

Model 44-9 Pancake GM Probe



Indicated Use: Alpha, Beta, & Gamma survey; sample counting
Detector: Pancake-type, halogen-quenched GM
Window: $1.7 \pm 0.3 \text{ mg/cm}^2$ mica
Window Area: 15.5 cm^2 (2.4 in²) Active; 12.3 cm^2 (1.9 in²) Open
Efficiency (4Π): 5% - ¹⁴C, 22% - ⁹⁰Sr/⁹⁰Y; 19% - ⁹⁹Tc; 32% - ³²P;
15% - ²³⁹Pu, ≤ 1% - ^{99m}Tc; 0.2% - ¹²⁵I
Sensitivity: Typically 3300 cpm/mR/hr
Energy Response: Energy dependent
Background: 60 cpm
Dead Time: 80 us
Operating Voltage: 900 Vdc
Connector: Series "C" (others available)
Construction: Aluminum housing with beige powder-coat finish and stainless steel protective screen (79% open)
Input Sensitivity: ≥ -30mV
Size: 1.8" H x 2.7" W x 10.7" L
Weight: 1 lb

44-9 Probe with Exposure Filter or Dose Filter also available

051-449 Pancake GM Probe

051-230 Optional 39" "C" Series Connecting Cable

Model 44-38 Energy Compensated Beta Gamma Probe



Indicated Use: Beta-Gamma survey
Detector: Halogen quenched GM, 30-45 mg/cm² stainless steel wall
Detection Range: ± 10% up to 50 mR/hr without DTC
± 10% up to 500 mR/hr with DTC
Sensitivity: 1200 cpm per mR/hr with window closed
Energy Response: (60 keV-1-3 MeV): within 20% of ¹³⁷Cs (662 keV)
Beta Cutoff: Approximately 200 keV (window open)
Background: 20 cpm Closed; 25 cpm Open
Dead Time: 95 microseconds (typical)
Operating Voltage: 900 volts
Construction: Anodized aluminum housing
Window Construction:
Low Energy Blocking Shield: tin shields mounted on aluminum (1353 mg/cm²) with solid aluminum section in the middle
Low Energy Pass Through Window: solid aluminum (610 mg/cm²)
Connector: Series "C"
Size: 1.3" Diameter x 6.5" L
Weight: 1 lb

051-278 Model 44-38 Energy Comp. Probe

051-230 Optional 39" "C" Series Connecting Cable

Model 44-7 End Window GM Probe



Indicated Use: Alpha, Beta, Gamma survey; Sample counting
Detector: End window, halogen-quenched GM
Window: $1.7 \pm 0.3 \text{ mg/cm}^2$ mica
Window Area: 6 cm^2 (0.93 in²) Active; 5 cm^2 (0.78 in²) Open
Efficiency (4Π): 2% - ¹⁴C, 10% - ⁹⁰Sr/⁹⁰Y; 7% - ⁹⁹Tc; 7% - ²³⁹Pu, 0.1% - ¹²⁵I
Sensitivity (¹³⁷Cs gamma): 2100 cpm/mR/hr
Energy Response: Energy dependent
Background: 40 cpm
Dead Time: 200 microseconds (typical)
Operating Volume: 900 volts
Connector: Series "C" (others available)
Construction: Anodized aluminum housing
Size: 1.8" Diameter x 5.8" L
Weight: 1 lb

051-447 End Window GM Probe

051-230 Optional 39" "C" Series Connecting Cable

Model 44-3 Low Energy Gamma Scintillator Probe



Indicated Use: ¹²⁵I and low energy gamma survey
Detector Type: NaI(Tl) scintillator, 1" Diameter x 1 mm thick
Window: 18.4 mg/cm^2
Window Area: 5 cm^2 (0.8 in²) Active and Open
Efficiency (4Π): 33.5% - ¹²⁵I (based on ¹²⁹I efficiency of 18%)
Sensitivity: 675 cpm/μR/hr (¹²⁵I)
Background (10 μR/hr): 300 cpm
Recommended Energy Range: 10-60 keV
Energy Response: Energy dependant
Photomultiplier Tube: 1.5" Diameter
Operating Voltage: 500-1200 V (typical)
Connector: Series "C"
Construction: Aluminum with beige powder coat
Size: 2" Diameter x 7" L
Weight: 1 lb

051-443 Model 44-3 Low Energy Gamma Scintillator

051-230 Optional 39" "C" Series Connecting Cable

Model 44-2 Gamma Scintillator Probe



Indicated Use: Low-level, wide-energy gamma survey
Detector Type: NaI(Tl) scintillator, 1" Diameter x 1" L thick
Efficiency: ¹²⁵I - 7%, ⁵⁷Co - 10%, ¹³⁷Cs - 3%, ⁶⁰Co - 3%
Sensitivity (¹³⁷Cs gamma): 175 cpm/μR/hr
Recommended Energy Range: 20 KeV - 1.5 MeV
Energy Response: Energy dependant
Background: 1800 cpm
Photomultiplier Tube: 1.123" Diameter, magnetically shielded
Operating Voltage: 500-1200 V
Temperature Range: 5 to 122° F, may be certified for -40 to 150°F
Connector: Series "C"
Construction: Aluminum with beige powder coat
Size: 2" Diameter x 7.3" L
Weight: 1 lb

44-2 Model 44-2 Gamma Scintillator Probe

051-230 Optional 39" "C" Series Connecting Cable