RAM-ION Portable Ion Chamber Survey Meter

The RAM ION DigiLog is a battery operated, auto ranging, portable Ion chamber Survey meter designed for highly stable and accurate measurement of dose rates **and** integrated dose of gamma (γ), X-ray and beta (β) radiation.

The meter covers a measuring range of 1μSv/h - 500 mSv/h (0.1 mR/h to 50 R/h) in the dose rate mode, and 0.01 μSv- 10Sv (1uR to 100 R) in the integrated dose mode.

The auto ranging meter utilizes a combination display consisting of a smoothed digital readout for minimum fluctuation and a two decade analog bar graph for fast response.

The RAM ION DigiLog survey meter combines an ionization chamber vented to atmospheric pressure, and a micro-controller to offer optimal performances and special features. Furthermore it is a compact hand-held, lightweight, rugged meter, easy to use and maintain.

FEATURES

- Ion chamber survey meter
- Accurate readings of Pulsed X-Ray (Golden Engineering)
- Wide measuring range of 1μSv/hr to 500mSv/hr (0.1 mR/hr to 50 R/hr)
- Built in memory to store data
- Compact, lightweight and easy-to-use, one hand operation
- Dose rate and accumulated dose measurement
- Display illumination
- Freeze mode to record the highest dose
- User programmable dose rate and accumulated dose alarms
- Remote PC communication
- Hot Spot detection

Applications

- Accurrate Pulsed X-ray Detection
- NDT Surveying
- Nuclear Power Plant Surveying
- Positioning Tool for NNP's
- X-ray machines safety and leakage

Product highlights

- Highest safety: provides accurate readings of extremely short X-Ray bursts as emitted by Pulsed X-ray Generators (Golden Engineering)
- Wide measuring range of 1µSv/hr to 500mSv/hr (0.1 mR/hr to 50 /hr)
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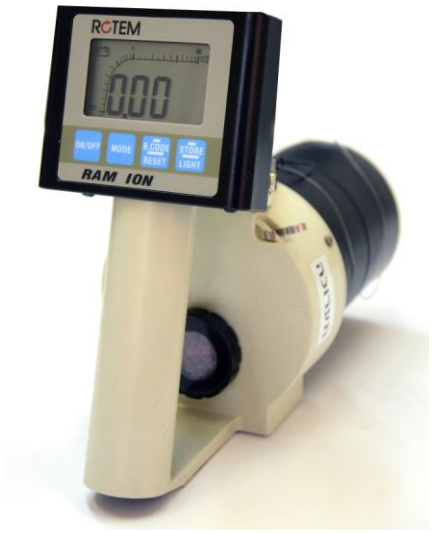

Specifications

Measuring Range	1µSv/hr to 500mSv/hr (0.1 mR/hr to 50R/hr)
Display Range	0.1µSv/hr to 500mSv/hr (0.01 mR/hr to 50R/hr)
Accuracy	±10% of reading within measuring range
Gamma Energy Dependence (137Cs)	Better than ±20% at 20keV to 1.3MeV
Angular Dependence (137Cs)	Less than ±5% (for ±120o of front direction
Ion Chamber Volume	500 cc
Chamber Wall and Cover Thickness	300mg/cm2 (tissue equivalent)
Window Thickness	7 mg/cm2
Response Time	2 sec. for readings above 1 mR/h 5 sec. for auto-ranging change, from Low Range to High _Range (2sec. +3 additional seconds for auto ranging delay)
Power Source	two 1.5V C-type Alkaline cells - 100 hours of continuous operation (Built in automatic battery check)
Display	DigiLog (3 digits and 2 decades of analog bar graph)
Data Logging	347 data records (1415 with extended memory)
Temperature Range	Operation -10oC to +50oC (15oF - 122oF) Storage: -20oC to +60oC (-5oF - 140oF)
Humidity Range	Up to 95% RH (non condensing)
Dimensions	Width: 10cm (3.9"), length 25cm (9.8"), height 19cm (7.5")
Weight	1100g (2.4lb)
Casing	High impact ABS