



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



PM1703MO-II BT

PERSONAL RADIATION DETECTOR / DOSIMETER

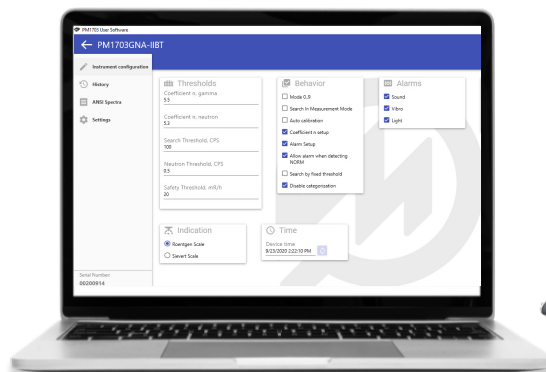


SPECIFICATIONS

Detector	CsI(Tl) SiPM; GM counter	
Gamma sensitivity	for ¹³⁷ Cs	100 cps per μ Sv/h
	for ²⁴¹ Am	500 cps per μ Sv/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 μ Sv/h to 200 mSv/h	
Dose rate measurement accuracy	$\pm(20+0.0025/\dot{H}) \%$, where \dot{H} is the measured dose rate value in mSv/h	
Dose measurement range	0.1 μ Sv to 10 Sv	
Dose measurement accuracy	$\pm 20 \%$	
Response time	0.25 s	
Memory	2000 events	
Alarms	visual, audible, vibration	
Communication	USB;	
	Bluetooth 4.0 (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**

Polimaster Inc.
44873 Falcon Place, Suite 128
Sterling,
VA 20166, USA
phone: +1 703 525 5075
fax: +1 703 525 5079
info@polimaster.us

Polimaster Europe UAB
Ezero str. 4, Didziasalio k.,
Nemezio sen., LT-13264,
Vilnius district, Lithuania
phone: +370 5 210 2323
fax: +370 5 210 2324
info@polimaster.com

Polimaster Japan Co., Ltd.
AUBE2 5-177 Kuratsuki,
Kanazawa, Ishikawa Prefecture
920-8203 Japan
phone: + 81 076 201 8623
fax: + 81 076 201 8624
pacific@polimaster.jp