RDS-Med™

Radiation Survey Meter

The RDS-Med radiation survey meter offers precise monitoring of ionizing radiation, ensuring the safety of medical professionals and patients.

Versatile and user-friendly, the RDS-Med survey meter is ideal for healthcare applications such as radioisotope production, radiopharmacies, nuclear medicine, diagnostic imaging, hot labs, and waste disposal. Designed to meet stringent health and safety standards, the RDS-Med survey meter is crucial for medical environments using radiation in diagnosis and treatment.

A clear display and straightforward user interface enable quick assessment of radiation level. Ergonomic, lightweight design, and an included battery cover and belt clip make the meter workflow-friendly.

HIGH SENSITIVITY FOR CRITICAL PATIENT & STAFF SAFETY

The RDS-Med meter can detect a wide range of ionizing radiation, including gamma and X-rays, with the ability to connect to external alpha, beta, and neutron probes. Mirion GMP-12/GMP-25 probes and the full CSP™ probe range can be connected with an adequate cable.

With both warning and alarm levels, users can know quickly if contamination or dose rates exceed screening levels for decontamination or patient monitoring.

FEATURES

- H*(10) dose equivalent rate according to latest standards
- External alpha, beta, gamma and neutron probes for direct connection
- Displays multiple radiation levels and types simultaneously
- 4-way navigation keys, practical shortcuts
- Intuitive user interface
- Large graphic screen, configurable backlight
- High impact durable case construction, IP67 immersion proof
- Configuration and firmware upgrade done through the CSW-Med™ Software with a USB cable-link
- Complies with IEC 60846-1 standards, designed to meet ANSI 42.17A standard

PROBE SELECTION

- Wide selection of dose rate and contamination probes
- Quick to connect
- Compatible with full range of CSP probes
- Compatible with GMP-series GMP-25, GMP-25i, GMP-12SD/ GSD/UW probes
- Dual display to show both external and internal detector readings simultaneously

RDS-Med + SN-D-2™
Neutron Dose Probe

RDS-Med + GMP-25™
Alpha/Beta/Gamma Frisker Probe

RDS-Med + SAB-100™
Alpha/Beta Frisker Probe

ACCESSORIES

- CSW-Med Configuration Software with USB cable-link
- Power Cradle to allow AC power option and provide multiple mounting options
- RDS-Med holder that is fixed on CSP probe body with dedicated bracket to form a one hand operating system
- Alarm box for stationary monitoring

RDS-Med™
Radiation Monitoring Alarm Box

RADIOLOGICAL CHARACTERISTICS

- Radiation detected gamma and X-rays. Alpha, beta, and neutron radiation with external probes
- Operational quantity: ambient dose equivalent H(10)
- Geiger-Mueller (GM) radiation detector with the possibility of measuring natural background levels

DETECTOR	
RDS-Med	One energy-compensated GM tube
IEC ENERGY RANGE	
RDS-Med	48 keV to 1.8 MeV
DOSE RATE MEASUREMENT RANGE	
RDS-Med	0.05 µSv/h to 100 mSv/h (5 µrem/h to 10 rem/h)
IEC DOSE RATE MEASUREMENT RANGE	
RDS-Med	0.3 µSv/h to 100 mSv/h (0.03 mrem/h to 10 rem/h)
DOSE MEASUREMENT RANGE	
RDS-Med	0.1 µSv to 10 Sv (0.01 mrem to 1000 rem)
DOSE RATE LINEARITY	
RDS-Med	-15% to +22% 0.3 µSv/h to 0.1 Sv/h (0.03 mrem/h to 10 rem/h)

RDS-MED RADIATION SURVEY METER

FUNCTIONAL CHARACTERISTICS

- Four navigation keys and a select key to operate the instrument
- Three keypad direct functions: Backlight, Mute and Dose and one user-defined shortcut
- Direct access to dose screen from keypad: level of dose in percentage of alarm level
- Configurable units: Sv(/h), rem(/h), with external detectors cps, cpm, dpm, Bq and Bq/cm^2
- Audible, visual and vibration alarm with configurable levels
- Real-Time Clock (RTC) function with 3 hrs battery back up
- Graphical LCD display; special symbols for alarm, external probe, battery, communication, vibration alarm, chirp and mute
- Dual display in probe mode; measurements from internal and external detector simultaneously
- Scaler/time with gross or net measurement (background deduction) for improved statistics:


