to alpha, beta, and gamma radiation. It energy-dependent, overresponding by a factor of 6 in the 60 keV to 100 keV range when normalized to <sup>137</sup>Cs. The GM tube is user-accessible for repair should it be required. The Model 44-88 detector will operate with any of the Ludlum Measurement instruments that provide 900 V and an input sensitivity of approximately 30 mV or higher.

## **Specifications**

Part Number: 47-2356

INDICATED USE: alpha, beta, gamma survey; sample counting DETECTOR TYPE: pancake-type, halogen-quenched GM WINDOW: 1.7 + 0.3 mg/cm<sup>2</sup> mica WINDOW AREA: 15 cm<sup>2</sup> (2.3 in<sup>2</sup>) active; 12 cm<sup>2</sup> (1.9 in<sup>2</sup>) open EFFICIENCY (4π): <sup>14</sup>C - 5%; <sup>90</sup>Sr/<sup>90</sup>Y - 22%; <sup>99</sup>Tc - 19%; <sup>32</sup>P - 32%; <sup>239</sup>Pu - 15% SENSITIVITY (<sup>137</sup>Cs gamma): 3300 cpm/mR/hr ENERGY RESPONSE: energy dependent BACKGROUND: 60 cpm DEAD TIME: typically 80 microseconds OPERATING VOLTAGE: 900 volts CONSTRUCTION: aluminum housing, beige powder-coat, with 79% open stainless steel screen SIZE: 5.9 x 7 cm (2.3 x 2.8 in.) (Dia x L) WEIGHT: 0.2 kg (0.5 lb)

Ludium Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556 Web: http://www.ludiums.com Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4672 / Email: sales@ludiums.com August 2020 Note: specifications subject to change without notification. We are not responsible for errors or omissions.