

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 $\mu\text{Sv/hr}$ 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 $\mu\text{Sv/hr}$ to 100 mSv/hr or from 1 $\mu\text{rem/hr}$ to 10 rem/hr
- Dose rate linearity: $\pm 10\% \pm 1$ digit within the range of 0.1 $\mu\text{Sv/h}$ to 100 mSv/h or 10 $\mu\text{rem/h}$ to 10 rem/h
- Calibration accuracy: $\pm 5\%$ of the reading in ^{137}Cs exposure, at 3 mSv/h , $\pm 20^\circ\text{C}$ (68°F)
- Energy response: $\pm 30\%$ 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:

- Case : 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)
- Battery Alarm: two-step alarm for low battery voltage
- Electromagnetic Compatibility: CE compliant

Environmental Characteristics:

- Temperature range: $-13^\circ\text{... }131^\circ\text{F}$ operational
 $-40^\circ\text{... }158^\circ\text{F}$ storage
- Protection level: IP67 (temporary immersion/floating device)

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

RDS-30/MSV Digital Handheld Dose Rate Meter (mSv/h)