ELECTRICAL CHARACTERISTICS

- Power supply: Batteries 2 x AA/LR6, alkaline or NiMH
- Operation time with fresh Alkaline batteries more than 2 months 8 h use/24 h (600 h in background radiation, Bluetooth® Low Energy disabled, 1display backlight off, LED off)
- Operation time with fully charged NiMH batteries more than 1.5 months 8 h use/24 h with 2900 mAh capacity (in background radiation, Bluetooth Low Energy disabled, display backlight off, LED off)
- Contacts for external power and charging of NiMH battery
- Alarm audio level 86 dBA at 30 cm

ENVIRONMENTAL CHARACTERISTICS

- Operating temperature: -25 °C to +60 °C (-13 °F to 140 °F)
- Storage temperature -40 °C to +70 °C (-40 °F to 158 °F)
- Relative humidity 10% to 95% at +35 °C (95 °F)
- RF-immunity: Fulfills following standards: IEC 61000-4-2 (2008), IEC 61000-4-3 (2006 +A1:2007 + A2:2010), IEC 61000-4-6 (2013), IEC 61000-4-8 (2009)
- RF Emissions: Fulfills following standards: EN 55032B
- FCC approval 2AHI8-RDS-32
- IC Approval 26167-RDS32
- IEC 60846-1

MECHANICAL CHARACTERISTICS

- Case: high impact durable glass fiber reinforced polymer; drop tested from 1 m height on concrete floor on each side
- Ergonomic design, rubber grip around the case
- Binder-702 series connector
- Enclosure class IP67 (IEC 60529), including battery compartment
- Dimensions: 116 x 72 x 32 mm (4.57 x 2.83 x 1.26 in)
- Weight without batteries/with batteries: 160 g / 210 g (0.35 lb/0.46 lb)
- Wrist strap, battery covers with and without a belt clip
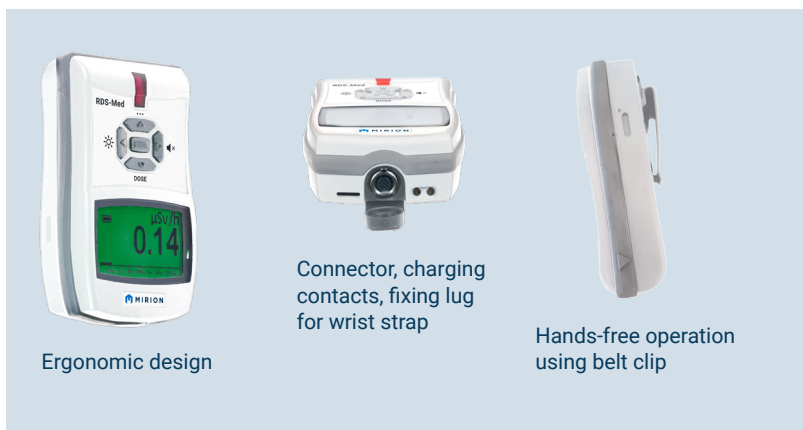
Ergonomic design

Connector, charging contacts, fixing lug for wrist strap

Hands-free operation using belt clip

COMMUNICATION PROTOCOLS

- USB communication with suitable adapter
- Bluetooth Low Energy 4.2 protocol, Class 2 communication

ORDERING INFORMATION

1233-343	RDS-Med S
1233-344	RDS-Med R
1233-345	CSW-Med
1233-333	USB cable-link
NOM006819	RDS-32(-Med)/CSP probe bracket with holder for one hand operation
1233-300	Alarm box without RDS-Med meter; Base and connector for both signaling sets included

Available Through Mirion Medical Companies: Capintec & Sun Nuclear

Health Physics for Healthcare solutions enable radiation monitoring in healthcare applications — a critical aspect of safety and compliance for all facilities using radiation in patient diagnosis and care.