

Personal Dosimeters

PM1604 Personal Dosimeter



The PM1604A/PM1604B are tiny professional dosimeters that are capable to measure the personal dose equivalent (DE) Hp(10) and personal dose equivalent rate DER Hp(10) of both gamma and X-ray radiation from 1 mSv/h up to 10 Sv/h within wide energy range and due to these parameters they can be applied by the specialists of nuclear-industrial complex and those who deal with intensive photon radiation sources.

The dosimeters enable the users to preset two independent dose and dose rate alarm thresholds and when these thresholds are exceeded the dosimeters give audible alarm signals of various types. In this event the LCDs of the dosimeters immediately shows the value which threshold is exceeded thus making it possible to inform the user of being irradiated. In cases when the radiation intensity exceeds the upper limit of dose rate measurement the LCDs of the dosimeters show the warning sign "OL".

The dosimeters store up to 1000 histories of dose rate measurements, accumulated dose values, events and levels of the preset alarm thresholds exceeding in their non-volatile memory. This information can be transmitted to a PC through the IR-channel using the special software for further processing and analysis and for its presenting as correspondent databases within the scope of personnel dose control and accounting process.

Hermetic waterproof housing of modern design makes possible using of the units in severe environment and allow deactivation of dosimeters with soap grouts if needed.

Specifications:

Detector	Geiger-Muller tube
Dose rate measurement range	1 mSv/h - 5.0 Sv/h
- PM1603A	
Dose rate indication range	0.01 mSv/h - 6.50 Sv/h
- PM1603A	
Dose rate and dose threshold range (two thresholds)	all operating range low order unit
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Dose measurement range	1.0 mSv- 9.99 Sv
Dose accumulation time count range	1 - 9999 h
Dose Rate Accuracy (H is the dose equivalent rate, mSv/h)	$\pm (15 + 0.02/H + 0.003H) \%$
Dose Accuracy	$\pm 15\%$
Energy range	0.048 - 3 MeV
Energy response in the full energy range	$\pm 30\%$

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