

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.

Specifications

Detector

Halogen-quenched GM tube with mica end window. Mica window density 1.5-2.0 mg/cm². 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.

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, μ Sv/hr., and Total.

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.

Operating Range

mR/hr - .001 (1 μ R) to 100 mR/hr

μ Sv/hr - .01 to 1000

CPM - 0 to 350,000

CPS - 0 to 5000

Total/ Timer - 1 to 9,999,000 counts

Gamma Sensitivity

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

Accuracy

\pm 10% typical (NIST), \pm 15% maximum.

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.

Anti-Saturation

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

Power

One 9-volt alkaline battery.

Battery Life

Battery life is typically 2000 hours at normal background radiation levels.

Temperature Range

-10° to +50°C (14° to 122° F)

Weight

117 grams (6.5 oz.) without battery.

Size

150 x 80 x 30 mm (5.9 x 3.3 x 1.2 in.).

