



POLIMASTER[®]
Radiation Detection Technologies



PERSONAL RADIATION DETECTOR / DOSIMETER

PM1703GNA-II MBT

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.

PM1703GNA-II MBT model is a **gamma-neutron** 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
- Free Polismart[®] iOS and Android app for advanced operation
- Dedicated 0-9 scale mode with unitless dose rate indication
- Operation in extreme temperatures from -40 °C to 50 °C
- ANSI N42.32-2016 and IEC 62401:2017 compliance
- Long-life alkaline or rechargeable battery
- Audible, visual and vibration alarms
- Bluetooth and USB communication



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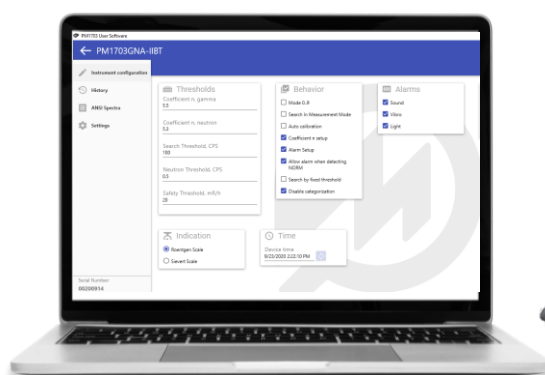


SPECIFICATIONS

Detector	gamma neutron	CsI(Tl) SiPM; GM counter ⁶ LiF/ZnS
Gamma sensitivity	for ¹³⁷ Cs for ²⁴¹ Am	100 cps per μSv/h 500 cps per μSv/h
Neutron sensitivity	for Pu-α-Be for thermal neutrons	0.035 counts × cm ² /neutron 1.2 counts × cm ² /neutron
Energy range	gamma (search) gamma (measurement) neutron	33 keV to 3.0 MeV 60 keV to 1.33 MeV thermal to 14.0 MeV
Count rate indication range	gamma neutron	1 to 9999 cps 1 to 999 cps
Dose rate measurement range		0.1 μSv/h to 200 mSv/h
Dose rate measurement accuracy		±30 %
Dose measurement range		0.1 μSv to 10 Sv
Dose measurement accuracy		±30 %
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 ≥ 800 hours – Bluetooth on ≥ 400 hours	
Ingress protection	IP65	
Drop test	1.5 m	
Dimensions	99 × 75 × 36 mm	
Weight	≤ 240 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 Polimart®
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.
45645 Willowpond Plaza,
Suite 100, Sterling, VA,
20164, 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