

## Model 44-116 Beta Scintillation Detector



### Specifications

Part Number: 47-2696

**INDICATED USE:** beta survey

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

**DETECTOR TYPE:** 0.25 mm (0.01 in.) thick plastic scintillator

**WINDOW:** 1.2 mg/cm<sup>2</sup> aluminized polyester

**WINDOW AREA:**

Active: approx. 125 cm<sup>2</sup> (19.4 in<sup>2</sup>)

Open: approx. 100 cm<sup>2</sup> (15.5 in<sup>2</sup>)

**PROTECTIVE SCREEN:** 0.76 mm (0.030 in.) stainless steel, 6.4 mm (0.25 in.) hex, 79% open

Outer Dimensions (L x W): 190 x 100 mm (7.5 x 3.9 in.)

**EFFICIENCY (4 $\pi$ ):** <sup>99</sup>Tc: 15%, <sup>14</sup>C: 4%, <sup>90</sup>Sr/<sup>90</sup>Y: 30%

**TYPICAL BACKGROUND:** 300 cpm or less

**DETECTOR UNIFORMITY:** within 10% of average reading

**GAMMA SENSITIVITY:** approx. 20 cpm per  $\mu$ R/hr

**PHOTOMULTIPLIER TUBE:** 38 mm (1.5 in.) diameter

**OPERATING VOLTAGE:** typically 500 to 1000 V (1500 V max.)

**TEMPERATURE RANGE:** -20 to 50 °C (-4 to 122 °F)

**ENVIRONMENTAL RATING:** IP rating of 63

**CONNECTOR:** series "C", unless specified otherwise

**CONSTRUCTION:** aluminum with beige powder coating

**SIZE (H x W x L):** 10 x 10 x 33 cm (4 x 4 x 12.25 in.)

**WEIGHT:** 0.68 kg (1.5 lb)