



Innovating Radiation Detection Technologies Since 1992

CONTINUOUS AND PULSE X-RAY AND GAMMA RADIATION PERSONAL DOSIMETER **PMT610**



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 10 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

Applications

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



ALARM



LOCATION



MEASUREMENT

USB

CE **ISO 9001**



CONTINUOUS AND PULSE X-RAY AND GAMMA RADIATION PERSONAL DOSIMETER

PM1610

SPECIFICATIONS

| | |
|--|--|
| Detector | Geiger-Mueller tube |
| Dose equivalent rate (DER) range | 0,1 μSv/h - 10 Sv/h |
| DER threshold range | Two threshold levels within all measurement range |
| Dose equivalent (DE) range | 0,05 μSv - 10 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 0,01 μSv/h - 0,1 Sv/h | ±(15+0.0015/H+0.001 H)% where H is DER value in mSv/h |
| Accuracy of DE measurement in the range 0,05 μSv - 10 Sv | ±20% |
| Energy range | 20 keV - 10 MeV |
| Energy response relative to 0.662 MeV (¹³⁷Cs) | 50% from 20 keV to 30 keV 25% from 30 keV to 3 MeV 50% from 3 MeV to 10 MeV |
| Response time at discontinuous DER variation (in compliance with IEC 61526) | 5 s - at increase |
| Features | - PC communication via USB - Audio alarm - Visual alarm - 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...+60°C 70-106,7 kPa |
| Case Protection Class | IP65 |
| Dimensions | 57x58x17,5 mm |
| Weight | 70 g |

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

Sales North and South America

Polimaster Inc.
 2300 Clarendon Boulevard, Suite 708
 Arlington VA, 22201, USA
 Phone: +1 703 525-5075
 Fax: +1 703 525-5079
E-mail: info@polimaster.us

Sales Europe

Polimaster Instruments UAB
 125, Kalvariju St., 3P3/p building,
 Vilnius, LT-08221, Republic of Lithuania
 Phone: +370 5 210 23 23
 Fax: +370 5 210 23 22
E-mail: polimaster@polimaster.lt

Sales Asia, Africa, Australia and Oceania

Polimaster Ltd.
 112, Bogdanovich St.,
 Minsk, 220040, Republic of Belarus
 Phone: +375 17 217 70 80
 Fax: +375 17 217 70 81
E-mail: polimaster@polimaster.com