



Innovating Radiation Detection Technologies Since 1992

CONTINUOUS AND PULSE
X-RAY AND GAMMA
RADIATION PERSONAL DOSIMETERS

PM1610 PM1610A
PM1610-01 PM1610A-01



These electronic personal dosimeters are excellent instruments for personnel, exposed to pulsed X-ray and gamma radiation.

The instruments provide measurement of dose equivalent and dose equivalent rate of continuous and pulsed X-ray and gamma radiation, as well as time of dose accumulation.

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

For reading data from dosimeters the special software Personal Dose Tracker is provided. It allows to record and monitor radiation exposure of users of dosimeters.

All versions have long life built-in rechargeable battery, charging via USB.

PM1610-01/PM1610A-01 versions can be used with different types of wireless readers in compliance with ISO 15693.



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
- 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

Applications

- Medical professionals
- First responders
- Customs and border patrol
- Radiological and Radionuclide isotope laboratories
- Professionals exposed

ALARM

LOCATION

MEASUREMENT



USB
RF-ID



CONTINUOUS AND PULSE X-RAY AND GAMMA RADIATION PERSONAL DOSIMETERS

PM1610 PM1610A
PM1610-01 PM1610A-01

SPECIFICATIONS

	PM1610	PM1610-01	PM1610A	PM1610A-01
Detector	Geiger-Mueller tube			
Dose equivalent rate (DER) range	0.01 μ Sv/h - 12.0 Sv/h			
DER threshold range	Two threshold levels within all measurement range			
DE measurement range: - continuous photon radiation (current) - pulsed photon radiation (pulse duration not less than 1	0.05 μ Sv to 10.0 Sv 10 μ Sv to 10.0 Sv	0.05 μ Sv to 20.0 Sv 10 μ Sv to 20.0 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 in the range 0.1 μ Sv/h - 10 Sv/h	$\pm(15+0.0015/?)\%$ where ? is DER value in mSv/h		$\pm(10+0.0015/? +0.0015?)\%$ where ? is DER value in mSv/h	
Accuracy of DE measurement in the range 0.05 μ Sv - 10 Sv	$\pm 20\%$			
Energy range	20 keV - 10 MeV			
Energy response relative to 0.662 MeV (¹³⁷ Cs)	- 60 % from 20 to 33 keV - 40 % 33 to 48 keV $\pm 30\%$ 48 keV to 3 MeV $\pm 50\%$ 3 to 10 MeV			
Communications via USB interface	+	+	+	+
Communications via ISO15693 interface	-	+	-	+
Features	- Audio alarm - Visual alarm - Vibration alarm - Holder with clip			
Automatic data logging	7500 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	58 58 18 mm			
Weight	70 g			

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



North and South America Polimaster Inc. 2200 Clarendon Blvd., Ste.1204 Arlington, VA 22201, USA Phone: +1 703 525 5075 Fax: +1 703 525 5079 info@polimaster.us	Europe Polimaster Europe UAB Ezero Str. 4, LT-13264 Didziasalis, Vilnius region, Republic of Lithuania Phone: +370 5 210 2323 Fax: +370 5 210 2322 polimaster@polimaster.lt	Asia, Africa, Australia and Oceania Polimaster Ltd. 112, Bogdanovich St., Minsk, 220040, Republic of Belarus Phone: +375 17 396 3675 +375 17 268 68 19 Fax: +375 17 260 2356 polimaster@polimaster.com	Japan Polimaster Pacific K. K. 3rd Floor #32 Arai Building, 3-9-14 Kudan-Minami, Chiyoda-ku Tokyo, Japan Phone: +81 03 6272 4280 Fax: +81 03 6272 4290 pacific@polimaster.jp
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