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Your Alternative
To The Obvious

# AMP-200 Area Monitor

The AMP-200, or Area Monitor Probe, is a GM tube-based rate meter. It has been designed specifically to be used in high dose rate fields. The AMP-200's detector features linear response from 10 mSv/h to 150 Sv/h .
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). The AMP-200 may be used 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.


## Features

Wide range response from 10 mSv/h to 150 Sv/h
Ruggedized construction, waterproof detector housing and cable
Quick-disconnect connectors allow customization of cable length and facilitate easy de-contamination
Built-in communication connection for use with Area Monitor or WRM transmitter
"Smoothed" digital display offers accurate, stable readings
User-selectable internal alarm threshold

## Applications

Real-time monitor applications. For example, the probe head may be placed directly into a filter cube or against a resin tank for the purpose of providing survey results

Replacement of traditionally "difficult to calibrate" underwater instruments

Provides real-time, remote monitoring in geometries developed for extendible "pole" rate meters (TelePole, Teletector,etc.)

Local readout of hand-held meter allows for use as a portable survey instrument

## Technical Description

The Area Monitor Probe (AMP-200) is a high-range GM tube-based detector designed to be continuously used in areas where high exposure levels exists.

The instrument consists of three parts: the Meter box (which includes the display unit, operating pushbuttons and detector's electronics); 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-200's connections and probe head feature watertight sealing to allow for use in underwater applications.

## Specifications

| | |
|---|---|
| **Detector**: | GM-tube (4G60M) |
| **Energy Range:** | 60 KeV to 2 MeV. |
| **Measuring Range:** | 10 mSv/h to 150 Sv/h |
| **Sensitivity (137Cs):** | 60 cps per R/hr |
| **Accuracy:** | ±10% of reading within measuring range |
| **Units:** | mR/h and mR or m Sv/h and m Sv |
| **Controls:** | Four key keypad with positive feedback. Key combinations for programming operating parameters. |
| **Power Source:** | One 9-volt cell battery or external 9V power supply, 50 hours minimum continuous operation, using an alkaline battery (speaker off)<br>Automatic battery check under full load (without backlighting) |
| **Display :** | LCD Display showing: Detector failure, Low battery, Overflow, Threshold |
| **Temperature Range:** | Operation: -10° C to +50° C<br>Storage: -20° C to +60° C |
| **Humidity Range** | 40% to 95% RH (non condensing) |
| **Casing Material:** | Meter: Aluminium<br>Detector: Aluminium, waterproof |
| **Dimensions:** | Meter: 7.2 cm wide, 12 cm high, 3.4 cm deep<br>Detector: Length: 14.3 cm diameter: 2.45 cm |
| **Weight:** | Meter: 340 g (0.76 lbs) including battery<br>Detector: 131 g (0.29 lbs) without cable |
| **Std. Cable Length:** | 25 ft. |
| **Max. Cable Length:** | 350 ft. |
| **Expected detector lifetime:** | 250 h at 1000 R/h |

Accuracy, range and sensitivity details are related to $^{137}Cs$