

RDS 40WE

Wide Energy Survey Meter



The RDS-40WE is a Digital Handheld Dose Rate Meter designed for use by personnel who may be exposed to gamma and/or X-ray radiation in their work. RDS-40WE provides either sequential or fixed dose rate alarming system (values are programmable with the CSW configuration software via IrDA link) and the ability to store dose rate events into the histogram memory of the meter. The easy to use RDS-CSW software is required for downloading the data into a PC via IrDA port.

The compact and durable RDS-40WE is a microprocessor controlled instrument that employs a single push button user interface. The menu structure is very straightforward and easy to understand with messages and information displayed on the digital LCD meter face. The six-digit display also shows the dose rate and numerous other essential notifications. Different alarm situations are indicated by a combination of audio-visual effects on the LCD and a buzzer (dose rate, dose, low battery, defect, dose rate overflow).

FEATURES

- Wide Energy range 16.3 keV - 3 MeV
- measurement according to H*(10)
- dose measurement indication
- high battery life time (>1 year)
- *compliant to IEC 60846
- dose rate follow-up by audible signal with frequency
- proportional to dose rate
- visual and audible alarm: user selectable for dose and dose rate over the whole measurement range
- histogram capability of up to 480 dose rate values with user selectable logging interval
- backlit display with six large digits
- display in either $\mu\text{Sv/h}$ or in mrem/h
- built-in self diagnostics
- enclosure class IP67

* see *Radiological Characteristics*

TECHNICAL SPECIFICATIONS:

Radiological Characteristics	<ul style="list-style-type: none">radiation detected: gamma and x-rays, 16.3 keV ($\pm 30^\circ$) 24keV... 3 MeV$\pm 45^\circ$detector: one energy-compensated GM tube. Energy response according to ambient dose equivalent H*(10)measurement range: effective dose rate 0.1 μSv/h – 50 mSv/h or 10 μrem/h – 5 rem/h, dose 0.1 μSv – 1 Sv or 10 μrem – 100 remalarm levels: adjustable alarm levels for dose rate and accumulated dosecalibration accuracy: $\pm 5\%$ of the reading in ^{137}Cs exposure, at 3 mSv/h (300 mrem), +20°C (68°F)dose rate linearity: $\pm 18\%$ in the whole measurement rangeresponse to radiation energy -29% to +67% over the range of 16.3 keV to 3 MeV
Functional Characteristics	<ul style="list-style-type: none">visual and audible alarm: user settable for dose and dose ratehistogram capability of up to 480 points with user settable logging interval 10s ... 14 400sbacklit display with six large digitsbuilt-in self diagnosticsIrDA link to PC
Electrical Characteristics	<ul style="list-style-type: none">power supply: 2 alkaline batteries IEC LR6/AA size (recommended)battery life time: at least 1000 hours at normal background with alkaline cellsbattery alarm: two-step alarm for low battery voltage
Mechanical Characteristics	<ul style="list-style-type: none">rugged plastic caseresistant against RF interferencesenclosure class: IP67dimensions: 78 x 126 x 57 mmweight: 294 g without batteries, 342 g with batteries
Environmental Characteristics	Temperature range: <ul style="list-style-type: none">-25...+55°C operational (-13°F to 131°F)-40...+70°C storage (-40... 158°F)
Accessories	<ul style="list-style-type: none">CSW configuration softwarewrist strapneck strap

