

AMP-50 Area Monitoring Probe

10 μ R/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 probe head may be located near a filter cube, rad waste stream, resin tank, or even inside the fuel pool (to take advantage of waterproof characteristics). 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 WRMPPlus) and TeleMap or connected directly to RS-232 computer input (using the RS-232 cable)



Applications

- Area monitoring of low dose rate areas (ISFSI -Independent Spent Fuel 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

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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: 4.25" (10.8cm), diameter: 0.8" (2cm)

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 μ R/hr to 4 R/hr

*Accuracy: \pm 10%

*Energy range: 50 KeV to 2 MeV

*Sensitivity: 17 cps per mR/hr

* Related to ¹³⁷Cs

ROTEM Model # 4-0024

ROTEM INDUSTRIES reserves the right to change specifications without advance notice

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