

Model 43-1-1 AlphaBeta Detector



Ludlum Measurements, Inc.



(three views shown)

Specifications

Part Number: 47-2336



INDICATED USE: alpha beta survey

SUGGESTED INSTRUMENTS: Models 2224-1, 2360

DETECTOR: scintillator, ZnS(Ag) adhered to 0.03 cm (0.01 in.) thick plastic scintillation material

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

OPERATING VOLTAGE: typically 500–1200 volts

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

WINDOW AREA: 83 cm² active, 75 cm² open

EFFICIENCY (4 π): ALPHA: 33% for ²³⁹Pu

ALPHA BETA: 4% for ¹⁴C

BACKGROUND: 3 cpm or less

CROSS TALK: alpha to beta: less than 10%

beta to alpha: less than 1%

DETECTOR UNIFORMITY: within 10% of average reading

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)

