Digital Handheld Dose Rate Meter



The RDS-30 is a Digital Handheld Dose Rate Meter designed for a wide range of applications involving a possibility for abnormal radiation levels.

Features:

- Measurement and display in µSv/hr or mRem/hr
- Dose measurement indication
- High battery life time (>1 year)
- Compliant to IEC 60846
- Dose rate follow-up by audible signal with frequency proportional to dose rate
- Visual and audible alarm: user settable for dose and dose rate over the whole measurement range
- Histogram capability of up to 480 dose rate values with user settable logging interval
- Backlit display with six large digits
- Built-in self-diagnostics complies with ANSI N42.33 and IEC 60846 standards

Radiological Characteristics:

- Radiation detected: Gamma and X-ray from 48 keV to 3 MeV
- Detector: energy compensated GM tube compliant to $H^*(10)$
- Dose rate measurement range: from 0.01 μSv/hr to 100 mSv/hr or from 1 μrem/hr to 10 rem/hr
- Dose rate linearity: ± 10% ±1 digit within the range of 0.1 μSv/h to 100 mSv/h or 10 μrem/h to 10 rem/h
- Calibration accuracy: ±5 % of the reading in 137Cs exposure, at 3 mSv/h, ± 20° C (68°F)
- Energy response: ± 30% over the range of 48 keV 3 MeV
- Angular response: $\pm 25\%$ within $\pm 45\%$ from the calibration direction at 48 keV
- Dose measurement range: from 0.01 µSv to 1 Sv or from 1 µrem to 100 rem
- Dose Rate: Follow-up by audible signal with frequency proportional to dose rate
- Dose Measurement: (µSv / mRem)
- Built-in Infrared port (IrDA)

Mechanical Characteristics:

- rugged plastic, easy to decontaminate
- Dimensions: 3" W x 5" L x 1.25" D
- Weight: .5 lb with batteries

Electrical Characteristics:

- Power supply: 2 alkaline batteries IEC LR6/AA size (recommended)
- Battery Life Time: at least 2000 hours at normal background with alkaline cells (more than 1 year under normal operation)
- two-step alarm for low battery voltage
- Electromagnetic Compatibility: CE compliant

Environmental Characteristics:

- Temperature range: -13°... 131°F operational -40°... 158°F storage
- Protection level: IP67 (temporary immersion/floating device)

RDS-30/MR Digital Handheld Dose Rate Meter (mRem/h)