

# Radiation Monitoring

## Radiation Survey Meter, Monitor 4

General purpose, low cost, analogue meter for detecting Alpha, Beta, Gamma and X-rays in medical, educational and industrial applications.

- ◆ Compact design
- ◆ Dual milliRad (mR) per hour or counts per minute (CPM) analogue scale display with three selectable ranges and separate, user selectable count bleeper
- ◆ Battery powered

Ranges	mR/hour	0 to 0.5, 0 to 5, 0 to 50
	CPM	0 to 500, 0 to 5000, 0 to 50,000
Sensitivity	Alpha	Down to 2.5MeV; detection efficiency typically >80% at 3.6MeV
	Beta	Typically 35% at 50KeV or 75% at 150KeV
	Gamma and X-rays	Down to 10KeV typically through the end window, 40KeV minimum through the case
Detector		Halogen-quenched, uncompensated G-M tube with mica end window 1.5 to 2mg/cm <sup>2</sup> thick
Display		Analogue with dual scale and red LED count light
Audio indicator		User selectable count bleeper
Power		9V battery (IEC 6F22)
Overall L x W x D mm		210 x 70 x 48
Weight	g	246

### Monitor 4 Radiation Survey Meter

As described. With battery.

- RA250-10** Monitor 4  
**BL610-25** 9V battery

## Digital Radiation Monitor, Monitor 200

- ◆ Monitors Alpha, Beta, Gamma and X-rays
- ◆ Accumulated counts or counts per minute (CPM) or mR/hr
- ◆ Halogen-quenched, uncompensated Geiger-Müller tube detector
- ◆ Digital display and audio-visual count bleeper with mute
- ◆ Adjustable audio alert level on mR/hr and counts per minute readings
- ◆ USB output for datalogging or warning devices

Ranges	mR/hour	0.001 to 200 (Cs-137)
	Sv/hr	0.01 to 1000
	CPM	0 to 214,000
	CPS	0 to 3575
	total counts	1 to 9,999,000
Sensitivity	Alpha	Down to 2.5MeV; detection efficiency typically >80% at 3.6MeV
	Beta	Typically 35% at 50KeV or 75% at 150KeV
	Gamma and X-rays	Down to 10KeV typically through the end window, 40KeV minimum through the case
Gamma sensitivity		1000CPM or mR/hour
Display		Digital with red LED count light
Output		Mini USB
Power		2 x 1.5V AA batteries
Overall L x W x D mm		140 x 68 x 33
Weight	g	220

### Monitor 200 Monitor

As described. Supplied with soft carrying case, protective boot, USB output and Observer USB software and batteries.

- RA275-45** Monitor 200  
**RA275-94** Rugged ABS/PC field case, water-resistant to IP65, for RA275-45  
**BL610-15** 1.5V battery (2 required)

## Digital Radiation Monitor, Ranger

Handheld digital meter with excellent sensitivity to low levels of Alpha, Beta, Gamma and X-rays.

- ◆ Accumulated counts, counts per minute, counts per second, timed period counts, mR/hr or Sv/hr selectable, with adjustable alarm
- ◆ Halogen-quenched, uncompensated Geiger-Müller tube detector
- ◆ USB outputs for datalogging or TTL devices

Ranges	mR/hour	0.001 to 100
	Sv/hr	0.01 to 1000
	CPM	0 to 350,000
	CPS	0 to 5000
	total counts	1 to 9,999,000
Timer		1 to 10 x 1 minute
		10 to 60 x 10 minutes
		1 to 24 x 1 hour
Display		Digital with red LED count light
Output		Dual mini Jack drives and USB
Power		2 x 1.5V AA batteries
Overall L x W x D mm		150 x 80 x 30
Weight	g	250

### Sensitivity to common isotopes

Isotope	Energy	Efficiency
Alpha		
241AM	5.5MeV	18%
Beta		
14C	49keV average 156keV max.	5.3%
210Bi	39keV average 1.2MeV max.	32%
90 Sr(Y)	546keV and 2.3MeV	38%
32P	693keV average 1.7MeV max.	33%
Gamma		
	3340CPM or mR/hr referenced to Cs-137	
	Smallest detectable level for I-125 is 0.02 Ci at contact	

### Ranger Monitor

As described. Supplied with soft carrying case, protective boot, USB output and Observer USB software. With battery.

- RA280-50** Ranger  
**BL610-15** 1.5V battery (2 required)  
**BL610-25** 9V battery



RA250-10



RA275



RA280