



POLIMASTER[®]
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 using 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[®] iOS and Android app** via Bluetooth, that allows to monitor the instrument readings in real-time, download the measurement history and adjust the dose and dose rate thresholds.

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 °C to 65 °C
- Ambient dose equivalent rate up to 10 Sv/h
- Ambient dose equivalent up to 100 Sv
- Audible, visual and vibration alarms
- Bluetooth and USB communication
- Battery lifetime at least 9 months
- Large and easy-to-read LCD



SPECIFICATIONS

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



PM1605 Software
for monitoring readings in real-time
on a computer,
downloading operating history and
adjusting dosimeter settings



Removable clip
for secure fastening
to a belt or a pocket



Polimaster[®] iOS and Android App
for monitoring readings in real-time
on a smartphone,
downloading measurement history and
changing dosimeter thresholds

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