Model 43-1Alpha Detector



Ludium Measurements, in



Two views to show the large window and the yellow to indicate the radiation type detected - in this case, yellow for alpha.

The Ludlum Model 43-1 is a large area scintillation detector for alpha radiation survey and wipe test analysis.

Specifications

Part Number: 47-1516

INDICATED USE: alpha survey

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

DETECTOR TYPE: scintillator, ZnS (Ag)

PHOTOMULTIPLIER TUBE: 3.8 cm (1.5 in.) diameter, magnetically shielded

DETECTOR OPERATING VOLTAGE: typically 500 to 1200 volts

WINDOW: 1.2 mg/cm² metalized polyester (1.3 mg/cm² recommended for outdoor use)

WINDOW AREA: 83 cm² active; 75 cm² open

DETECTOR UNIFORMITY: within 10% of average reading

EFFICIENCY (4π): ALPHA: 33% for ²³⁹Pu

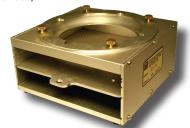
BACKGROUND: 3 cpm or less

CONNECTOR: series "C", others available

CONSTRUCTION: aluminum housing with beige powder coat

SIZE: 12.2 x 24.9 cm (4.8 x 9.8 in.) (Dia x L)

WEIGHT: 0.9 kg (2 lb)



Model 180-16 Wide Diameter Sample Holder

Option: Model 180-16 Wide Diameter Sample Holder provides repeatable geometry for counting wipes, filter paper, or slides, up to 10.2 cm (4 in.) diameter. Sample trap offers selectable spacings of 0.32, 0.64, 1.3, 2.5, and 5.1 cm (0.125, 0.25, 0.5, 1.0, and 2 in.) Part Number 47-1132

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