



RADIATION[®]
A • L • E • R • T
QUALITY HANDHELD DETECTORS

MONITOR 4 & 4EC

The MONITOR 4 and MONITOR 4EC are compact, general purpose survey meters capable of detecting alpha, beta, gamma, and x-rays over 3 selectable ranges. A red count light flashes and a beep sounds with each event detected. The Monitor 4EC offers a more accurate linear reading for gamma and x-rays (above 40 keV).

Monitor 4 now available in kit form!

Specifications:

Detector:

Monitor 4: Halogen-quenched uncompensated GM tube with thin mica window 1.5-2.0 mg/cm² thick.

Monitor 4EC: Halogen-quenched GM tube, energy compensated sidewall 2mm tin filter. Thin mica window 1.5-2.0 mg/cm² thick.

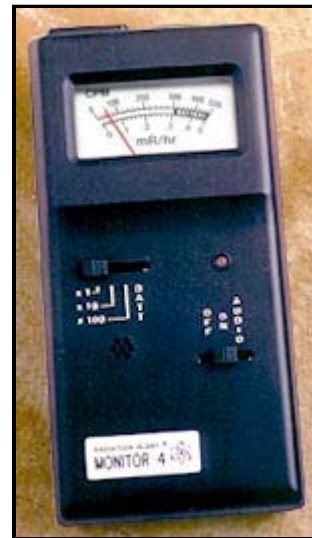
Monitor 4 Energy Sensitivity:

- Detects alpha down to 2.5 MeV; typical detection efficiency at 3.6 MeV is greater than 80%.
- Detects beta at 50 keV with typical 35% detection efficiency.
- Detects beta at 150 keV with 75% typical detection efficiency.
- Detects gamma and x-rays down to 10 keV typical through the window, 40 keV minimum through the sidewall of the detector.
Normal background is approximately 10-20 CPM.

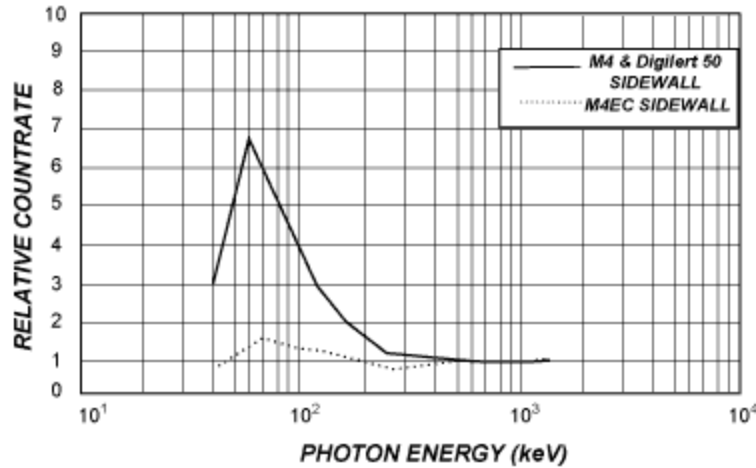
Gamma Sensitivity: 1000 CPM/mR/hr

Monitor 4EC Energy Sensitivity Same as Monitor 4 except:

- The energy response for gamma and x-rays through the detector sidewall is flat within +61% or -26% over the range of 40 keV to 100 keV, and within +35% or -17% over the range of 100 keV to 1.3 MeV (referenced to Cs-137).



ENERGY RESPONSE
(Relative to Cs-137)



Operating Range:

0-.5, 0-5, 0-50 mR/hr and 0-500, 0-5,000, 0-50,000 CPM
or 0-500 μ Sv/hr and 0-50 mR/hr.

Common Specifications:

Accuracy:

\pm 10% of full scale (referenced to Cs-137)

Audio:

Internally mounted beeper (can be switched off for silent operation).

Anti-Saturation:

Meter will hold at full scale in fields as high as 100 times the maximum reading.

Power Requirements:

One 9-volt alkaline battery. Battery life is up to 2,000 hours at normal background radiation levels.

Temperature Range:

-20° C to 55° C (-4° F to 131° F).

Size:

145 x 72 x 38 mm (5.7 x 2.8 x 1.5 in.)

Weight:

M4: 178 grams (6.3 oz.) without battery

4EC: 198.1 grams (7 oz.) without battery

Range Switch:

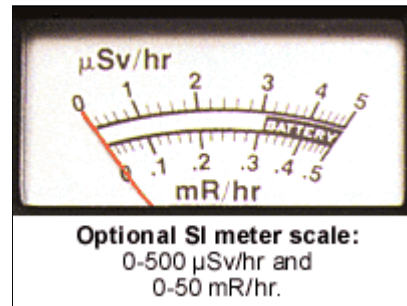
X1, X10, X100, Battery Check.

Includes:

1 year limited warranty, carrying case, and CE mark.

Options:

Modification to run [Observer Software](#). Stainless steel [belt clip](#) (attached to instrument).



Build your own Monitor 4!

Learn about how a geiger counter works.

Monitor 4 kit includes: All parts required to build a Monitor 4, Assembly and Illustration booklets.

S.E. International, Inc. P.O. Box 39, 436 Farm Rd. Summertown, TN 38483-0039, USA
Phone: 931-964-3561 / 1-800-293-5759 Fax: 931-964-3564
mail to: radiationinfo@seintl.com