

model
RangerEXP



Features:

- Backlit Graphic LCD with Backlight
- Count Light-Red LED flashes with each radiation event
- Audio Indicator-Internally mounted beeper (can be switched off for silent operation)
- Anti-Saturation-Meter will hold at OVER RANGE in fields as high as 100 times the maximum reading
- Requires 2 AA alkaline batteries
- Includes RAP-RS2 External GM Probe, 3 ft BNC Cable, Carrying Case, Xtreme Boot, Lanyard, Stand, Batteries, Mini-USB Cable, Observer USB Software, Certificate of Conformance
- Options: NIST Calibration
- Limited 1 year warranty



Ranger EXP

The Ranger EXP is a maximum performance, lightweight, rugged nuclear radiation detector to use for surveys in the field or at your facility. The Ranger EXP is designed specifically for individuals operating in tough environments. The small, handheld Geiger counter offers excellent sensitivity to low levels of alpha, beta, gamma, and x-rays. The digital readout is displayed with a red count light and a beeper sounds with each count detected. Other features include an adjustable timer, selectable alert, and with the free Observer USB Software Family, you can download your collected data, and set alarms!

RAP-RS2 Probe – External Halogen-quenched, uncompensated GM tube with thin mica window, 1.4-2.0 mg/cm² areal density. Effective diameter of window is 45 mm (1.75 in.).

Operating Range

mR/hr – .001 (1μR) to 100

CPM – 0 to 350,000

μSv/hr – .01 to 1000

CPS – 0 to 5000

Total Counts- 1 to 9,999,000 counts

Accuracy (Referenced to Cs137)

Typically ±15% from factory, ±10% with NIST Source Calibration

Energy Sensitivity

Detects Alpha down to 2 MeV. Detects Beta down to .16 MeV; typical detection efficiency at 1 MeV is approx. 25%. Detects Gamma down to 10 KeV through the detector window. 3340 CPM/mR/hr (137Cs). Smallest detectable level for 125I is .02 μCi at contact.

Built-In Efficiencies

Sulfur (35S), Strontium (90Sr/y), Cesium (137Cs), Phosphorus (32P), Carbon (14C), Iodine (131I), Cobalt (60Co), and Alpha

Selectable Alert Set Range

mR/hr .001 – 100 and CPM 1 – 350,000. 70db @ 1m. Pulsating beeper sounds the alert. Adjustable alert levels are used for mR/hr / CPM, and μSv/hr / CPS. Alarm will sound when in Timer Mode when set alarm threshold is reached.

Averaging Periods

Display updates every 3 seconds. At low background levels, the update is the average for the past 30-second time period. The timed period for the average decreases as the radiation level increases.