



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

<b>Detector</b>	<b>Geiger-Mueller tube</b>
<b>Dose equivalent rate (DER) range</b>	<b>0,1 μSv/h - 10 Sv/h</b>
<b>DER threshold range</b>	<b>Two threshold levels within all measurement range</b>
<b>Dose equivalent (DE) range</b>	<b>0,05 μSv - 10 Sv</b>
<b>DE threshold range</b>	<b>Two threshold levels within all measurement range</b>
<b>Minimum pulse duration of X-ray and gamma radiation</b>	<b>1 ms at multiple exposure (more than 10 pulses) 10 ms at single exposure</b>
<b>Accuracy of DER measurement in the range 0,01 μSv/h - 0,1 Sv/h</b>	<b>±(15+0.0015/H+0.001 H)% where H is DER value in mSv/h</b>
<b>Accuracy of DE measurement in the range 0,05 μSv - 10 Sv</b>	<b>±20%</b>
<b>Energy range</b>	<b>20 keV - 10 MeV</b>
<b>Energy response relative to 0.662 MeV (<sup>137</sup>Cs)</b>	<b>50% from 20 keV to 30 keV 25% from 30 keV to 3 MeV 50% from 3 MeV to 10 MeV</b>
<b>Response time at discontinuous DER variation (in compliance with IEC 61526)</b>	<b>5 s - at increase</b>
<b>Features</b>	<b>- PC communication via USB - Audio alarm - Visual alarm - Vibration alarm - Alligator clip on chain</b>
<b>Automatic data logging</b>	<b>1000 data points</b>
<b>Power supply</b>	<b>Built-in rechargeable battery, charging via USB</b>
<b>Rechargeable battery capacity</b>	<b>30 days</b>
<b>Low battery (partial and critical)</b>	<b>Indication on LCD</b>
<b>Operating conditions: - temperature range - pressure</b>	<b>-20...+60°C 70-106,7 kPa</b>
<b>Case Protection Class</b>	<b>IP65</b>
<b>Dimensions</b>	<b>57x58x17,5 mm</b>
<b>Weight</b>	<b>70 g</b>

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