The RAM ION Meter

Gamma, Beta and X-Ray (1µSv/h - 500 mSv/h)

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, x-ray and beta 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.

The **RAM ION DigiLog** provides a very straightforward, fast and reliable method of collecting and storing monitoring data on site for later use. The **RAM ION DigiLog** can read bar code labels that identify measurements location. The measurement's data combined with their locations, data and time are stored in a built in memory. The stored data records can be downloaded by the **SMARTS** (Survey Mapping Automated Radiation Tracking System) or the **RMV** (Rotem Meter View) software packages.
The **RAM ION DigiLog** is ideal for use in nuclear power plants, nuclear medicine, radiography and radiotherapy facilities, life science laboratories, nuclear research centers and in other industrial applications.
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Features

- Ion chamber (500 cc atmospheric) survey meter
- Barcode laser scanner
- Wide measuring range of 1µSv/hr to 500mSv/hr (0.1 mR/hr to 50R/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
- Display illumination
- Freeze mode to record the highest dose
- User programmable dose rate and accumulated dose alarms
- Remote PC communication

ROTEM

Specifications:

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

Ordering Information

RAM ION DigiLog (units mR/h)	#4-0042-10
RAM ION DigiLog (units µSv/h)	#4-0042-11

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