



Technology for a Healthy Planet

imi

Radiation Detection Instruments since 1986

Rad 100™ Nuclear Radiation Monitor



The Rad 100™ 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).

- 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

Detector :	Halogen-quenched Geiger-Mueller detector (LND712) Mica end window density is 1.5-2.0 mg/cm ² Side wall is 0.012" #446 stainless steel Detects Alpha, Beta, Gamma, and X-radiation	<p>The graph shows two curves: a solid line for the 'Window' detector and a dashed line for the 'Side' detector. The x-axis is Energy (KeV) on a logarithmic scale from 1.00E+01 to 1.00E+04. The y-axis is Relative Response from 0 to 8. The 'Side' curve peaks at approximately 7.5 at 0.05 KeV, while the 'Window' curve peaks at approximately 4.5 at 0.05 KeV. Both curves show a sharp decline in response as energy increases beyond 0.1 KeV.</p>
Display :	4-digit liquid crystal display with mode indicators	
Operating Range :	μ Sv/hr: .000 to 1,100 mR/hr: .000 to 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, 120 CPM/ μ Sv/hr (Cs-137)	
Accuracy :	\pm 10% typical; \pm 15% maximum	
Count Light :	Red LED flashes with each count	
Audio :	Beeper chirps for each count (can be muted)	<p>High Quality, High Contrast LCD Display</p> <p>Timer Set Switches Alpha Beta Window</p>
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. 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; nominal 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 Complaint Meets WEEE standards	

Specifications subject to change without notice. Rev. A.

IMI - International Medcom, Inc.

<http://medcom.com>



103 Morris Street, Suite A5
Sebastopol, CA 95472 USA
contact@medcom.com

Tel: 707.823.0336
Fax: 707.823.7207
Toll Free: 1.877.378.1010