



**POLIMASTER**<sup>®</sup>  
Radiation Detection Technologies



## PERSONAL RADIATION MONITOR / DOSIMETER

## PM1605BT

**PM1605BT** electronic dosimeter is equipped with a Geiger-Mueller counter for extended measurement of the **ambient dose equivalent** and **ambient dose equivalent rate**. Instruments are able to search, detect and locate radioactive sources, alert the user with audible, visual and vibration alarms, transmit stored data to a PC or smartphone.

The dosimeter is designed to withstand **extreme environmental conditions** such as limited visibility, raised noise, high temperatures, exposure to sea water, shock and falls. Control panel with two big buttons allows the using of protective gloves while operating the instrument. Instruments are recommended for personal radiation protection of first responders, HAZMAT teams, civil defense, firefighters and the other divisions who deal with radiological emergencies.

PM1605BT is compatible with Polismart<sup>®</sup> Android app via Bluetooth, that allows to monitor the instrument readings in real-time, download and transfer the history and adjust the instrument settings.

### Applications

- Firefighters
- Paramedics
- First responders
- Police and security
- Emergency services
- HAZMAT and CBRNe teams
- Customs and border control

### Features

- IP68 case for operation in extreme environmental conditions
- Large buttons suitable for use with protective gloves
- Operating temperature from  $-30\text{ }^{\circ}\text{C}$  to  $65\text{ }^{\circ}\text{C}$
- Ambient dose equivalent rate up to  $10\text{ Sv/h}$
- Ambient dose equivalent up to  $100\text{ Sv}$
- Audible, visual and vibration alarms
- Bluetooth and USB communication
- Battery lifetime at least 9 months
- Large and easy-to-read LCD



## SPECIFICATIONS

<b>Detector</b>	Geiger-Mueller tube	
<b>Dose rate measurement range</b>	0.1 $\mu$ Sv/h to 10 Sv/h	
<b>Dose rate measurement accuracy</b>	$\pm(15 + 0.0015/\dot{H}) \%$ , where $\dot{H}$ is the measured dose rate value in mSv/h	
<b>Dose measurement range</b>	1 $\mu$ Sv to 100 Sv	
<b>Dose measurement accuracy</b>	$\pm 15 \%$	
<b>Energy range</b>	48 keV to 3 MeV	
<b>Energy response relative to 0.662 MeV (<math>^{137}\text{Cs}</math>)</b>	$\pm 30 \%$	
<b>Memory</b>	2000 events	<b>Ingress protection</b> IP68
<b>Alarms</b>	visual, audible, vibration	<b>Drop test</b> 1.5 m
<b>Communication</b>	USB Bluetooth 4.0 (FCC ID: QOQBLE112; IC: 5123A-BGTBLE112)	<b>Dimensions</b> $\leq 114 \times 62 \times 20$ mm $\leq 114 \times 62 \times 36$ mm (with clip)
<b>Power supply</b>	alkaline AA battery; external via USB	<b>Weight</b> $\leq 250$ g
<b>Battery lifetime</b> (average dose rate < 0.3 $\mu$ Sv/h, active alarms < 20 s / 24 h)	$\geq 9$ months	<b>Operating conditions</b> – ambient temperature $-30$ °C to 65 °C – atmospheric pressure 84 kPa to 106.7 kPa – relative humidity up to 98 % at 40 °C



Removable clip for secure fastening to a belt or a pocket



Free Personal Dose Tracker PC Software for collecting, processing and reporting the dose data from the dosimeters



Highly visible LED lights on the front and top panels for alarms indication

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