POLIMASTER®
Radiation Detection Technologies

# PERSONAL RADIATION DETECTOR/DOSIMETER

# PM1703MO-II BT

**PM1703-II series** of personal radiation detectors (PRDs) are extremely sensitive and robust devices that detect and locate even trace amounts of radioactive materials.
Equipped with a clip for multiple wearing options and easy to operate even for non-specialists, PRDs became the perfect fit as Radiation Pagers for public security agencies, including border control, rescue teams, police and anti-terrorist units that need to quickly search for radioactive materials in public places.
While ensuring high-performance detection for any scenario, PM1703-II PRD provides confidence in personal safety by continuously monitoring the measured dose equivalent rate and alerting the user with visual, audible and vibration alarms when the pre-set radiation thresholds are exceeded.

**PM1703MO-II BT model** is a **gamma-only** PRD equipped with a high-sensitive scintillator and a Geiger-Mueller counter for extended measurement of the **personal dose rate up to 200 mSv/h** and **personal dose up to 10 Sv**. This model also has a Bluetooth module that enables communication with smartphones for advanced operation via the free Polismart® App.

## Applications

- Customs and border control
- HAZMAT and CBRNe teams
- Steel and recycling industry
- Waste management sites
- Counter terrorism teams
- Homeland security
- First responders
- Special forces
- Public safety

## Features

- Personal dose accumulation up to 10 Sv
- Extended dose rate measurement up to 200 mSv/h
- NORM-suppression algorithm for differentiating color-coded alarms triggered by natural or man-made radiation materials
- Dedicated 0-9 scale mode with unitless dose rate indication allowing for ease of use and minimal training
- Free Polismart® iOS and Android app for advanced operation
- Long-life alkaline or rechargeable battery
- Audible, visual and vibration alarms
- Bluetooth and USB communication

γ X-RAY IP65 ER

# PM1703MO-II BT
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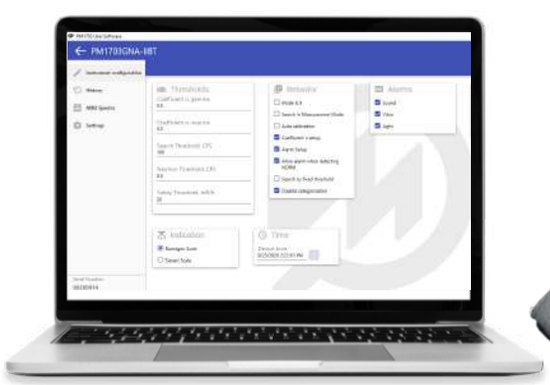
## SPECIFICATIONS

| | | |
|---|---|---|
| **Detector** | | CsI(Tl) SiPM; GM counter |
| **Gamma sensitivity** | for $^{137}$Cs | 100 cps per µSv/h |
| | for $^{241}$Am | 500 cps per µSv/h |
| **Energy range** | gamma (search) | 33 keV to 3.0 MeV |
| | gamma (measurement) | 60 keV to 1.33 MeV |
| **Dose rate measurement range** | | 0.1 µSv/h to 200 mSv/h |
| **Dose rate measurement accuracy** | | ±(20+0.0025/Ḣ) %, where Ḣ is the measured dose rate value in mSv/h |
| **Dose measurement range** | | 0.1 µSv to 10 Sv |
| **Dose measurement accuracy** | | ±20 % |

| | |
|---|---|
| **Response time** | 0.25 s |
| **Memory** | 2000 events |
| **Alarms** | visual, audible, vibration |
| **Communication** | USB;<br>Bluetooth 4.0<br>(FCC ID: QOQBLE112, IC: 5123A-BGTBLE112) |
| **Power supply** | one AA (LR6) alkaline or rechargeable battery |
| **Battery lifetime** | |
| – Bluetooth off | ≥ 1000 hours |
| – Bluetooth on | ≥ 500 hours |

| | |
|---|---|
| **Ingress protection** | IP65 |
| **Drop test** | 0.7 m |
| **Dimensions** | 87 × 72 × 32 mm |
| **Weight** | ≤ 200 g |
| **Operating conditions** | |
| – ambient temperature | –40 °C to 50 °C |
| – atmospheric pressure | 84 kPa to 106.7 kPa |
| – relative humidity | up to 98 % at 35 °C |
| **Standards compliance** | ANSI N42.32-2016, IEC 62401:2017 |

**Free Polismart iOS and Android App for advanced operation**




**PM1703 Desktop Software for setting alarms and thresholds, accessing and processing the operation history**

**Optional telescopic extension pole for remote operation and surveys in hard-to-reach places**

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