AMP-50 Area Monitoring Probe

10 µR/h to 4 R/h

Low-range waterproof GM probe instrument

The AMP-50 is a GM tube-based low range Area Monitor. It has been designed specifically to be used in low dose rate fields using a very sensitive GM tube. The AMP-50's detector features a linear response from 10 μ R/h to 4 R/h (0.1 μ Sv/h to 40 mSv/h).

The AMP-50 may be used in one of 2 ways: by locally reading the smoothed digital display via the hand-held meter, or by connecting the meter to a Remote Monitoring System (e.g. wired DDC 16 or wireless WRMPlus) and TeleMap or connected directly to RS-232 computer input (using the RS-232 cable)



Applications

Area monitoring of containers for low dose rate areas Storage Installations Environmental monitoring Alara waiting areas Low-level radioactive waste material surveillance Facility & site boundary surveillance Emergency Response surveillance Shipping of radioactive material Outdoor area monitoring Underwater surveys

Features

Wide range response from 10 μ R/h to 4 R/h (0.1 μ Sv/h to 40 mSv/h). Ruggedized construction, waterproof detector housing and cable User-selectable internal alarm threshold Quick-disconnect connectors allow customization of cable length and facilitate easy de-contamination Built-in RS-232 communication connection for use with Area Monitor or WRM transmitter "Smoothed" digital display offers accurate, stable readings



Technical Data

Technical Description

The Area Monitor Probe (AMP-50) is a low-range GM tube-based detector designed to be continuously used in areas where exposure levels are required to be monitored.

The instrument consists of three parts: the Meter box, which includes the detector's electronics, the display and operating pushbuttons; The probe head, which contains the GM Tube; and the connecting cable, which is fitted with quick-connect type connectors at each end. The AMP-50's connections and probe head feature watertight sealing to allow for use in underwater applications up to 20 meters deep.

Electrical characteristics

Power supply - 9 Volts, supplied by a 9 Volt alkaline battery, located in the meter case.

Optional AC adapter available.

Battery life - approximately 50 hours of continuous use Environmental conditions - temperature: -4°F to 140°F (-20°C to +60°C) Relative humidity (Instrument): 10 to 95% RH (non-condensing)

Mechanical characteristics

Meter dimensions: 2.7" (6.9cm) wide, 4.7"(11.9cm) high, 1.25" (3.2cm) deep Probe head length: 5.39" (137mm), diameter: 1.29" (33m) Standard cable length: 25 feet (7.62m) Maximum cable length: 350 feet (107m)

Radiological characteristics

Detector: GM-tube (ZP-1201, or equivalent) Detection range 10 µR/hr to 4 R/hr *Accuracy: ± 10% *Energy range: 50 KeV to 2 MeV *Sensitivity: 17 cps per mR/hr

* Related to ¹³⁷Cs

ROTEM Model # BAK-0071 (uSv/h) BAK-0061 (mR/h)

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