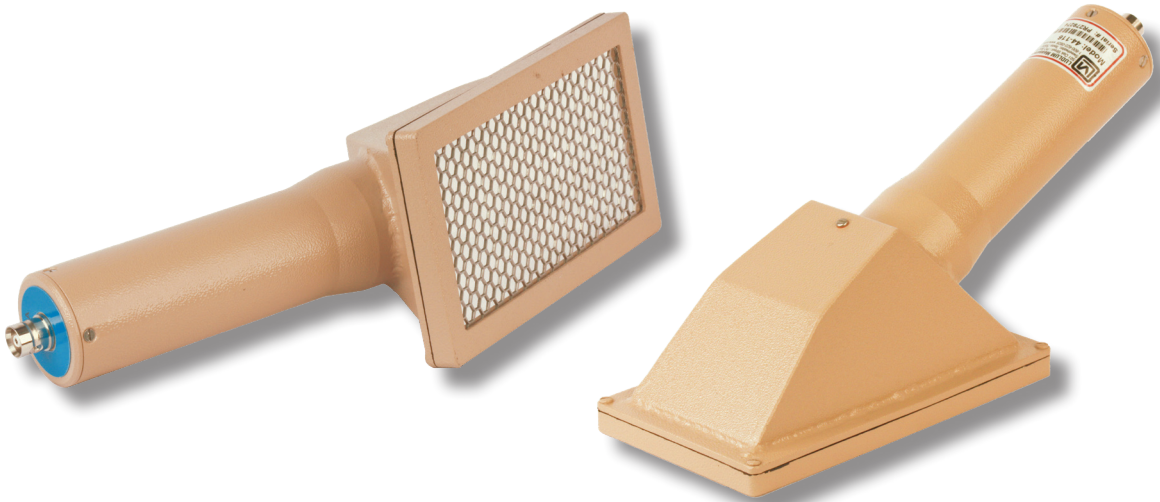


Model 44-116 Beta Scintillation Detector



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/cm² aluminized polyester

WINDOW AREA:

Active: approx. 125 cm² (19.4 in²)

Open: approx. 100 cm² (15.5 in²)

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 (4π): ⁹⁹Tc: 15%, ¹⁴C: 4%, ⁹⁰Sr/⁹⁰Y: 30%

TYPICAL BACKGROUND: 300 cpm or less

DETECTOR UNIFORMITY: 10% or less from average reading

GAMMA SENSITIVITY: approx. 20 cpm per μR/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)