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® 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 °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
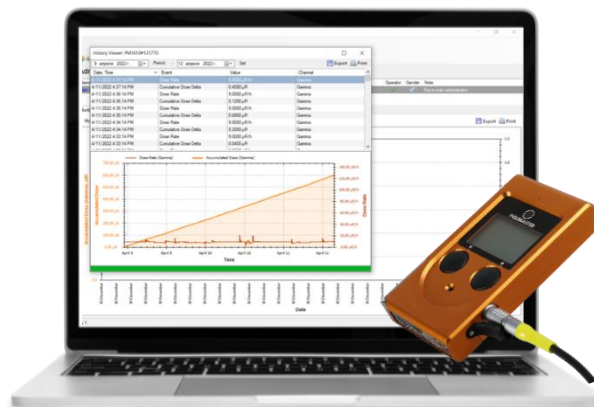- Battery lifetime at least 9 months
- Large and easy-to-read LCD

SPECIFICATIONS

Detector	Geiger-Mueller tube
Dose rate measurement range	0.1 µSv/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	±15 %
Energy range	48 keV to 3 MeV
Energy response relative to 0.662 MeV (^{137}Cs)	±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**	≤ 114 × 62 × 20 mm ≤ 114 × 62 × 36 mm (with clip)
Power supply	alkaline AA battery; external via USB	**Weight**	≤ 250 g
Battery lifetime (average dose rate < 0.3 µSv/h, active alarms < 20 s / 24 h)	≥ 9 months	**Operating conditions** − ambient temperature − atmospheric pressure − relative humidity	 −30 °C to 65 °C 84 kPa to 106.7 kPa 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