

## DRM-1 Data Radiation Monitor

### Introduction

The DRM-1 is a GM tube-based wide range Area Monitor. It has been designed specifically to be used as a fixed monitor in varying dose rate fields using two very sensitive, auto switching GM tubes. The DRM's detector features a linear response from 10uR/h to 1000R/h (0.1µSv/h to 10Sv/h).

The DRM-1 is a wall mounted instrument that can be connected to the AC power with NiMH backup batteries. The radiation data is sent via 900 MHz FHSS or 2.4 GHz FHSS radios via the external antenna to a transceiver or via hardwire (RS-232 or RS-485) to a Remote Monitoring System. The DRM-1 can also be connected directly to a computer input.



### Applications

#### • Perimeter or boundary surveillance

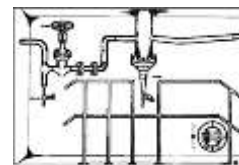
The DRM is a portable or fixed position device used for perimeter and/or boundary monitoring used to quickly identify changing radiological conditions.

#### • Collection of radiological survey data for real-time mapping and surveillance software

The DRM provides live radiological data for display, archiving and trending in real-time mapping software programs (e.g. TeleMap)



Solar Powered  
Outdoor DRM



Telemap Software

### Features

- Wide range response from 10uR/h to 1000R/h (0.1µSv/h to 10Sv/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 WRM transmitter.
- 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

# PYCKO SCIENTIFIC LIMITED

## Technical Data

### Technical Description

The DRM-1 is a wide-range GM tube-based Monitor 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:** 10 $\mu$ R/hr to 10  $\mu$ R/hr (0.1 $\mu$ Sv/hr to 10Sv/hr)

**Sensitivity:** 0.3 cps/ $\mu$ R/hr (<sup>137</sup>CS)

**Accuracy:**  $\pm$ 10% of reading within measuring range

**Units:** mR and mR/hr or  $\mu$ SV and  $\mu$ Sv/hr

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

**Temperature Range:** Operation: -10°C to +50°C (15°F to 122°F)  
Storage: -20°C to +60°C (-5°F to 140°F)

**Humidity Range:** 40% to 95% RH (non condensing)

**Case:** Blue anodized aluminum

**Dimensions: Meter:** 93mm W x 148mm L x 56mm H (3.7" x 5.8" x 2.2"

**Weight:** 680g (1.5 lbs)

**Radio Frequencies:** 900 MHz FHSS or 2.4 GHz FHSS

**Optional:** External Display and Alarm Unit