

Multi-Purpose Survey Meter



The RDS-31 Multi-purpose Survey Meter is a small handheld, battery operated survey instrument using an energy compensated GM-tube as primary detector. Due to its versatile functions and durability it is suited for a wide range of applications in civil defense, industrial and laboratory use etc.

Features:

- H*(10) ambient dose, equivalent dose, and dose rate
- Wide range of external alpha, beta, gamma and neutron probes for direct connection with the RDS-31 meter
- Large graphic screen, configurable backlight with automatic illumination control
- High impact durable case construction, IP-67 immersion proof
- Internal memory to store measurements
- Flexible histogram functions
- Firmware of instrument upgradable through cable link
- Complies with ANSI N42.33 and IEC 60846 standards

Radiological Characteristics:

- Radiation Detected: Gamma and X-rays, 48 keV...3 MeV. Alpha, beta and neutron radiation with external probes
- Detectors: One energy-compensated GM tube, energy response according to ambient dose equivalent H*(10)
- Dose Rate Measurement Range: 0.01 µSv/h...0.1 Sv/h or 1 µrem/h...10 rem/h
- Dose Measurement Range: 0.01 µSv...10 Sv or 1 µrem...1000 rem
- Resolution: 3 significant digits or 0.01 µSv/h on dose rate and 0.01 µSv on dose (1 µrem/h on dose rate and 1 µrem on dose)
- Calibration Accuracy: ± 5%, Cs-137, calibration direction and in the calibration field, temperature +20° C (68° F)
- Dose Rate Linearity: ± 15% ± least significant number 0.05 µSv/h...0.1 Sv/h (5 µrem/h to 10 rem/h)
- Variation of the Response Due to Photon Radiation Energy and Angle of Incidence: (R E,A) 71% < RE,A < 160% (48 keV...3 MeV); ± 60°
- Configurable Units: Sv(/h), R(/h), with external detector Gy(/h), cps, cpm, dpm, Bq and Bq/cm2
- Flexible Histogram Functions: (dose rate, dose, diagnostic logging depending on configuration, time stamp, optional location control for mapping and repeating room measurement analysis)
- Additional Histogram Analyzing Capabilities on CSW-31™ Software
- Configurable audible, visual and vibration alarm
- RF-communication and USB-communication with Suitable Adapter
- Graphic Display: 128x64 pixel with special symbols for alarm, external probe, battery, RF-communication, vibration alarm, chirp, and mute

Mechanical Characteristics:

- Case : rugged plastic, easy to decontaminate
- Dimensions: 4" W x 3" L x 1.25" D
- Weight: 0.5 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

Environmental Characteristics:

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

RDS-31R Multi-Purpose Survey Meter (Rem/h)

RDS-31S Multi-Purpose Survey Meter (Sv/h)