MIRION TECHNOLOGIES

RDS-32™

Radiation Survey Meters

The RDS-32 Survey Meters are small handheld, battery operated radiation survey instruments. Due to its versatile functions and durability it is suited for a wide range of applications in civil defense, industrial use, nuclear power plants, laboratories, etc.

The meter features excellent ergonomics; lightweight and easy handling, with visual, audible, and vibration functions. Each meter includes an additional battery cover with belt clip to make it wearable, freeing the user's hands to focus on their primary job.

With both Warning and Alarm levels users can know when they are approaching their limit without constantly monitoring their device and can act accordingly.

To extend the capabilities of the instrument, a wide variety of external Smart probes are available to meet user needs with any RDS-32 version. GMP-12/GMP-25 probes, and the full CSP™ probe range can be connected to all RDS-32 versions with an adequate cable. The selection includes probes for gamma and neutron dose rate and alpha and/or beta contamination with various detection areas and scaler counting.

FEATURES

- H*(10) dose equivalent rate according to latest standards
- External alpha, beta, gamma and neutron probes for direct connection
- RDS-32WR meter for wider dose rate range
- iTx versions for wireless monitoring
- 4-way navigation keys, practical shortcuts
- Intuitive user interface
- Large graphic screen, configurable backlight
- Automatic display rotation with tilt sensor
- High impact durable case construction, IP67 immersion proof
- Internal memory allows versatile histogram functions and the ability to manually store measurements
- Configuration and firmware upgrade done through the CSW-32™ Software with a USB cable-link
- Complies with IEC 60846 standards, designed to meet ANSI 42.17A, 42.17C standards

RDS-32 RADIATION SURVEY METERS

RDS-32 VERSIONS

STANDARD RANGE

RDS-32 **RDS-32ITx**

- ✓ GM tube
- ✓ Dose rate up to 100 mSv/h (10 rem/h)
- ✓ iTx version with internal radio

WIDE RANGE

RDS-32WR **RDS-32ITxWR**

- ✓ GM tube + Si diode
- ✓ Dose rate up to 10 Sv/h (1000 rem/h)
- ✓ iTx version with internal radio

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

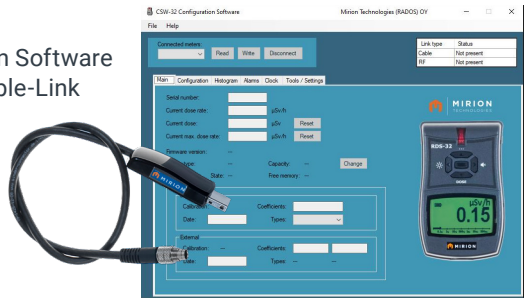
RDS-32 + GMP-25™
Alpha/Beta/Gamma Probe

RDS-32iTx + SN-D-2™
Neutron Dose Probe

ACCESSORIES

- CSW-32 Configuration Software with USB cable-link
- Telescopic pole
- Power Cradle to allow AC power option and provide multiple mounting options
- RDS-32 Holder that is fixed on CSP probe body with dedicated bracket to form a one hand operating system
- Alarm box for stationary monitoring
- Wireless telemetry capability for iTx versions

CSW-32
Configuration Software
with USB Cable-Link



RDS-32 + SAB-100™
Alpha/Beta Probe

RDS-32 + Tele-STTC™2
Wide Range Telescopic Probe

*Change from GM tube to Si diode at 30 mSv/h in increasing field and back from Si diode to GM tube at 10 mSv/h in decreasing field

RADIOLOGICAL CHARACTERISTICS

- Radiation detected gamma and X-rays. Alpha, beta, and neutron radiation with external probes
- Operational quantity: ambient dose equivalent H*(10)

