The RAMION 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 1000 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 RAMION 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, one hand-held, lightweight, rugged meter, easy to use and maintain.

The RAMION DigiLog provides a very straightforward, fast and reliable method of collecting and storing monitoring data on site for later use. The RAMION 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 RAMION 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.

**FEATURES**

- ICRP-51 H* (10) Response also available
- Ion chamber 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
- User programmable dose rate and accumulated dose alarms
- Remote PC communication
- Hot Spot detection
- Splash proof keypad
- Multi use including wireless applications
- Low battery, overflow and detector fail alarms
## TECHNICAL SPECIFICATIONS:

### Radiological Characteristics
- **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 - better than ±20% at 20keV to 1.3MeV (related to 137Cs)
- angular dependence - less than ±5% (for ±120° of front direction, related to 137Cs)
- ion chamber volume: 500 cc
- chamber wall and cover thickness 300 mg/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 (2 sec. + 3 additional seconds for auto ranging delay)

### Electrical Characteristics
- **Power Source**
  - meter: two 1.5V C-type Alkaline cells - 100 hours of continuous operation
  - laser scanner: One 9V Alkaline cell - 6000 operations (built in automatic battery check)

### Mechanical Characteristics
- **meter dimensions:** (w x l x h): 10 x 25 x 19 cm (3.9 x 9.8 x 7.5 in)
- **weight:** 1100 g (2.4lb)
- casing: high impact ABS

### Environmental Characteristics
- **Temperature:**
  - operation: -10°C to +50°C (15°F to 122°F)
  - storage: -20°C to +60°C (-5°F to 140°F)
- relative humidity: 10 to 95% RH (non-condensing)