The Ranger is a small, handheld, digital NORM survey meter with excellent sensitivity to low levels of alpha, beta, gamma, and x-rays. It has built-in efficiencies for common isotopes to calculate activity in Bq and DPM. It has a backlit display and a count light and a beeper that sounds with each count detected. Other features include selectable alert levels, an adjustable timer, and an optional wipe test plate. Internal memory and the free Observer USB Software allow you to download your data, set computer alarms, and calibrate your instrument! The Bluetooth and Observer BLE enables saving, sharing, and automation of surveys and RadResponder compatibility.

Detector
Internal Halogen-quenched, uncompensated GM tube with thin mica window, 1.4-2.0 mg/cm² areal density. Effective diameter of window is 45 mm (1.77 in.).

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

Operating Range
mR/hr - .001 (1µR) to 100 CPM - 0 to 350,000 µSv/hr - .01 to 1000 CPS - 0 to 5000
Total/ Timer - 1 to 9,999,000 counts

Accuracy
(Referenced to Cs137) Typically ±15% from factory, ±10% with NIST Source Calibration

Size
140 X 66 X 33 mm (5.5 X 2.7 X 1.3 in.)

Weight
291g (0.64 lbs.)

Energy Sensitivity
3340 CPM/mR/hr referenced to Cs¹³⁷
- 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 end window. Smallest detectable level for I¹²⁵ is .02 µCi at contact.

Built-In Efficiencies
³⁵Sulfur (S35), ⁹⁰Strontium (Sr/y90), ¹³⁷Cesium (Cs137), ³²Phosphorus (P32), ¹⁴Carbon (C14), ¹³¹Iodine (I131), ⁶⁰Cobalt (Co60), and Alpha
Display
Backlit Graphic LCD with Backlight

Count Light
Red LED flashes with each radiation event

Alert Set Range
mR/hr .001 - 100 and CPM 1 - 350,000

Alarm Indicator
Internally mounted beeper. 70db @ 1m. (can be switched off for silent operation)

Outputs
Bluetooth BLE for Observer BLE (RadResponder Ready)
USB for use with Observer USB Software Family

Anti-Saturation
Meter will hold at full scale in fields as high as 100 times the maximum reading.

Power Requirements
USB or Two (2) AA alkaline batteries

Includes
Carrying Case, Xtreme Boot, Stand, Mini-USB Cable, Observer USB Software Download, Certificate of Conformance

Options
Wipe Test Plate, Swipes, NIST Calibration

Limited Warranty
1 year limited

Lanyard, Ruggedized Boot, Detector Cover, USB Cable and Stand Included

Detector Window and AA Battery Door on Back

Optional Wipe Test Plate Shown

Shown with ruggedized protective boot