

# 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/cm<sup>2</sup> metalized polyester (1.3 mg/cm<sup>2</sup> recommended for outdoor use)

**WINDOW AREA:** 83 cm<sup>2</sup> active, 75 cm<sup>2</sup> open

**EFFICIENCY (4 $\pi$ ):** ALPHA: 33% for <sup>239</sup>Pu  
ALPHA BETA: 4% for <sup>14</sup>C

**BACKGROUND:** 3 cpm or less

**CROSS TALK:** alpha to beta: less than 10%  
beta to alpha: less than 1%

**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)

