

## 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:  $15.5 \text{ cm}^2$  (2.4 in<sup>2</sup>) Active;  $12.3 \text{ cm}^2$  (1.9 in<sup>2</sup>) Open  
 Efficiency (4II) : 5% - <sup>14</sup>C, 22% - <sup>90</sup>Sr/<sup>90</sup>Y; 19% - <sup>99</sup>Tc; 32% - <sup>32</sup>P;  
 15% - <sup>239</sup>Pu,  $\leq 1\%$  - <sup>99m</sup>Tc; 0.2% - <sup>125</sup>I  
 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:  $\geq -30 \text{ mV}$   
 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/cm<sup>2</sup> stainless steel wall  
 Detection Range:  $\pm 10\%$  up to 50 mR/hr without DTC  
 $\pm 10\%$  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 <sup>137</sup>Cs (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/cm<sup>2</sup>) with solid aluminum section in the middle  
 Low Energy Pass Through Window: solid aluminum (610 mg/cm<sup>2</sup>)  
 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:  $6 \text{ cm}^2$  (0.93 in<sup>2</sup>) Active;  $5 \text{ cm}^2$  (0.78 in<sup>2</sup>) Open  
 Efficiency (4II) : 2% - <sup>14</sup>C, 10% - <sup>90</sup>Sr/<sup>90</sup>Y; 7% - <sup>99</sup>Tc; 7% - <sup>239</sup>Pu, 0.1% - <sup>125</sup>I  
 Sensitivity(<sup>137</sup>Cs 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: <sup>125</sup>I and low energy gamma survey  
 Detector Type: NaI(Tl) scintillator, 1" Diameter x 1 mm thick  
 Window:  $18.4 \text{ mg/cm}^2$   
 Window Area:  $5 \text{ cm}^2$  (0.8 in<sup>2</sup>) Active and Open  
 Efficiency (4II): 33.5% - <sup>125</sup>I (based on <sup>129</sup>I efficiency of 18%)  
 Sensitivity: 675 cpm/ $\mu\text{R/hr}$  (<sup>125</sup>I)  
 Background (10  $\mu\text{R/hr}$ ): 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



44-2 Model 44-2 Gamma Scintillator Probe

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

Indicated Use: Low-level, wide-energy gamma survey  
 Detector Type: NaI(Tl) scintillator, 1" Diameter x 1" L thick  
 Efficiency: <sup>125</sup>I - 7%, <sup>57</sup>Co - 10%, <sup>137</sup>Cs - 3%, <sup>60</sup>Co - 3%  
 Sensitivity (<sup>137</sup>Cs gamma): 175 cpm/ $\mu\text{R/hr}$   
 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