

# RADIATION METER

## PCE-RAM 100



- »  **$\alpha$ ,  $\beta$ ,  $\gamma$  radiation**
- » **accumulated radiation dose**
- » **pulse counting in cps and cpm**
- » **data logger with 32 GB memory**
- » **adjustable alarm**
- » **graphical measurement history**
- » **audible radiation pulse**

The radiation meter offers comprehensive measurement functions for  $\alpha$ ,  $\beta$  and  $\gamma$  radiation and is the test instrument of choice for professional radiation measurements. With the ability to precisely record the accumulated radiation dose and count the radiation in both cps (counts per second) and cpm (counts per minute), the radiation meter provides accurate and reliable measurement data at all times. The integrated data logger with 32 GB memory saves the measured values and allows them to be analysed in detail. The measurement history is shown graphically on the TFT colour display. Individual alarm limits can also be set in the radiation meter: a warning message appears if a certain radiation value or a defined radiation dose is exceeded.

Another feature of the radiation meter is the acoustic radiation pulse output. Each detected radiation pulse is made audible by a sound, which provides immediate feedback on the radiation activity in the environment. This function can also be deactivated. The integrated data logger can record up to 10 million measuring points at the touch of a key or after entering a start time.

This radiation meter combines precision, ease of use and innovative technology - an indispensable tool for the safe handling of radioactive materials.

## Specification

Radiation	
Measurement range up to	0 ... 1500 µSv/h
Resolution	0,001 µSv/h
Accuracy	<10 % of Rd (<1000 µSv/h)
Radiation	
Measurement range up to	0 ... 150 mrem/h
Resolution	0,001 mrem/h
Accuracy	<10 % of Rd (< 100 mrem/h)
Radiation	
Measurement range up to	0 ... 9,9 Sv
Resolution	0,1 Sv
Accuracy	<10 % of Rd (< 100 µSv)
Radiation	
Measurement range up to	0 ... 167000 cps
Resolution	1 cps
Accuracy	<10 % of Rd
Radiation	
Measurement range up to	0 ... 9999999 cpm
Resolution	1 cpm
Accuracy	<10 % of Rd

General technical data	
Measuring functions	MIN, MAX, Average value
Display type	TFT colour display
Display size	2,8 Inch
Storage medium	Internal memory
Storage capacity	32 GB
Memory capacity (additional information)	10 million measuring points
Storage interval from	1 s
Storage interval to	12 h
Interface	USB-C
Sensor	Geiger-Mueller counter tube
Operating time	24 h
Operating time additional information	depending on display brightness and data logger settings
Automatic power-off from...to	1 ... 15 min.
Automatic power-off can be deactivated	Yes
Alarm	optical, Acoustic
Alarm modes	Radiation, radiation dose, number of pulses
Sensitivity	α-rays from 4 MeV β-rays from 0.2 MeV γ-rays from 30 keV
Menu language	German, English (GB), English, French, Spanish, Italian, Danish, Portuguese, Turkish, Polish, Russian, Chinese, Dutch, Japanese
Protection class (device)	IP52
Power supply	5 V DC, 500 mA (USB)
Weight	280 g
Operating conditions	-20 ... 65 °C , 10 ... 95 % RH
Storage conditions	-20 ... 65 °C , 10 ... 95 % RH
Capacity	2500 mAh
Dimensions ( L x W x H )	208 x 85 x 37 mm