

Monitor 4 and Monitor 4EC Specifications

Detector

External Halogen-quenched, uncompensated GM tube with thin mica window, 1.4-2.0 mg/cm² areal density. Effective diameter of window is 45 mm (1.77 in.). Radiation symbol on label marks the center of the detector.

Operating Range

mR/hr - .001 (1μR) to 100 CPM - 0 to 350,000

μSv/hr - .01 to 1000 CPS - 0 to 5000

Total/Timer - 1 to 9,999,000 counts

Accuracy (Referenced to Cs137)

Typically ±15% from factory, ±10% with NIST Source Calibration

Energy Sensitivity

Detects Alpha down to 2 MeV. Detects Beta down to .16 MeV; typical detection efficiency at 1 MeV is

approx. 25%. Detects Gamma down to 10 KeV through the end window. 3340 CPM/mR/hr (Cs137). Smallest detectable level for I125 is .02 μCi at contact.

Built-In Efficiencies

Sulfur (S35), Strontium (Sr/y90), Cesium (Cs137), Phosphorus (P32), Carbon (C14), Iodine (I131), Cobalt (Co60), and Alpha

Selectable Alert Set Range

mR/hr .001 - 50 and CPM 1 - 160,000. 70db @ 1m. Pulsating beeper sounds the alert. Adjustable alert levels are used for mR/hr / CPM, and μSv/hr / CPS. Alarm will sound when in Timer Mode when set alarm threshold is reached.

Anti-Saturation

Meter will hold at OVER RANGE in fields as high as 100 times the maximum reading.

Averaging Periods

Display updates every 3 seconds. At low background levels, the update is the average for the past 30-second time period. The timed period for the average decreases as the radiation level increases.

Display

Backlit 4 digit liquid crystal display with indicators. Display updates every 3 seconds.

Count Light

Red LED flashes with each radiation event.

Audio Indicator

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

Outputs

3.5mm jack for CMOS or TTL devices and counts to computer or datalogger.

USB for use with Free Observer USB Software for PCs

Power Requirements

One 9-volt alkaline battery. Battery life is approx. 2160 hours at normal background.

Temperature Range

-10°C to 50°C (14°F to 122°F)

Weight

635 g (22.4 oz.)

Size

150 x 80 x 30 mm (5.9 x 3.1 x 1.2 in.)

Probe: 260 X 70 X 25 mm (10.25 X 2.75 X 1 in)

Probe Construction

Anodized aluminum housing

Size - Approx. 8.75 in. (22.23 cm) Dia.: 2.75 in. (7.0 cm)

Connector - BNC

Handle - Black foam grip

Includes

Carrying Case, Observer USB Software Download, USB Cable, Certification of Conformance.

Options

Serial Observer Software