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Radiation measurements for your safety

PERSONAL RADIATION DETECTORS PM1401MA PM1401GNM

HIGH-PERFORMANCE SEARCHING INSTRUMENTS FOR FIRST-RESPONDERS

Purpose

PM1401MA and PM1401GNM PRDs are highly sensitive gamma/gamma-neutron search devices that are able to detect even a small amount of radioactive and nuclear materials in vehicles, luggage, etc.

The devices are widely used to prevent the illegal movement of radioactive and nuclear materials across the borders, as well as to ensure security and counter the terrorist threats.

Ease of operation allows the effective use of these devices by employees of various services without special training in the field of radiation monitoring.

Functions

- PM1401MA is equipped with a highly sensitive CsI(Tl) scintillation detector to search for gamma radiation sources
- PM1401GNM is equipped with a highly sensitive CsI(Tl) scintillation detector and a He-3 proportional counter to search for gamma and neutron sources, and is also equipped with a Geiger-Muller counter, which allows measuring the ambient dose equivalent rate in the range up to 10 mSv/h
- Alarm on exceeding the user-specified dose rate thresholds
- Non-volatile memory to save the history of operation
- Communication with a PC via USB

Features

- Optional accessories: vibration alarm, telescopic extension, chamber-moderator for higher sensitivity to neutron radiation
- Sealed impact-resistant housing, IP65
- Fast response

Application

- First responders and emergency teams
- Security and law enforcement services
- Radiation monitoring services
- Customs and border control

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Specifications

	PM1401MA	PM1401GNM
Gamma detector	CsI(Tl)	CsI(Tl) and GM tube
Neutron detector	–	He-3 counter
Sensitivity: • gamma for ^{137}Cs, no less than • neutron for Pu-α-Be, no less than • thermal neutrons, no less than	100 cps/(μSv/h) – – –	100 cps/(μSv/h) 0.1 counts·cm^2 1.0 counts·cm^2 (with chamber-moderator or on phantom) 7.0 counts·cm^2
Energy range • gamma • neutron	0.05 – 3 MeV –	0.033 – 3 MeV 0.025 eV– 14 MeV
Dose rate measurement range	0.05 – 40 μSv/h	0.1 – 9999 μSv/h
Dose rate measurement accuracy	±(20 +1/ Ḣ)%, where Ḣ is the measured dose rate in μSv/h	±20%
Alarm type	audible, visual, vibration (external)	
Memory	up to 900 records	
PC communication	USB	
Drop test	0.7 m	
Ingress protection	IP65	
Power supply	one AA size alkaline battery (LR6)	
Battery lifetime, no less than	800 h	
Operating conditions: • temperature • relative humidity	from −30 °C to 50 °C from 98 % at 35 °C	
Dimensions	110 × 62 × 38 mm	195 × 57 × 32 mm
Mass	320 g	450 g

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Quality management system ISO 9001
• Customer focus
• Customer satisfaction
• Continuous improvement
• System/process effectiveness
ID 15 100 148764

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