



RDS-30



Radiation Survey Meter

- gamma ambient equivalent dose rate measurement $H^*(10)$
- measurement range from 0.01 $\mu\text{Sv/h}$ to 100 mSv/h or from 1 $\mu\text{rem/h}$ to 10 rem/h

- small size and large display
- measurement in $\mu\text{Sv/h}$ or mrem/h
- gamma dose indication
- visual and audible signalling
- high battery life time (> 1 year)
- compliant to IEC 60846

The RDS-30 Radiation Survey Meter is a versatile gamma radiation detector which has been designed for a wide range of applications involving a possibility for abnormal radiation levels.

Compact, lightweight, waterproof, it's performance and it's user friendly interface make the RDS-30 perfectly suited to radiation survey in field conditions as in nuclear industry or for protection against radiological hazards.

Physical characteristics

- **detected radiation:**
 - gamma and X-ray from 48 keV to 1.3 MeV
- **detector:**
 - energy compensated GM tube compliant to H*(10)
- **dose rate measurement range:**
 - from 0.01 $\mu\text{Sv/h}$ to 100 mSv/h or from 1 $\mu\text{rem/h}$ to 10 rem/h
- **dose rate linearity:**
 - $\pm 10\%$ or ± 1 digit within the range 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, $+20^\circ\text{C}$ (68°F)
- **energy response:**
 - $\pm 30\%$ over the range of 48 keV - 1.3 MeV
- **angular response:**
 - $\pm 15\%$ 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

Functional characteristics

- 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
- dose measurement
- data logging capability of up to 480 dose rate values with user settable logging interval
- backlit display with six large digits
- display in either $\mu\text{Sv/h}$ or in mrem/h
- built-in self diagnostics

Electrical characteristics

- power supply: 2 alkaline batteries IEC LR6/AA size (recommended) or rechargeable NiMH batteries
- battery life time: 2000 hours with alkaline batteries (more than 1 year under normal operation)
- alarm: 2 threshold levels for «low battery»
- electromagnetic compatibility: CE compliant

Accessories

- software for parameter setting, histogram readings and calibration
- wrist strap
- neck strap

Mechanical characteristics

- rugged plastic case, easily decontaminable
- dimensions: 78 x 126 x 32 mm
- **weight:**
 - 170 g without battery
 - 220 g with battery

Environmental characteristics

- **temperature range :**
 - -25°C ... $+55^\circ\text{C}$ operational (-13°F to 131°F)
 - -40°C ... $+70^\circ\text{C}$ storage (-40°F to 158°F)
- protection level IP67 (temporary immersion / floating device)

External interfaces

- built-in infra-red port (IrDA)