

DRM-1D Data Radiation Monitor

Introduction

The Data Rate Monitor (DRM-1D) is a sensitive CsI(Tl) Scintillator coupled to PMT dose rate meter, and is a state-of-the-art microprocessor-based instrument, combined with the telemetry using the WRM2900 MHz or 2.4 GHZ FHSS radio.

The DRM-1D is designed for highly stable and accurate measurements of rate from gamma radiation. The DRM Measuring range is from 0.01 $\mu\text{Sv/h}$ to 100 $\mu\text{Sv/h}$ (0.001 mR/h to 10 mR/h) The DRM-1D is a lightweight instrument with sophisticated software offering special features and optimal performance for telemetry data. The sensitive range is obtained by CsI(Tl) scintillator (30 * 30 mm) coupled to PMT

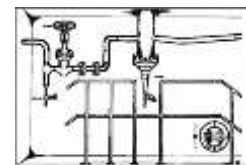


Applications

- Perimeter & Boundary Surveillance
- Collection of Survey Data for real-time mapping & surveillance software
- General Area Monitoring
- Hospital Emergency Room Entrances
- Response vehicles
- Event Monitoring



Solar Powered
Outdoor DRM



Telemap Software

Features

- Wide range response from 0.01 $\mu\text{Sv/h}$ to 100 $\mu\text{Sv/h}$
- Readout of dose rate and accumulated dose
- Ruggedized construction, metal casing
- User-selectable internal alarm threshold
- Built-in RS-232/RS-485 communication connection for use with Area Monitor or WRMtransmitter.
- Output plug for Local Alarm Unit.
- Calibration software available
- Compatible with RMV software for pc data downloads
- Dead time correction
- Alarms for detector overflow, low battery and detector failure
- Automatic self diagnostic routines
- RADNET and CE compatible

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Technical Data

Technical Description

The DRM-1D is a highly sensitive Monitor, based on a CsI(Tl) Scintillator, (30x30mm) crystal optically coupled to PMT with 0.5 mm aluminum housing and solid Mu Metal shield, designed to be continuously used in areas where exposure levels are required to be monitored.

The instrument is powered by an external AC source with NiMH backup batteries for backup. Two flashing LED's on the cover of the monitor show the radiation and communication statuses, while another two LED's display the power origin (AC Power or Batteries).

Measuring Range: 0.01 uSv/h to 100 uSv/h (0.001 mR/h to 10 mR/h)

Sensitivity: 6.8 cps/uR/hr (¹³⁷Cs)

Accuracy: ±10% of reading within measuring range **Units:** mR and mR/hr or μSv and μSv/hr

Power Source: External AC Power backed up by two NiMH batteries

Temperature Operation: -10°C to +50°C (15°F to 122°F)

Storage: -20°C to +60°C (-5°F to 140°F)

Humidity Range: 10% to 95% RH (non condensing)

Case: Blue anodized aluminum

Dimensions: Meter: 108mmW x 178mmL x 89mmH (4.25" x 7" x 3.5")

Weight: 907g (2 lbs)

Radio Frequencies: 900 MHz FHSS or 2.4 GHz FHSS

Optional: External Display and Alarm Unit