

RAM R-330

Portable Gamma Survey Meter

The versatile RAMR-330 is an extremely sensitive and very wide range gamma survey meter designed to measure dose rates from 1 nSv/h to 1 Sv/h (0.1 uR/h to 100 R/h). It is designed for highly stable and accurate measurements of dose rate and integrated dose rate gamma radiation. Two versions of the RAM R-330 meter are available, one for mR/h units and the other for μ Sv/h units.

Functions

- Automatic internal monitor and detector test
- Automatic switching between external and internal detectors
- Dose rate and accumulated dose (mR and μ Sv)
- Detector failure, overflow and low battery alarms
- User selectable threshold levels
- Piezo-electric audio element indicates count rate, failure and exceeded thresholds.
- Indicators in case of reading over thresholds alarm value
- Wide range of measurement - up to 100 Sv/h
- Dead time correction



FEATURES

- IP-67 rated
- One hand operation
- Backlight
- Automatic internal diagnostics
- Portable, lightweight and compact
- Large, easy to read, 7 segment, 4 digit LCD display panel
- Ergonomically designed to function using only 4 push-buttons
- Fast time responses while keeping the reading fluctuations minimal.
- Low current consumption, more than 100 hours of continuous operation with a single 9V battery.
- Passed sub-pressures, dust, shock, vibration, drop and immersion tests. Meets MIL-STD 810, MIL-STD 461, ICRP60, ICRU39 and CEI 846 standards.
- CE certified.

Technical Data

The firmware of the instrument translates the counts from the external detector into units of dose rate according to sensitivity measured against a ^{137}Cs source.

Detectors	External: Scintillator, diameter 3", height 3", density 1.032 g/cm ³ Internal: GM Tubes ZP1201 and ZP-1313
Display range	0.01 nSv/h to 1 Sv/h (0.01 uR/h to 99.9 R/h)
Measuring range	1 nSv/h to 1 Sv/h (0.1 uR/h to 100 R/h)
Sensitivity (^{137}Cs)	From 2350 cpm/uR/h
Accuracy	±10% of reading within the measured range
Energy range	23 KeV to 7 MeV
Energy dependence	± 30% related to ^{137}Cs
Angular dependence	Less than ± 40% for ± 45° of preferred direction.
Thresholds	User selectable
Display	LCD 7 segments including backlight showing :
Audio	Internally mounted piezo-electric element
Measuring Units	mR/h and mR or μSv/h and nSv
Controls	ON/OFF push-button MODE push-button SPEAKER push-button STORE push-button
Power source	1 standard 9 volt battery supplying > 100 hours of operation. Automatic battery check under full load
Temperature range	Operation: -10°C to + 50°C (15°F – 122°F) Storage - 20°C to + 60°C (-5°F to 140°F)
Humidity range	40% to 95% RH (non-condensing)
Casing	Metal anodized Aluminum
Dimensions	Meter: 134 mm (L) x 80 mm (B) x 35 mm (W) Detector: 370 mm (L) x 100 mm
Weight	2.30 Kg's

Perfection
In
Detection

Rotem Model# BAK-2073 (μSv/h)
BAK-2074 (mR/h)

ROTEM INDUSTRIES reserves the right to change specifications without advance notice

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