

High Range Submersible Monitor

Model - CP-MU-10K

(Includes DMU-100 Probe to 104R/hr)

Features

- Five Decades 0.1 to 10,000 R/hr.
- Waterproof Detector System
- Stable and Dependable
- Fast Response
- Lightweight and Portable
- 6-AA Cell
- 2-way Serial Port-standard
- Probe Cable 0-60 Ft
- Optional: 0.1 to 20,000 R/hr

Application

Extremely high range capability and waterproof construction of ion chamber detection system provides underwater monitoring and in hot cell monitoring of Reactor Spent Fuel Elements. Reactor components and doserate measurements of irradiated objects can now be made easily and at the ranges called for.

General Description

- Lightweight single 6-AA cell operated, solid state and MOSFET driven electronic package.
- A High Range DMU-100 Detector System consisting of 60 feet of special low noise cable.
- A waterproof coupling to a 8" long x 1/2" diameter aluminum tube containing an ion chamber.
- A "handle" consisting of 8 foot sections of free draining 5/8" stainless steel tubing is available as an option.
- Five linear decades on the electronic package provide readings up to 10,000 R/hr. A "set" button on the front panel permits the meter to be adjusted to read zero by the zero adjust knob.
- Calibration is fully adjustable.
- The instrument case is made of drawn aluminum with epoxy lettering for easy decontamination. Case openings are sealed by gasket or screw closure for protection of electronics.
- A reliable MOSFET electrometer circuit and improved solid state electronics assure long uninterrupted service. Mechanical switching of the high impedance circuit has been eliminated.
- Protection against influence by magnetic fields up to 60 gauss has been built into the instrument. A top handle and four rubber feet achieve a more stable base with no loss of display visibility.





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Specifications

Accuracy: \pm 10% F.S.

Calibration: Cs-137 Gamma (Co-60 Optional) **Time Constant:** 2 seconds fast, 12 seconds slow

Drift: At room temperature - less than 0.5% per °C

Battery: 6-AA Cells

Battery Check: Push-button with LED indicator **Range Adjusts:** 1 internal screwdriver adjust

Zero Adjust: Knob

MOSFET: Prevents damage to MOSFET when coupling

or decoupling detector system

Serial Port: RS-232 communications for data collection

or remote computer readout

Dimensions: 6-1/2" long x 3-1/2" x 9" tall including handle

Weight: Electronics 28 oz.

Detector System: DMU-100 - Sealed Air ion chamber nominal 100cc volume

Readout: LCD 8 digits

Indicator Lamp: Green LED 1 pulse/sec R/hr. Red Over-range Indicator

Electrometer: Solid State MOSFET input
Electronics: A-D converter LCD drivers
Options: Readout in Si units: Sv and Sv/h
Data Output: WIN-W -- RS-232 Software

Options:

Cable: 0-100 ft (30 meters)

Alarm: Settable visual alarm LED

Range: 0.1 TO 20,000 R/hr

Non-Submersible Probe: Lighter weight and optional wand/handle









