

# Product Datasheet

# Radhound X/E

## Hand-held Digital Radiation Meter

An advanced hand-held general purpose radiation monitor, suitable for a wide range of probes.

This feature-packed instrument boasts some unique features, such as the ability to switch between probes via the menu allowing, for example, a dose rate probe and a contamination probe to be configured for use with one instrument.



### Application Areas

- Health physics: for contamination monitoring on surfaces, clothing and objects etc.
- Nuclear medicine departments: suitable for  $^{125}\text{I}$ ,  $^{99\text{m}}\text{Tc}$ , etc.
- Radiological survey work and lab use.
- Emergency planning, response and clean up.
- Research applications.

### Features

- Clear digital LCD display with backlight.
- GM and scintillation detectors for contamination and dose rate measurements.
- Fully adjustable alarm levels.
- Multiple probe library/configuration.
- Scaler timer function.
- Peak mode.
- Over range.

# Specifications

## Scintillation Detector Options

A number of scintillation probes are available for sensitive contamination measurements of Alpha and Beta/Gamma radiation.

SS404 Al: Low energy gamma scintillation probe.

SS404 Be: Very low energy gamma scintillation probe.

SS440 B: Beta scintillation probe. Active Area 20 cm<sup>2</sup>

SS500: NaI (Tl) 25.4 x 25.4 mm gamma probe.

SS600: A/B/AB: Alpha, beta, alpha/beta dual phosphor. Area 100 cm<sup>2</sup>

SS700: A/B/AB: Alpha, beta, alpha/beta dual phosphor. Area 50 cm<sup>2</sup>

Mechanical	
Dimensions	165 x 115 x 59 mm (excluding handle)
Weight	Typically 1.4 kg
Units (According to connected probe)	CPS, CPM, Sv/hr, $\mu$ Sv/hr, mSv/hr (R/hr, mR/hr, $\mu$ R/hr) Bq/cm <sup>2</sup>
Display	Large backlit LCD 70 mm x 40 mm Automatic backlight movement sensor – when instrument is picked up, the backlight comes on On screen battery status indication
Main Modes of Operation	Count (or dose rate), Integration Mode, Histogram (Count rate graph), Peak Value Menu gives control of system parameters and multiple probe library

  

Radiological Performance	
Range	High voltage adjustable from 300 - 1200 V User defined probe library up to 5 probes with adjustment of HV, gain, threshold, dead time, over range, probe name. Adjustable alarm levels. MHV Connector (other available on request).
Response Time	0.5 seconds Averaging: 5, 10, 15 seconds Integration time up to 24 hrs

## Geiger Müller Detector Options

SS300: Pancake Geiger for alpha, beta, gamma and X-ray radiation.

SS315: End window for alpha, beta, gamma and X-ray radiation.

SS330: Compensated pancake Geiger for ambient gamma radiation H\*(10).

SS335: Compensated end window Geiger for ambient gamma radiation H\*(10).

SS340: Compensated GM probe for H\*(10) measurements.

Power	
Battery	Uses 2 x 1.5 V Alkaline C-Cell (or optional Lithium Ion rechargeable)
Battery Life	Typically >8 hours continuous use

  

Environmental	
Operating Temperature	-10°C to +50°C
Storage Temperature	-25°C to +60°C

  

Compliance	
Standard Compliance	In conformity with EMC directive (2004/108/EC), EN61326-1 EN61000-3-2, EN6100-3-3 Low Voltage Directive (2006/95/EC) Designed to meet IEC 60325-2006 and IEC 60846-2004 Nuclear Instrumentation Standards

\*Dose rate probes are set up to read in  $\mu$ Sv/hr by default.  
For measurements in rem/hr, please specify at point of order.

Specifications are subject to change without notice.  
For the most up-to-date specifications, please visit [www.southernscientific.co.uk](http://www.southernscientific.co.uk)

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