POLIMASTER®

Innovating Radiation Detection Technologies Since 1992
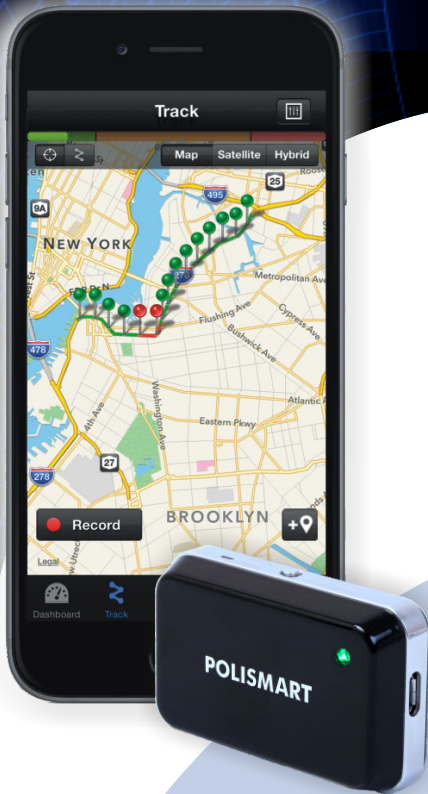
ELECTRONIC PERSONAL DOSIMETER

PM1904A POLISMART® II

Electronic Personal Dosimeter PM1904A POLISMART®II is designed to continuously monitor and measure ionizing radiation from gamma emitting radiation sources.

Small size device can be used independently or as an efficient add-on for iOS® and Android™-based mobile devices.

PM1904A alerts the user with a flashing light signal and sound alarm about the impending radiation source or that a critical dose was accumulated.

Autonomous operation mode

- Continuous measurement of personal dose equivalent (DE) and personal dose equivalent rate (DER)
- LED and sound alarm when
  - DER threshold is exceeded
  - DE threshold is exceeded
- Low battery indication

Mobile device connection mode

- Exchange data with mobile devices in real time via Bluetooth 4.0 LE wireless connection
- POLISMART® II mobile apps for iOS (iPod®, iPhone®, iPad®) and for Android™ mobile devices (free download is available from the App Store℠ or Google Play™)
- DER and DE instant read-out
- DER and DE threshold settings
- System of units – Imperial (yard, mile) or Metric (meter, kilometer)
- Units – Sv (Sievert) or R (Roentgen)
- Geo-linked points and trackings with current recording of radiation background measurement values
- History of measurements
- Integration into Nuclear Protection Network System NPNET® and Personal Dose Tracker®
- Access to the radiological geo information shared by other users (Facebook, Twitter, NPNET)
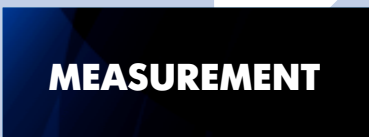
Features

- Trendy design
- Weight 30 g
- Use on a lanyard or PVC badge with a clip
- Built-in rechargeable battery charged via USB
- Operating time 2000h

Application

- Indoor and outdoor use
- People who need to monitor radiation level and control personal exposure to radiation

Download on the **App Store**

ANDROID APP ON **Google play**

ALARM

MEASUREMENT

Geo information system NPNET®

Bluetooth USB

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PERSONAL DOSIMETER
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SPECIFICATIONS

Detector	Geiger-Muller tube
DER Indication range	0.01 µSv/h − 120 mSv/h (1 µR/h − 12 R/h)
DER Accuracy	±20 % in the range 1.0 µSv/h − 100 mSv/h (0.1 mR/h − 10 R/h)
DE Measurement range	1 µSv − 10 Sv (0.1 mR − 1000 R)
DE Accuracy	± 20%
Energy range	0.06 - 1.33 MeV
Energy response relative to 0.662 MeV (^{137}Cs) within the whole energy range	± 30%
Alarm type	LED indication, sound
Power	Built-in rechargeable battery
Charge time	Up to 4 hours
Quantity of events in the internal PM1904A history	2000
Continuous operation (from a fully charged battery): - at average background < 0.3 µSv/h - with Bluetooth connection	2000 hours 300 hours
Communication: - with PC - with mobile devices	USB Bluetooth 4.0 LE
Environmental conditions: - temperature range - humidity	from -20 to +50 °C up to 95 % at +30 °C
Ingress protection rate	IP30
Drop Test	1.5 m onto concrete surface
Dimensions	59 x 37 x 17 mm
Weight	30 g

Design and specifications of the device can be changed without further notice.

C€   ISO 9001