



POLIMASTER[®]
Radiation Detection Technologies



ELECTRONIC PERSONAL DOSIMETER

PoliSimeter™

PoliSimeter series of electronic personal dosimeters (EPDs) is a **next generation** of the well-known **PM1610 series** by Polimaster, which was a trusted solution on the market for nearly 15 years, with over 20,000 dosimeters sold. Building on the legacy of the PM1610, the PoliSimeter offers enhanced capabilities for extended measurement of **personal dose Hp(10)** and **dose rate $\dot{H}p(10)$** of both continuous and pulsed X-ray and gamma radiation. The PoliSimeter is designed to meet the latest industry requirements and features a USB-C port for convenient connectivity and data transfer.

Equipped with shockproof rubberized case, a bright high-contrast display with LED backlight, and large, easy-to-press buttons PoliSimeter is designed for convenient use, even with protective gloves on.

PoliSimeter ER model has an **extended range** of dose measurement **up to 20 Sv** for use in high-radiation environments, providing critical safety and monitoring functionality.

Applications

- First responders
- Industrial facilities
- Police and security
- Nuclear power plants
- Healthcare professionals
- Customs and border control
- Anyone working under the risk of X-ray and gamma radiation exposure

Features

- Small and lightweight
- Shockproof hermetic case
- USB-C communication with PC
- Audible, visual and vibration alarms
- Simple navigation with two large buttons
- Measurement of pulsed photon radiation
- Wide dose and dose rate measurement ranges
- Long-life rechargeable battery: 500 hours

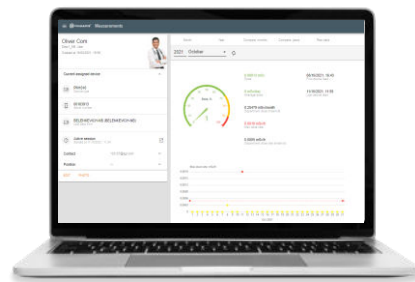


SPECIFICATIONS

Detector	Geiger-Mueller tube	
Types of radiation	X-ray and gamma radiation	
Measurement quantities	Hp(10); Ĥp(10)	
Dose measurement range	0.05 µSv to 10 Sv (up to 20 Sv for PoliSimeter ER)	
Dose rate measurement range	0.1 µSv/h to 10 Sv/h	
Energy range	20 keV to 10 MeV	
Combined energy and angular response (Ref. ¹³⁷ Cs)	-29 % to +67 % (48 keV to 1.25 MeV; 0° to 60°) <i>IEC 61526:2024 compliant</i>	
Accuracy (Ref. ¹³⁷ Cs at 300 µSv/h)	±5 %	
Dose rate linearity (0.1 µSv/h to 1 Sv/h)	-13 % to +18 % <i>IEC 61526:2024 compliant</i>	
Statistical fluctuations for dose and dose rate	<i>IEC 61526:2024 compliant</i>	
Pulsed radiation		
– pulse width	>1 ms	
– dose range	10 µSv to 10 Sv (up to 20 Sv for PoliSimeter ER)	
Memory	7500 events	
Alarms	visual, audible, vibration	
Communication	USB-C	
Power supply	built-in rechargeable battery	
Battery lifetime		
(average dose rate < 0.3 µSv/h, active alarms < 20 s / 24 h)	500 hours (typical)	
Ingress protection	IP65	
Drop test	1 m (concrete surface)	
Dimensions	≤ 58 × 58 × 20 mm	
Weight	≤ 70 g	
Operating conditions		
– ambient temperature	-20 °C to 50 °C	
– atmospheric pressure	84 kPa to 106.7 kPa	
– relative humidity	up to 98 % at 35 °C	



Holder with a clip for secure fastening



Compatible with PoliRead[®] Automated Personal Dosimetry System

OPTIONAL

Factory calibration approved under LST EN ISO/IEC 17025:2018 (LA NAB accreditation certificate No. LA.225-02) is available upon request.

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