

Model 43-10-1 Alpha Sample Counter Head

Radiation Detection for a Safer World



Ludlum Measurements, Inc.



Part Number: 47-1305

Specifications

INDICATED USE: alpha/beta sample counting

SUGGESTED INSTRUMENTS: Model 2929, Model 2223, Model 2224, Model 3030E

DETECTOR TYPE: scintillator, ZnS (Ag)

DETECTOR OPERATING VOLTAGE: 500–1200 volts

CONNECTOR: series “C” (others available)

SAMPLE SIZE (maximum): 5.1 x 0.9 cm (2 x 0.4 in.) (Dia x L)

SAMPLE HOLDER: anodized aluminum tray with sample ring to allow for 2.5 cm (1 in.) or 5.1 cm (2 in.) diameter x 0.32 cm (0.13 in.) deep samples

PHOTOMULTIPLIER TUBE: 5.1 cm (2 in.)

WINDOW: 0.4 mg/cm²

EFFICIENCY (4 π): 37% for ²³⁹Pu, 5% for ¹⁴C, 27% for ⁹⁹Tc, 32% for ²³⁰Th, 39% for ²³⁸U, 29% for ¹³⁷Cs, 26% for ⁹⁰Sr/⁹⁰Y

BACKGROUND: 3 cpm or less alpha, 80 cpm or less for beta-gamma

CONSTRUCTION: aluminum housing with beige powder coating

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

SIZE: 23.6 x 11.4 x 23.6 cm (9.3 x 4.5 x 9.3 in.) (H x W x L)

WEIGHT: 1.9 kg (4.1 lb)

Optional Accessories

Sample Planchets

SIZE: 5.1 x 0.32 cm (2 x 0.125 in.) (Dia x Thickness)

Aluminum: Part Number 7525-371

Stainless Steel: Part Number 7525-371-01

(minimum order quantity 500)

