



AREA RADIATION MONITORING

AMP-50™

Low to Medium range waterproof gamma detector



FEATURES

- Rugged construction, waterproof detector housing and cable
- Quick-disconnect connectors allow customization of cable length and facilitate easy decontamination
- Built-in communication port for use with AWM WRM transmitter
- Clear digital display offers accurate, stable readings
- User-selectable internal alarm threshold

APPLICATIONS

- Real-time monitor applications in lower dose rate areas. For example, the probe head may be placed directly into a filter cubicle or against a resin tank for the purpose of providing live time survey results
- Replacement of traditionally “difficult to calibrate” underwater instruments
- Local readout of hand-held meter allows for use as a portable survey instrument

DESCRIPTION

The AMP-50 monitor is designed specifically to be used in medium to low dose rate fields.

More importantly, since the probe's sensitive electronics are located far from the high field (25 to 350 feet away), they are not subject to destructive gamma exposure. Thus 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) having a longer life expectancy.

SPECIFICATIONS

The AMP-50 unit features linear response from 10 $\mu\text{R/h}$ to 4 R/h (0.1 $\mu\text{Sv/hr}$ to 40 mSv/hr).

The Area Monitor Probe (AMP-50) is a Low to Mid Range GM Tube based detector designed to be continuously used in areas where lower exposure levels exist. The AMP-50 unit consists of three parts: the Meter box, which includes the detector's electronics, display and pushbuttons; the Probe head, which contains the energy compensated GM Tube detector; and the connecting cable, which is fitted with a quick-connect-type connector at one end. The AMP-50 unit's connections and probe head feature watertight sealing to allow for use in underwater applications up to at least 20 meters deep.

Radiological Characteristics

- Detector: energy compensated GM-tube
- Detection range ($\pm 10\%$): 10 $\mu\text{R/h}$ to 4 R/h
- Energy range sensitivity: 17 cps per mR/h

Electrical Characteristics

- Power supply: 9 Volts (supplied by a 9 Volt battery located in the meter case)
- Optional 9 Volt AC adapter available
- Battery life: approximately 50 hours of continuous use

Mechanical Characteristics

- Meter dimensions: 7.2 x 12 x 3.4 cm (2.83 x 4.72 x 1.34 in.) (H x W x D)
- Detector dimensions: 3.3 x 17 cm (1.3 x 6.7 in.)
- Standard cable length: 7.6 m (25 ft)
- Maximum cable length: 106 m (350 ft)

Environmental Characteristics

- Temperature: -10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (15 $^{\circ}\text{F}$ to 120 $^{\circ}\text{F}$)
- Relative humidity: 10 to 95% RH (non-condensing)
- Conforms to CE requirements
- EMC conformity