



## AREA RADIATION MONITORING

# AMP-100™

*High 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 high 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-100 monitor is designed specifically to be used in high 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-100 monitor features linear response from 0.5 mR/hr to 1000 R/hr (0.5 mSv/hr to 10 Sv/hr).

The Area Monitor Probe (AMP-100) is a high-range GM Tube based detector designed to be continuously used in areas where high exposure levels exist. The AMP-100 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-100 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 ( $\pm 10\%$ ): 0.005 R/hr to 1000 R/hr
- Energy range: sensitivity: 330 cps per R/h
- Detector life time: 20 R/h field for six months

#### 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: 2.45 Dia. x 14.3 cm (0.96 Dia. x 5.71 in.)
- Standard cable length: 7.6 m (25 ft)
- Maximum cable length: 106 m (350 ft)

#### Environmental Characteristics

- Temperature: -10 °C to 50 °C (15 °F to 120 °F)
- Relative humidity: 10 to 95% RH (non-condensing)
- Conforms to CE requirements
- EMC conformity