



FEATURES

- Detects alpha, beta and gamma radiation
- Direct digital readout displayed on backlit lcd using large size characters
- Simple user interface
- Audible beep output and alarms
- Computer Interface



INTRODUCTION

The Ranger offers maximum performance in a lightweight, rugged nuclear radiation detector for surveying at the facility or in the field. The Ranger has been designed for industrial environments, but it still has all of the features you've come to love in the lab. It's small, handheld, digital meter and offers excellent sensitivity to low levels of alpha, beta, gamma, and x-rays.

This model has built in efficiencies for common isotopes to calculate activity in Bq and DPM. It has a backlit digital display, a red 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 for swipes.

SPECIFICATIONS

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.).

Operating Range

mR/hr – .001 (1μR) to 100
CPM – 0 to 350,000
CPS – 0 to 5000
Total Counts- 1 to 9,999,000 counts

Energy Sensitivity

Detects Alpha down to 2 MeV and 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).

Accuracy

Reference to Cs137
Typically ±15% from factory, ±10% with NIST Source Calibration

Selectable Alert Set Range

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

Anti-Saturation

Meter will hold at OVER RANGE in fields as high as 100 times the maximum reading.

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.

Display

Graphics display with backlight

Count Light

Red LED flashes with each radiation event

Audio Indicator

Internally mounted beeper (can be switched off for silent operation)

Power Requirements

USB Power or Two (2) AA alkaline batteries (included). Approx. 800 hrs @ background.

Temperature Range

-10° to 50°C (14° to 122°F)

Size

140 X 68 X 33 mm (5.5 X 2.7 X 1.3 in.)

Weight

291g (0.64 lbs.)