

The 900 Series

Mini Monitor



The Mini-monitor serves as a portable or bench top style radiation counter available with a variety of different probes to accommodate most of your radiation detection needs.

- *Several Configurations available*
 - *Battery or Line*
 - *Powered*
 - *Very Affordable*

The 900 Series of radiation counters are well established in teaching, research, hospital and industrial laboratories. Their reliability and convenient design are particularly attractive for industrial hygiene applications or where budgets are tight.

These instruments feature a large logarithmically scaled meter with an open scale at the lower end to show background levels of radiation while displaying high levels without switching. A built-in speaker provides audible feedback of the radiation intensity while the user is performing the measurement. An alarm can be set to trip at any level on the scale.

To support its versatile use and portability, the Mini-900's are packaged in a durable, lightweight aluminium case. Operation may be conducted on either battery power or by mains operation using a separate power unit. Included is an internal constant current charger for rechargeable batteries.

Each unit comes with a comprehensive manual containing tables and curves of response to different radiations and other useful information.

Specifications:

Weight: 1.0 kg

Size: 180 (w) x 110 (d) x 165 (h) mm overall

Batteries: 6 type AA cells, alkaline (IEC LR6) or rechargeable (IEC KR15/51)

Battery Life: Approximately 300 hours at 4 hours/day

Paralysis Time: Scale corrected to give true reading

Meter Integration Time: 1 to 4 seconds set to match counting rate

Radiation Detector: Halogen quenched G-M tube

Radiation Detected: Gamma and x-rays only

G-M Tube Supply: 300-700 volts preset for tube type

Overload Protection: No meter "fallback" with intensities at least 100 times full scale reading

Mains Power: 12-18 volts DC from mains unit

Available Configurations

Type R: Monitoring High Level Dose Rates A monitor scaled over the range 0.5 to 5000 $\mu\text{Sv h}^{-1}$ (0.05 to 500 mR/h). The G-M tube is compensated to give a useful response from 45 keV to 1.5 MeV and above. It is not recommended for monitoring X-radiation from apparatus operating below 75 kVp.

Type G: Monitoring for Low Environmental Dose Rates Highly sensitive performance. The monitor is scaled over the range 0.05 to 75 $\mu\text{Sv h}^{-1}$ (0.005 to 7.5 mR/h). The useful energy range is 55 keV to 1.5 MeV and above. This instrument is not suitable for monitoring X-radiation.

Type D: A monitor using a partially compensated G-M tube to obtain an extended low energy response. The instruments is scaled over the range of 0.5 to 1000 $\mu\text{Sv h}^{-1}$ (0.05 to 100 mR/h). The useful energy range is from 30 keV to 1.5 MeV but response is maintained down to at least 17 keV. It is suitable for measuring radiation from X-ray apparatus operating at or above 45 kVp.

Type X: This instrument is scaled 0.5 to 2000 counts per second and uses an end window G-M tube without energy compensation. It is sensitive to radiation down to 10keV and is therefore useful for locating X-ray leakage from a variety of systems including high voltage equipment where X-rays are generated adventitiously. It is not intended for measurement but as a relative check device.