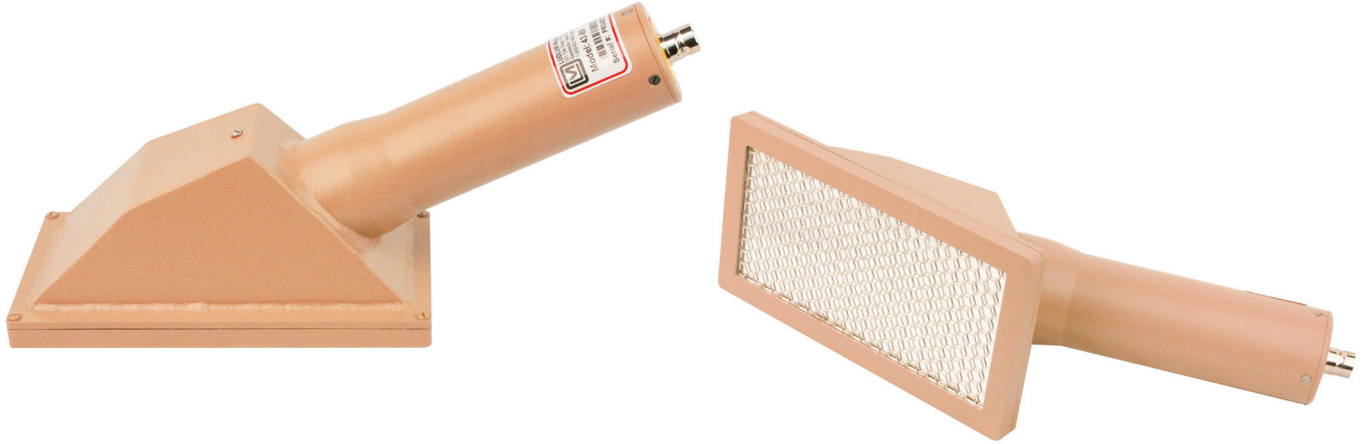


Model 43-89 Alpha-Beta Scintillation Detector



Specifications

Part Number: 47-2430

INDICATED USE: simultaneous alpha and beta survey

SUGGESTED INSTRUMENTS: Model 2360, Model 3002,
Model 3003

DETECTOR TYPE: ZnS (Ag) adhered to 0.25 mm (0.01 in.) thick
plastic scintillator

WINDOW: 1.2 mg/cm² metallized 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.) thick stainless
steel, 6.4 mm (0.25 in.) hex, 79% open

Outer Dimensions (L x W): 168 x 92 mm (6.6 x 3.6 in.)

EFFICIENCY (4 π): ²³⁹Pu: 17.5%, ⁹⁹Tc: 15%, ⁹⁰Sr/⁹⁰Y: 17.5%

TYPICAL BACKGROUND:

Alpha: 3 cpm or less

Beta: 300 cpm or less

CROSSTALK:

Alpha to Beta: 10% or less

Beta to Alpha: 1% or less

DETECTOR UNIFORMITY: within 10% of average reading

GAMMA SENSITIVITY: approx. 20 cpm per μ 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 otherwise specified

CONSTRUCTION: aluminum with beige powder coating

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

WEIGHT: 0.68 kg (1.5 lbs)