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Radiation measurements for your safety

X-RAY AND GAMMA RADIATION PERSONAL DOSIMETERS PM1621 PM1621A

HIGH SENSITIVITY, POWER-EFFICIENCY AND RELIABILITY

Purpose

The most efficient dosimeters, available on the market. These are highly sensitive, durable, reliable instruments with number of unique features.

The PM1621/PM1621A series dosimeters are designed for continuously monitoring of personal dose equivalent of external photon radiation Hp(10), personal dose equivalent rate of external photon radiation Ḣp(10) and time of dose accumulation. PM1621/PM1621A personal electronic dosimeters designed to monitor and measure dose equivalent and dose equivalent rate of X-ray and gamma radiation and record even slightest fluctuations in the ambient background.

Functions

- Continuous measurement of personal dose equivalent Hp(10) and personal dose equivalent rate Ḣp(10) of gamma and X-ray radiation
- Indication of automatically calculated time of safe stay close to the detected radiation source with alternate display of the current dose rate level
- Visual and audible alarm when the user-specified dose rate and dose thresholds are exceeded
- Two independent alarm thresholds for dose and dose rate
- Storage of up to 1000 history events
- Communication with a PC via IR

Features

- Wide dose rate measurement range: from natural background to 1 Sv/h
- Ease of use, two-button control
- Impact-resistant, sealed enclosure with IP67 protection rating
- Lightweight and compact

Application

- First responders and fire services
- Customs and border services
- Radioisotope laboratories
- Nuclear power plants
- Medical workers

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Specifications

Detector	Geiger-Muller tube
Dose rate measurement range • PM1621 • PM1621A	 0.1 μSv/h – 0.1 Sv/h 0.1 μSv/h – 1.0 Sv/h
Dose rate thresholds range	within all dose rate measurement range
Dose measurement range	1 μSv – 9.99 Sv
Dose thresholds range	within all dose measurement range
Dose rate measurement accuracy	±(15+0.0015/H+0.01H) %, where H is the dose equivalent rate, mSv/h
Dose measurement accuracy	±15 %
Energy range	10.0 keV – 20.0 MeV
Energy response relative to 0.662 MeV (^{137}Cs) within the energy range	±30 %
Response time at discontinues variation of dose rate (according to IEC 61526), no more	5 s at increase 10 s at decrease
Variation coefficient	< 15 %
Maintains performance after short-term exposure to the maximum permissible gamma radiation • PM1621 • PM1621A	 10 μSv/h 10 Sv/h
Alarm types	audible
PC communication	IR
Drop test on concrete floor	0.7 m
Power supply	one AA battery
Battery lifetime	12 months
Battery discharge indication (partial and critical)	LCD indication
Operating conditions • temperature range • relative humidity • atmosphere pressure	 from −40 °C to 60 °C up to 95 % at 35 °C from 84 to 106.7 kPa
Ingress protection	IP67
Dimensions	87 × 72 × 39 mm
Mass (with battery)	≤ 165 g

Design and specifications of the product can be changed without further notice.

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