

CRM-100

The CRM-100 is a general purpose geiger counter that measures alpha, beta, gamma, and x-radiation. It is intended for personal safety and educational purposes. Like the popular Radalert 100, the CRM-100 features a 3-second update on its digital liquid crystal display (LCD). The LCD shows the current radiation level in your choice of milliroentgens per hour from .001 to 110 or counts per minute (cpm) from 0 to 350,000. When SI units are selected, the LCD shows readings in microsieverts per hour from .01 to 1100 or counts per second (cps) from 0 to 3,500. This instrument also offers an accumulated total and timer function, up to 9,999,000 counts and 40 hours. A red LED blinks and a beeper chirps with each count (the chirp can be muted).

Use the CRM-100 to:

- Detect the presence of ionizing radiation
- Measure background radiation
- Detect radiation leaks and contamination
- Monitor changes in background radiation
- Demonstrate principles of nuclear physics
- Check for radioactive minerals in the earth

Specifications:

Sensor:

- Halogen-quenched Geiger-Mueller detector (LND712)
- Mica end window density is 1.5-2.0 mg/cm²
- 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:

mR/hr: .001-110

CPM: 0-350,000

μSv/hr: .01-1,100

CPS: 0-3,500

Total: 0-9,999,000 counts

Timer: up to 40 hours



Calibration: Cesium 137 (gamma)

Sensitivity: 1000 cpm/mR/hr referenced to Cs-137

Accuracy: $\pm 10\%$ typical; $\pm 15\%$ max. (mR/hr and $\mu\text{Sv/hr}$ modes)

Alert: No alert feature. If your intended application requires a user-adjustable alert, we recommend the [Radalert® 100](#).

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, and headphones
- Input: Mono 2.5 mm jack provides electronic calibration input

Power: One 9-volt alkaline battery; average battery life is 2160 hours at normal background, 625 hours at 1 mR/hr with beeper off

Size: 150 x 80 x 30 mm (5.9" x 3.2" x 1.2")

Weight: 225 grams (8 oz) including battery

Options: Computer cable and software (Windows compatible)

CE Certified

Designed & Manufactured: Designed in USA by International Medcom, Inc. Manufactured in Thailand under ISO 9001:2001 & ISO 14001 Certification.

Specifications subject to change without notice.