POLIMASTER®

Radiation Detection Technologies

PERSONAL RADIATION DETECTOR PM1703GNA-II

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 models are **gamma-neutron** PRDs equipped with a high-sensitive scintillator for measurement of the **personal dose rate** up to **300 µSv/h**. **PM1703GNA–II BT** in addition 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

- 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
- USB and Bluetooth (PM1703GNA-II BT) communication
- ANSI N42.32-2016 and IEC 62401:2017 compliance
- Long-life alkaline or rechargeable battery
- Audible, visual and vibration alarms
- Shockproof hermetic case IP65

γ X-RAY n IP65

PM1703GNA-II, PM1703GNA-II BT
PERSONAL RADIATION DETECTOR

POLIMASTER®
Radiation Detection Technologies

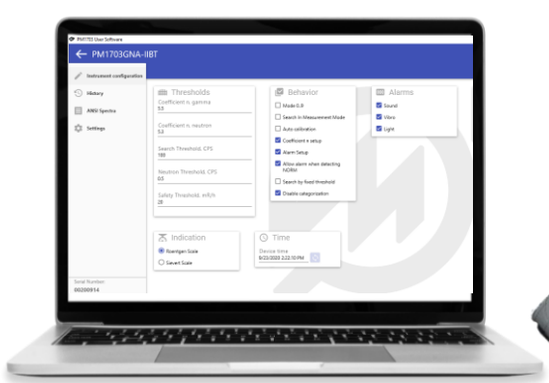
SPECIFICATIONS

Detector	gamma	CsI(Tl) SiPM
	neutron	^{6}LiF/ZnS
Gamma sensitivity	for ^{137}Cs	100 cps per µSv/h
	for ^{241}Am	500 cps per µSv/h
Neutron sensitivity	for Pu-α-Be	0.035 counts × cm^2/neutron
	for thermal neutrons	1.2 counts × cm^2/neutron
Energy range	gamma (search)	33 keV to 3.0 MeV
	neutron	thermal to 14.0 MeV
Count rate indication range	gamma	1 to 9999 cps
	neutron	1 to 999 cps
Dose rate measurement range		0.1 µSv/h to 300 µSv/h
Dose rate measurement accuracy		±30 %

Response time	0.25 s
Memory	2000 events
Alarms	visual, audible, vibration
Communication	USB; Bluetooth 4.0 (PM1703GNA-IIBT) (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	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.
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