



Technology for a Healthy Planet

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Radiation Detection Instruments since 1986

Radalert 100X™ Nuclear Radiation Monitor

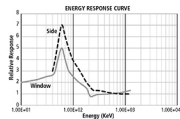


The Radalert 100X™ measures alpha, beta, gamma, and X-radiation. Its digital display shows readings in your choice of counts per minute (CPM) $\mu\text{Sv/hr}$ or mR/hr or in accumulated counts. A red LED blinks and a beeper chirps with each count (the chirp can be muted). An audible alert sounds when the radiation reaches a user-adjustable level.

- Monitor personal radiation exposure
- Monitor an area or perimeter
- Detect radiation leaks and contamination
- Ensure regulatory compliance
- Monitor changes in background radiation
- Demonstrate principles of nuclear physics
- Check for radioactive minerals in the earth

Technical Specifications

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|---------------------------|---|
| Detector : | Halogen-quenched Geiger-Mueller tube (LND 712) Mica end window density 1.5-2.0 mg/cm ² Side wall is 0.012" #446 stainless steel Detects Alpha, Beta, Gamma, and X-radiation |
| Display : | 4-digit liquid crystal display with mode indicators |
| Operating Range : | μSv/hr: .000-1,100 mR/hr: .000-110 CPM: 0 to 350,000 CPS: 0 to 3,500 Total: 0 to 9,999,000 counts |
| Calibration: | Cesium -137 (gamma) |
| Gamma Sensitivity: | 1,200 CPM/mR/hr referenced to Cs-137 |
| Accuracy : | ±10% typical; ±15% maximum |
| Alert Range : | User-adjustable alert level to 500 μSv/hr & 60,000 CPM |
| Count Light : | Red LED flashes with each count |
| Audio : | Beeper chirps for each count (can be muted) |
| Ports : | <ul style="list-style-type: none"> • Output: Stereo 3.5 mm jack sends counts to computers, data loggers, other CMOS-compatible devices, earphones, and educational data collection systems. • 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 |
| Timer: | Can set sampling periods of 1 minute to 40 hours |
| Averaging Periods: | Display updates every 3 seconds, showing the average for the past 90- second time period at normal levels. The Averaging period decreases as the radiation level increases. |
| Power: | One 9-volt alkaline battery; battery life 2,000 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 : | 225 grams (8 oz) including battery |
| Options : | Computer software and cable available |
| Certifications : | CE Certified: Emissions: EN 55011:2009 + A1:2010 (Class B emissions limits); EN 61326-1: 2006 (Class B) RF Emissions Immunity: EN 61326-1:2006 (Annex C) Portable Test and Measurement Equipment; EN 61000-4-2: 1995 (ESD); EN 61000-4-3: 1997 (EM) RoHS Compliant; Meets WEEE standards |



Alert Switches

Alpha Window



Radiansa
Consulting