DORGEAN
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Technology for a Healthy Planet

IMI

Radiation Detection Instruments since 1986

IMI Inspector Alert™ V2 Surface Contamination Meter

The IMI Inspector Alert™ V2 measures alpha, beta, gamma and X-radiation using a 2-inch “pancake” GM detector with high sensitivity to common beta and alpha sources. The easy-to-read digital display shows reading in your choice of Dose Rate - µSv/hr or mR/hr, and Count Rate - CPM or CPS. The Total / Timer feature allows timed readings from one minute to 40 hours for precise measurement of low-level contamination. An Audible alert sounds when the radiation reaches a user-adjustable level.

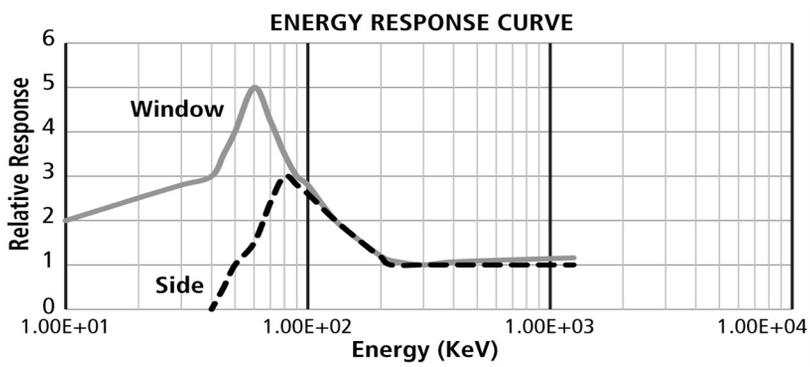
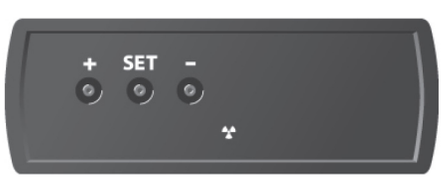
- Quickly alerts user to the presence of harmful levels of nuclear radiation
- Detects noble gases and low energy radionuclides
- Automatically compensates for GM tube dead time
- Will not jam in high radiation fields
- Meets CE Certification, RoHS compliant and WEEE standards

Technical Specifications

Detector :	Halogen-quenched Geiger-Mueller tube Effective diameter 1.75" (45 mm) Mica window density 1.5-2.0 mg/cm ² Detects Alpha, Beta, Gamma, and X–radiation
Display :	4-digit liquid crystal display with mode indicators
Operating Range :	µSv/hr: .01-1,100 mR/hr: .001-110 CPM: 0-350,000 CPS: 0-5,000 Total: 1-9,999,000 counts
Calibration:	Cesium-137 (gamma)
Gamma Sensitivity:	3500 CPM/mR/hr referenced to Cs-137 Smallest detectable level for I-125 is .02 mCi at contact
Efficiency :	For 4 pi at contact :

Isotope	Energy	Efficiency
C-14 (Beta)	49 keV avg. 156 keV max.	5.3%
Bi-210 (Beta)	390 keV avg. 1.2 MeV max.	32%
Sr-90 (Beta)	546 keV and 2.3 MeV	38%
P-32 (Beta)	693 keV avg. 1.7 MeV max.	33%
Am-241 (Alpha)	5.5 MeV	18%

Accuracy :	±10% typical; ±15% maximum



Alert Range :	µSv/hr: 0 to 500 mR/hr: 0 to 50 CPM: 0 to 160,000 Beeper sounds the alert
Timer :	Can set sampling periods of 1 minute to 40 hours
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
Count Light :	Red LED flashes with each count
Audio :	Beeper chirps for each count (can be muted)
Ports :	• Output: Stereo 3.5 mm jack sends counts to computers, data loggers, other CMOS-compatible devices, earphones, and educational data collection systems. 0-9 V, 1 kOhm impedance. • Input: 2.5 mm mono jack provides calibration input. 0-3.3 V, > 5 µs width, rising edge triggered
Anti-Saturation :	Readout holds at full scale in fields up to 100 times the maximum reading
Temperature Range :	-20° to +50° C , -4° to +122° F
Power :	One 9-volt alkaline battery; battery life 2000 hours typical, 700 hours minimum at normal background radiation levels at sea level Battery life decreases as radiation level rises
Size :	150 x 80 x 30 mm (5.9" x 3.2" x 1.2")
Weight :	323 grams (11.4 oz) including battery
Options :	Computer software and cable available
Certifications :	CE Certified: Emissions: EN 55011:98 + A2 (Class B emissions limits); EN 61326: 06 (Class B) RF Emissions Immunity: EN 61326: 06 (Annex C) Portable Test and Measurement Equipment; EN 61000-4-2: 95 (ESD); EN 61000-4-3: 97 RoHS Compliant; Meets WEEE standards