

The RAM DA 2000 Meter

Portable Radiation Survey Meter with external probes for all kinds off Radiation

Features

- Large, easy to read, illuminated, digital & analog custom made LCD
- Unique algorithms to achieve fast response and stable readings
- Bar code laser scanner for location identification of reading
- Built-in memory to store measurements data
- RS-232 communication port
- SMARTS and RMV software compatibility
- Automatic self-test of meter and detector
- Various types of external detectors
- Automatic detector identification
- No need for re-calibration with each detector change
- Wide range internal gamma detection tubes
- Autoranging
- Automatic recording of dose accumulation
- Freeze mode to record highest dose rate
- Manually set threshold alarm
- Low battery, overflow and failure alarms
- Two alarm relay contacts for external interface
- Versatile: Can function either as ratemeter or scaler
- CE marked



RAM DA-3-2000 with wide range internal detector
RAM DA-2000 without internal detector

Description

RAM DA-3-2000 is a further development of the RAM series, a family of versatile, user friendly meters and detectors designed to give highly reliable alpha, beta, gamma and X-ray measurements. The **RAM DA-3-2000**, a microprocessor based meter, includes an internal detector with two energy compensated GM tubes; ZP1201 and ZP1313 (Air kerma dose equivalent) or ZP1202 and ZP1314 (Ambient dose equivalent (H*10)) for wide range gamma fields measurement, from 0.5 $\mu\text{Sv/h}$ to 1 Sv/h (50 $\mu\text{R/h}$ to 100 R/h). Meters are available in either Sievert or Roentgen measuring units. The **RAM DA-3-2000** provides a straightforward, fast and reliable method to collect and store monitoring data on site for later use. The measurements' data, date and time, are stored in a built-in memory. The stored data records can be downloaded by the SMARTS (Survey Mapping Automatic Radiation Tracking System) or the RMV (ROTEM Meter View) software packages. The **RAM DA-3-2000** 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.



Technical Data

Display	LCD readout showing: <ul style="list-style-type: none">● 20-segments, autoranging analog scaled bargraph● Four digits for accurate and easy readout● Two digits for identifying type of detector connected● Operating conditions, including:<ul style="list-style-type: none">- measuring units- freeze, dose, or count modes- detector failure, exceeding of threshold, low battery- display illumination on/off- audible indicator on/off
Measuring units	cps, cpm, counts, Sv/h, Sv (R/h, R), other units upon request. The measuring unit and display range are set automatically for each type of detector, and the measuring unit can be also changed manually.
Power source	Three 1.5 V C-type cells <ul style="list-style-type: none">● 150 hours minimum continuous operation with alkaline batteries (excluding display lighting), using internal detector. 100 hours with all other external detectors● Automatic battery check under full load● Option: 3 rechargeable C-type cells & charger, or 4.5 VDC external adapter
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	10% to 95% RH (non-condensing)
Casing	Splash-proof plastic case
Dimensions	Width: 142 mm (5.6") Length: 244 mm (9.6") Height: 115 mm (4.5")
Weight	1.5 Kg (3.3 lb) including batteries and internal detectors
Data logging	347 data records (1415 with extended memory)
Communication	Serial communication port (RS-232)
Laser scanner	Class II, maximum power 1.0 mW
Relays	Two relay contacts: fail alarm, threshold alarm
Memory	E ² EPROM for the meter parameters

Internal Detector (RAM DA-3-2000)

Measuring range	0.5 μ Sv/h to 1 Sv/h (50 μ R/h to 100 R/h)
Display range	0.01 μ Sv/h to 1 Sv/h (1 μ R/h to 100 R/h)
Accuracy	\pm 10% of reading
* Energy response	\pm 30% over the range of 50 keV to 1.3 MeV \pm 20% over the range of 60 keV to 1.3 MeV
Angular dependence	\pm 20% for \pm 45° of preferred direction

* related to ¹³⁷Cs

Ordering #	RAM DA-2000	2-0030-10
	RAM DA-3-2000	2-0033-10