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Technical Radioactivity 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 α -, β -, γ - 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.

- α -, β -, γ 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

 α -, β -, γ - and x- radiation

Measurement ranges

radiation dose rate: 0.1 1000 µSv/h

impulse dose rate:

0 ... 30,000 cpm, 0 ... 5000 cps radiation dose accumulation:

 $0.001~\mu Sv \dots 9.999~Sv$

impulse dose accumulation: 0 ... 9,999

Sensitivity 108 pulses or 1000 cpm/mR/hr in Cobalt-60 in

radiant environment with electricity of 1 µSv/h

alpha radiation: above 4 MeV beta radiation: above 0.2 MeV x-radiation: above 0.02 MeV

Accuracy $< 10 \% \text{ (less than } 500 \,\mu\text{Sv/h)}$

< 20 % (less than 600 µSv/h)

Selective radiation Combination of α -, β -, γ - 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 μ 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