

Model 180-8 Alpha Beta Gamma Sample Counter Head

Radiation Detection for a Safer World



Part Number: 47-1549

Specifications

INDICATED USE: low background sample counting

DETECTOR: end window halogen quenched GM (others available)

WINDOW: 1.7 ± 0.3 mg/cm² mica

WINDOW AREA: active 6 cm²; open 5 cm²

EFFICIENCY (4 π): 2% for ¹⁴C, 10% for ⁹⁰Sr/⁹⁰Y, 7% for ²³⁹Pu

SENSITIVITY: 2100 cpm/mR/hr (¹³⁷Cs gamma)

ENERGY RESPONSE: energy dependent

BACKGROUND: 14 cpm with end window GM

DEAD TIME: 250 μ s

SAMPLE SIZE: maximum 4.7 cm (1.8 in.) diameter

SAMPLE TRAY: selectable spacing of 0.32 cm (0.125 in.), 0.64 cm (0.25 in.), 1.3 cm (0.5 in.), 2.5 cm (1 in.), or 5.1 cm (2 in.) from detector

OPERATING VOLTAGE: 900 volts

CONSTRUCTION: 0.3 cm (1.5 in.) thick painted lead housing

SIZE: 24.1 x 37.3 cm (9.5 x 14.7 in.) (Dia x L)

WEIGHT: 107 kg (235 lb)

SHIPPING WEIGHT: 125 kg (275 lb)

SUGGESTED INSTRUMENTS:

Model 2000 (Part Number 48-1648) General Purpose Scaler for sample counting

Model 2200 (Part Number 48-1651) Scaler/Ratemeter for single channel analyzing, gross counting

Both of the above instruments support a wide range of external detectors.



Ludlum Measurements, Inc.