



RDS-80

Surface Contamination Meter



Nuclear
Power



Homeland
Security
& Defense



Industrial and
Manufacturing



Healthcare



Labs and
Education

OVERVIEW

The RDS-80 Surface Contamination Meter is a versatile contamination detector which has been designed for a wide range of applications in different fields of radiation protection in nuclear industry, rescue and other operations, involving a possibility for abnormal contamination levels.

The Digital, Hand Held Pulse Rate Meter is suitable for personnel who need to locate and detect contaminated surfaces/objects during their work.

The functions comprise contamination measurements with alarm functions and automatic conversion to surface activity value and additionally surface contamination measurement with a possibility to store the histogram events into the meter's internal memory.

The use of configuration software (RDS-CSW) is required for downloading the data into a PC via IrDA port.

www.mirion.com

KEY FEATURES

- Wide measurement range: up to 100 000 cps or 1 000 000 Bq/cm²
- Standard surface contamination measurements in cps or Bq/cm²
- Contamination measurements with histogram function
- Visual and audible alarms
- Handy and easy- to- use design
- Software for parameter setting, histogram readings and nuclide calibration complies with IEC 60325 standard

RADIOLOGICAL CHARACTERISTICS

- Radiation detected: alpha >2 MeV, betaEmax >100 keV, gamma and x-rays from 5 keV to 3 MeV
- Detector: end window GM tube, 1,5-2 mg/cm²
- MICA window active surface area 15,2 cm²
- Measurement range: surface contamination 1 to 100 000 cps or 0.01 to 1 000 000 Bq/cm²
- Alarm levels: freely adjustable alarm levels for contamination level
- Cps linearity: ±15% ±1 digit over the range. The Bq/cm² display is calculated from cps values using isotope dependent coefficients

FUNCTIONAL CHARACTERISTICS

- Display in either cps or Bq/cm²
- Surface activity (Bq/cm²) display configurable for different isotopes
- Cps rate follow-up by audible signal with frequency proportional to activity
- Visual and audible alarm: user settable for surface activity
- Histogram capability of up to 480 points with user settable logging interval
- Backlit display with six large digits
- Built-in self-diagnostics function
- Gamma background reduction for Bq/cm² measurements
- Built-in infra-red port (IrDA)

MECHANICAL CHARACTERISTICS

- Case: rugged plastic case
- GM tube Ø 4.4 cm (1.74")
- Dimensions: 78 x 126 x 57 mm
- Weight:
 - 280 g without batteries
 - 330 g 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:
 - 25...+55°C operational (-13... 131°F)
 - 40...+70°C storage (-40... 158°F)

ACCESSORIES

- RDS-CSW software for parameter setting and histogram readings (can be downloaded free of charge at www.mirion.com)
- RDS-CSW Configuration SW full version with calibration key (item no. 1233-246)
- Wrist strap
- Neck strap

> CHINA - SHANGHAI

T: +86 21 6180 6920 | E: info-cn@mirion.com

> FINLAND - TURKU

T: +358 2 4684 600 | E: info-fi@mirion.com

> FRANCE - LAMANON

T: +33 (0) 4 90 59 59 59 | E: info-fr@mirion.com

> GERMANY - HAMBURG

T: +49 40 85193 0 | E: info-de@mirion.com

> USA - SMYRNA, GEORGIA

T: +1 770 432 2744 | E: info-us@mirion.com

Copyright (c) 2014 Mirion Technologies, Inc. or its affiliates. All rights reserved. Mirion, the Mirion logo, and other trade names of Mirion products listed herein are registered trademarks or trademarks of Mirion Technologies, Inc. or its affiliates in the United States and other countries. Third party trademarks mentioned are the property of their respective owners.