





CONTINUOUS AND PULSE X-RAY AND GAMMA RADIATION PERSONAL DOSIMETER

PM1610

This personal dosimeter is an excellent instrument for personnel, exposed to pulsed X-ray and gamma radiation

The instrument provides measurement of dose equivalent and dose equivalent rate of continuous and pulsed X-ray and gamma radiation, as well as time of dose accumulation

It incorporates audible, visual and vibration alarms to warn the user when preset dose/dose rate threshold levels are exceeded.

The instrument also has an additional audible signal for every registered gamma quantum.





Features

- Easy to use
- Measurement of pulse X-ray and gamma radiation with pulse duration 1 ms and up
- Wide dose rate and dose measurement range from background to 10 Sv/h and 12 Sv, respectively
- Two independent alarm thresholds for dose and dose rate
- Audible, visual and vibration alarms
- Wide energy range from 20 keV to 10 MeV
- PC communication via USB
- Shockproof hermetic case
- Light weight and small dimensions







USB

ALARM

LOCATION

MEASUREMENT

(€ ISO 9001)

Applications

- Medical professionals
- First responders
- Customs and border patrol
- Radiological and Radionuclide isotope laboratories
- Other professionals exposed to pulse radiation





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SPECIFICATIONS

Detector	Geiger-Mueller tube
Dose equivalent rate (DER) range	0.01 μSv/h - 12.0 Sv/h
DER threshold range	Two threshold levels within all
	measurement range
DE measurement range:	
- continuous photon radiation (current)	0.05 µSv to 10.0 Sv
- pulsed photon radiation (pulse duration not less than 1 ms)	10 µSv to 10.0 Sv
DE threshold range	Two threshold levels within all measurement range
Minimum pulse duration of X-ray and gamma radiation	1 ms at multiple exposure (more than
	10 pulses)
	10 ms at single exposure
Accuracy of DER measurement	±(15+0.0015/H+0.001 H)%
in the range 0,01 μSv/h - 0,1 Sv/h	where H is DER value in mSv/h
Accuracy of DE measurement	where it is back value in mov/ii
in the range 0,05 μSv - 10 Sv	±20%
Energy range	20 keV - 10 MeV
Energy response relative	- 60 % from 24 to 33 keV
to 0.662 MeV (¹³⁷ Cs)	- 40 % 33 to 48 keV ± 30 % 48 keV to 3 MeV
	± 50 % 3 to 10 MeV
Response time at discontinuous DER variation	5 s - at increase
(in compliance with IEC 61526)	
Features	- PC communication via USB
	- Audio alarm - Visual alarm
	- Visual diariii - Vibration alarm
	- Alligator clip on chain
Automatic data logging	1000 data points
Power supply	Built-in rechargeable battery,
	charging via USB
Rechargeable battery capacity	30 days
Low battery (partial and critical)	Indication on LCD
Operating conditions: - temperature range - pressure	-20+50°C 70-106,7 kPa
Case Protection Class	IP65
Dimensions Weight	57x58x17,5 mm
weign	70 g

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



