Inspector USB / Digital Radiation Detector - a ß γ x

Detector
Internal 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 front label and end panel marks the center of the detector.

Operating Range
mR/hr - 0.001 (1µR) to 100

CPM - 0 to 350,000

µSv/hr - 0.01 to 1000

CPS - 0 to 5000

Total Counts- 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 0.001 - 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 headphone 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. 2000 hours at normal background. USB-AC Adapter.

Temperature Range

-10ºC to 50ºC (14ºF to 122ºF)

Weight

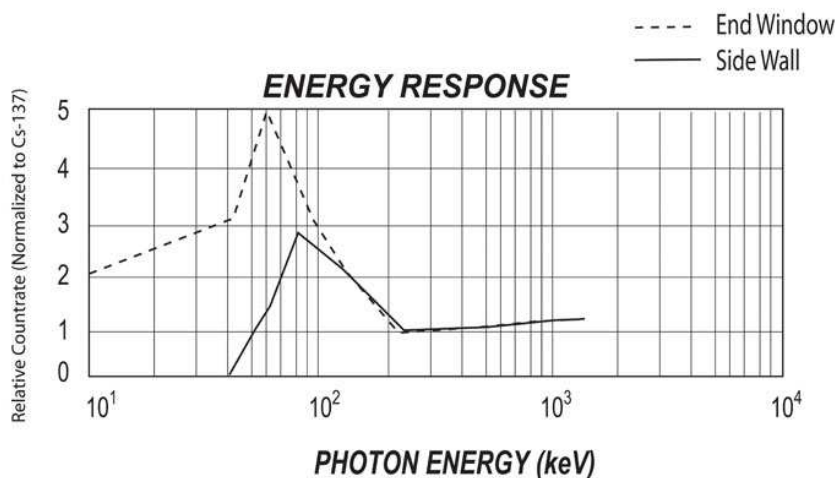Inspector: 273 g (9.6 oz.) without battery.

Size

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

Includes

Carrying Case, Certification of Conformance, Observer USB Software

Options

Xtreme Boot, Wipe Test Plate, & Stand