RDS 80

Surface Contamination Meter

RDS-80
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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 potential for abnormal contamination levels.

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

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

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

FEATURES

- Wide measurement range:
  up to 100 000 CPS
  or 100,000 Bq/cm^2
- Standard surface contamination measurements in CPS or Bq/cm^2
- Contamination measurements with histogram function
- Visual and audible alarms
- Ergonomic and user-friendly design
- Software for parameter setting, histogram readings and nuclide calibration

RDS80
TECHNICAL SPECIFICATIONS

Radiological Characteristics

- Radiation detected: alpha > 2 MeV, beta > 100 keV, gamma and x-rays from 5 keV to 1.3 MeV
- Detector: end window GM tube, 1,5-2 mg/c2 MICA window
- 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
- CPM linearity: ± 15 ± 1% DIGIT over the measurement range. the DPM and CPM display is calculated from CPM/DMP values by multiplying with Isotope coefficient

Functional Characteristics

- Display in either CPS Bq/cm^2
- Alarm levels: freely adjustable alarm levels for contamination level
- Surface activity (DPM) display configurable for different nuclides
- Activity 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
- Built-in Infra-red port

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 step alarm for «low battery»
- Electromagnetic compatibility: CE compliant

Mechanical Characteristics

- Rugged plastic case
- Dimensions: 3.07 x 4.9 x 2.24 N (78 x 126 x 57 mm)
- Weight: 9.87 oz. (280 g) without batteries, 11.64 oz. (330 g) with batteries

Environmental Characteristics

- Temperature:
- 13°F to 131°F operational (–25°C to +55°C)
- 40°F to 158°F storage (–40°C to +70°C)
- Protection level IP67 (temporary immersion / floating device)

Accessories

- CSW software for parameter setting and histogram readings
- CSW-Configuration SW full version with calibration key (item no. 1233-246)
- Wrist strap
- Neck strap

Detector under protective grid

IrDA link