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## Technical Environmental Meter PCE-RAM 10

**Radiation Detector to detect  $\alpha$ -,  $\beta$ -,  $\gamma$ - and x- radiation / high accuracy / internal data memory /**

**large LCD display / data transfer to computer / Bluetooth interface**

The radiation detector PCE-RAM 10 was developed to detect  $\alpha$ -,  $\beta$ -,  $\gamma$ - and x- radiation. The radiation meter PCE-RAM 10 provides many features including a large, high-resolution LCD display with background lights and many indicators. The radiation detector PCE-RAM 10 has an internal data storage for up to 2000 data sets, which are saved either manually or automatically. Furthermore the radiation detector PCE-RAM 10 is equipped with a Bluetooth interface to transfer the measured data in real-time to a computer. With the software that is included in the delivery, the data can then be further processed and reviewed. The radiation detector PCE-RAM 10 stands out with its high accuracy and practical design. The radiation detector can be applied in the pharmaceutical industry, laboratories, power plants, quarries, the emergency services, metal industries, petroleum reservoirs, environmental protection etc.

- $\alpha$ -,  $\beta$ -,  $\gamma$ - and x- radiation
- High measuring accuracy
- Internal data storage for 2000 values
- Large LCD display
- Bluetooth interface
- Software for data processing

### Technical Specifications of the Radiation Detector

Types of radiation	$\alpha$ -, $\beta$ -, $\gamma$ - and x- radiation
Measurement ranges	radiation dose rate: 0.1 .... 1000 $\mu$ Sv/h impulse dose rate: 0 ... 30,000 cpm, 0 ... 5000 cps radiation dose accumulation: 0.001 $\mu$ Sv ... 9.999 Sv impulse dose accumulation: 0 ... 9,999

Sensitivity	108 pulses or 1000 cpm/mR/hr in Cobalt-60 in radiant environment with electricity of 1 $\mu$ Sv/h alpha radiation: above 4 MeV beta radiation: above 0.2 MeV x-radiation: above 0.02 MeV
Accuracy	< 10 % (less than 500 $\mu$ Sv/h) < 20 % (less than 600 $\mu$ Sv/h)
Selective radiation	Combination of $\alpha$ -, $\beta$ -, $\gamma$ - and x- radiation
Sensor	halogen balancing sensor
Output port	Bluetooth
Average process time	manual or automatic, adjustable, between 2 ... 12 seconds
Display	digital LCD display, with barograph display
Alarm function	Acoustic alarm for manually selected value
Average radiation value for normal environment	less than 0 ... 0.2 $\mu$ Sv/h
Internal data storage	automatic, 2000 values
Software	data transfer with real-time speed, 2000 measurement values and recording
Operation temperature	0 ... +50 °C
Power Supply	3.6 V high level energy Li-batteries
Dimensions	200 x 70 x 45 mm
Weight	206 g

**Delivery Content of the Radiation Detector PCE-RAM 10:**

1 x Radiation Detector PCE-RAM 10, 1 x SD memory card, 1 x USB data cable, 1 x USB charger