

Inspector

Geiger detector for measurement of alpha, beta and gamma and X-rays

Main features:

- **3 second update**
- **audible and silent alarms**
- **count rate and dose rate mode**
- **audio output jack**
- **simple operation**
- **μSv/hr or mR/hr options**



The Inspector portable radiation monitor measures alpha, beta, gamma and x-radiation using a 44 mm "pancake" geometry Geiger-Müller detector with high sensitivity to common beta and alpha sources. The large display shows readings in your choice of mR/hr, counts-per-second, counts-per-minute, or μSv/hr. The timer feature allows timed readings from one minute to 24 hours for precise measurement of low-level contamination. An audible alert sounds when the radiation reaches a user-adjustable threshold level. The instrument automatically compensates for GM tube dead time and anti-saturation circuitry prevents the instrument jamming in very high radiation fields (no "max-out").

Specifications:

Sensor	Halogen-quenched Geiger-Mueller tube. Effective diameter 45 mm. Mica window density 1.5-2.0 mg/cm ²
Display	4-digit liquid crystal display with mode indicators
Operating range	0.01-1000.00 μSv/hr (Cs-137); cps: 0 - 5000
Averaging Periods	Display updates every 3 seconds, showing the average for the past 30-second time period at normal levels. The averaging period decreases as the radiation level increases. User can select fast 3-second averaging period
Calibration	Cesium 137 (662 keV gamma)
Sensitivity	350 cpm/μSv/hr referenced to Cs-137
Accuracy	±10% typical; ±15% max

Efficiency	Sr-90 (546KeV, 2.3MeV β max): approx. 75%; C-14 (156KeV β max): approx. 11%; Bi-210 (1.2 MeV β max): approx. 64%; Am-241 (5.5 MeV α): approx. 36%
Count light	Red LED flashes with each count
Audible signal	Chirps for each count (can be muted)
Timer	Can set 1-10 minute sampling periods in 1-minute increments, 10-50 minute sampling periods in 10-minute increments, and 1-24 hour sampling periods in 1-hour increments
Outputs	Dual miniature jack drives CMOS or TTL devices, sending counts to computer or data logger. Submini jack allows for electronic calibration.
Power	One 9-volt alkaline battery, battery life is minimum 200 hours at normal background
Anti-Saturation	Readout holds at full scale in fields up to 100 times the maximum reading
Dimensions	150 x 80 x 30 mm
Weight	350 grams