DETECTOR	
RDS-32 RDS-32iTx	one energy-compensated GM tube
RDS-32WR RDS-32iTxWR	energy-compensated GM tube and energy-compensated Si diode*
IEC ENERGY RANGE	
RDS-32 RDS-32iTx	48 keV to 1.8 MeV
RDS-32WR RDS-32iTxWR	55 keV GM tube / 65 keV* Si diode to 1.8 MeV
HIGH ENERGY RESPONSE TO Cs-137	
4.4 MeV	GM tube 220% Si diode 120%
6.7 MeV	GM tube 260% Si diode 200%
DOSE RATE MEASUREMENT RANGE	
RDS-32 RDS-32iTx	0.05 µSv/h to 100 mSv/h (5 µrem/h to 10 rem/h)
RDS-32WR RDS-32iTxWR	0.05 µSv/h to 10 Sv/h (5 µrem/h to 1000 rem/h)
IEC DOSE RATE MEASUREMENT RANGE	
RDS-32 RDS-32iTx	0.3 µSv/h to 100 mSv/h (0.03 mrem/h to 10 rem/h)
RDS-32WR RDS-32iTxWR	0.3 µSv/h to 10 Sv/h (0.03 mrem/h to 1000 rem/h)
DOSE MEASUREMENT RANGE	
RDS-32 RDS-32iTx	0.1 µSv to 10 Sv (0.01 mrem to 1000 rem)
RDS-32WR RDS-32iTxWR	0.1 µSv to 10 Sv (0.01 mrem to 1000 rem)
DOSE RATE LINEARITY	
RDS-32 RDS-32iTx	-15% to +22% 0.3 µSv/h to 0.1 Sv/h (0.03 mrem/h to 10 rem/h)
RDS-32WR RDS-32iTxWR	-15% to +22% 0.3 µSv/h to 10 Sv/h (0.03 mrem/h to 1000 rem/h)

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/time to dose screen from keypad: level of dose in percentage of alarm level and time before reaching it
- 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
- Versatile histogram functions: internal and external dose rate, dose, diagnostic logging depending on configuration, time stamp, optional location control for mapping and repeating area control analysis
- Histogram data stored in XML format; allowing additional histogram analyzing capabilities when downloaded from CSW-32 software to a spreadsheet
- 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
- Automatic display rotation via tilt sensor (behavior setup through CSW-32 software)
- Dual display in probe mode; measurements from internal and external detector simultaneously:

Display with Gamma Probe

Display with Alpha/Beta Probe

- Scaler/time with gross or net measurement (background deduction) for improved statistics:

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
  - RDS-32: 160 g / 210 g (0.35 lb / 0.46 lb)
  - RDS-32iTx: 170 g / 220 g (0.37 lb / 0.49 lb)
  - RDS-32WR: 195 g / 245 g (0.43 lb / 0.54 lb)
  - RDS-32iTxWR: 205 g / 255 g (0.45 lb / 0.56 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

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, radios disabled, display 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, radios 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

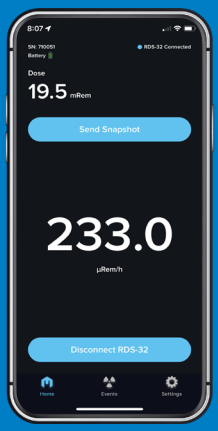
- Operating temperature
  - RDS-32/RDS-32iTx: -25 °C to +60 °C (-13 °F to 140 °F)
  - RDS-32WR/RDS-32iTxWR: -25 °C to +50 °C (-13 °F to 122 °F)
- Storage temperature -40 °C to +70 °C (-40 °F to 158 °F)
- Relative humidity 10% to 95% at +35 °C (95 °F)
- RF-immunity: Fulfills following standards: IEC 61000-4-2 (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 (all models), 60846-2 (WR models) compliant

COMMUNICATION PROTOCOLS

- USB communication with suitable adapter
- iTx versions: WRM radio 900 MHz or 2.4 GHz
- Maximum possible emitting Tx power:
  - 298 mW at 900 MHz
  - 86 mW at 2.4 GHz
- Bluetooth® Low Energy 4.2 protocol, Class 2 communication

ORDER CODES

1233-321	RDS-32 Survey Meter (Sv)
1233-322	RDS-32 Survey Meter (rem)
1233-323	RDS-32WR Survey Meter (Sv)
1233-324	RDS-32WR Survey Meter (rem)
1233-325	RDS-32iTx Survey Meter (2.4 GHz, Sv)
1233-326	RDS-32iTx Survey Meter (900 MHz, rem)
1233-327	RDS-32iTxWR Survey Meter (2.4 GHz, Sv)
1233-328	RDS-32iTxWR Survey Meter (900 MHz, rem)
1233-331	CSW-32 Configuration and calibration software with USB cable-link
1233-333	USB cable-link
NOM006819	RDS-32/CSP probe bracket with holder for one hand operation



Connect your RDS-32™ meter with Bluetooth Low Energy to SpirVIEW Mobile™ Supervisory Software and the RadResponder Network with our app via Bluetooth technology.

RDS-32

Download on the App Store

GET IT ON Google Play

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CE