

# Digilert 100



The Digilert 100 measures alpha, beta, gamma, and x-rays. Its digital display shows readings in your choice of counts per minute (CPM) or mR/hr, or in accumulated counts. A red LED flashes and beeper sounds with each count detected and when the radiation reaches a user set alert level.

### Detector

Halogen-quenched GM tube with mica end window. Mica window density 1.5-2.0 mg/cm<sup>2</sup>. Effective window diameter is .360 inch. Side wall is .012 inch thick.

### Display

4-digit liquid crystal display with mode indicators. Display updates every 60 sec.

### Operating Range

mR/hr: .001 (1  $\mu$ R) to 100  
 CPM: 0 to 100,000  
 Total: 0 to 120,000 counts  
 Optional -  $\mu$ Sv/hr: .01 to 1000

### Accuracy

+/-10% typical, +/-15% maximum.

### Gamma Sensitivity

1000 CPM/mR/hr referenced to Cs-137.

### Count Light

Red LED flashes with each count.

### Audio Indicator

Sounds with each count (can be switched off for silent operation).

### Alert

Pulsating beeper sounds the alert. Three separate adjustable alert levels are used for mR/hr, CPM,  $\mu$ Sv/hr., and Total.

### Energy Sensitivity

Detects alpha down to 2.5 MeV; typical detection efficiency at 3.6 MeV is greater than 80%. Detects beta at 50 keV with typical 35% detection efficiency. Detects beta at 150 keV with typical 75% detection efficiency. Detects gamma and x-rays down to 10 keV typical through the window, 40 keV minimum through the case. Normal background is 5-20 CPM.

### Outputs

Dual miniature jack sends counts to CMOS-compatible devices, including computers, data loggers, and educational data collection systems. Submini jack provides audio output to an external earpiece, amplifier, or tape recorder.

### Anti-Saturation

Readout will hold at full scale in high radiation fields as high as 100 times the maximum reading.

### Battery Life

Battery life is typically 2000 hours at normal background radiation levels. (One 9-volt alkaline battery.)

### Temperature Range

-10° to +50°C (14° to 122° F)

