

Model 44-2-14 and Model 44-2-23 Waterproof Gamma Detectors



Model 44-2-14



Model 44-2-23

Specifications

Model 44-2-14 Part Number: 47-2473

Model 44-2-23 Part Number: 47-3656

INDICATED USE: low-level, wide-energy gamma detection

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

DETECTOR TYPE: 2.5 x 2.5 cm (1 x 1 in.) (Dia x L) NaI scintillator

EFFICIENCY: ¹²⁵I: 7%; ⁵⁷Co: 10%; ¹³⁷Cs: 3%; ⁶⁰Co: 3%

SENSITIVITY: typically 175 cpm per μ R/hr (¹³⁷Cs gamma)

RECOMMENDED ENERGY RANGE: 20 keV – 1.5 MeV

ENERGY RESPONSE: energy dependent

BACKGROUND: 1800 cpm (in 10 μ R/hr field)

PHOTOMULTIPLIER TUBE: 2.86 cm (1.125 in.) diameter

OPERATING VOLTAGE: 500 to 1200 volts

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

WATERPROOF: submersible up to 30 m (100 ft); IP68 or better

CONNECTOR: hard wired in detector, Series "C" at end of cable

CONSTRUCTION:

Model 44-2-14: aluminum with 0.21 cm (0.083 in.) thick wall

Model 44-2-23: stainless steel with 0.21 cm (0.083 in.) thick wall

SIZE: 4.8 x 28 cm (1.9 x 11 in.) (Dia x L)

WEIGHT:

Model 44-2-14: 0.9 kg (2 lb)

Model 44-2-23: 2.5 kg (5.5 lb)