

# Radhound X/I

## Hand-held Radiation Monitor

The Radhound X/I is an advanced hand-held survey meter with an internal dose rate detector.

### 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 detector options.
- Fully adjustable alarm levels.
- Multiple probe library/configuration.
- Scaler timer function.
- Peak mode.
- Over range.



### Scintillation Detector Options

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

SS404 AI: 32 x 2.5 mm low energy gamma scintillation probe.

SS404 Be: 32 x 2.5 mm very low energy gamma scintillation probe.

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

SS500: NaI (TI) 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>

### Geiger Müller Detector Options

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

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

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

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

SS340: Side on window Geiger for ambient gamma radiation H\*(10).

# Specifications

## Mechanical

**Dimensions** 165 x 115 x 59 mm (excluding handle)

**Weight** Typically 1.4 kg

**Units** 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), integrate/Scaler  
Timer, 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

## Power

**Battery** Uses 2 x 1.5 V Alkaline C-Cell (or optional  
Lithium Ion rechargeable)

**Battery Life** Typically >40 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

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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