



**RADIATION IS EVERYWHERE
WE ARE THERE TO PROTECT YOU**

**PRODUCT
PORTFOLIO**



POLIMASTER®

Polimaster is an international group of companies with over 30 years of experience in delivering radiation detection and monitoring solutions.



 **2 production sites in the US and the EU**

 **5 service centers all over the world**

 **> 60 dealers and distributors**

 **> 80 sales countries**


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ELECTRONIC DOSIMETERS

Polimaster dosimeters are reliable devices that provide critical data to ensure radiation safety in various settings. Our compact, lightweight and easy-to-use dosimeters offer quick and accurate radiation measurements to ensure the safety of professionals at risk of exposure in medicine, security and nuclear industry sectors. Each dosimeter has unique advantages to meet the specific needs of different applications and ensure the safety of personnel.



PM1610/A



PM1610B



PM1605BT



RadFlash®

Type	personal	personal	ambient	personal
Dose rate range	0.1 μ Sv/h to 10 Sv/h	0.1 μ Sv/h to 10 Sv/h	0.1 μ Sv/h to 10 Sv/h	0.1 μ Sv/h to 1 Sv/h
Dose range	0.05 μ Sv to 10 Sv (to 20 Sv PM1610A)	0.05 μ Sv to 20 Sv	1 μ Sv to 100 Sv	1 μ Sv to 10 Sv
Energy range	20 keV to 10 MeV	20 keV to 10 MeV	48 keV to 3 MeV	15 keV to 1.5 MeV
Pulsed X-ray	✓	✓	✗	✓
Ingress protection	IP65	IP65	IP68	IP67
Weight	≤ 70 g	≤ 90 g	≤ 250 g	≤ 50 g
Temperature	-20 °C to 50 °C	-20 °C to 50 °C	-30 °C to 50 °C	-10 °C to 50 °C
PC communication	USB Type A	USB Type A	USB, Bluetooth 4.0	Bluetooth 4.0
Battery	rechargeable battery	AAA (LR03) battery	alkaline AA battery	rechargeable (wireless charging)
Battery lifetime	≥ 650 hours	≥ 480 hours	≥ 6570 hours	≥ 1460 hours



Holder with a clip for secure fastening



Holder with a clip for secure fastening



IP68 case and highly visible LEDs for harsh environments



Removable clip for secure fastening to a belt or a pocket



Three clips and a wristband for different wearing options



Can be integrated into Real-Time Dosimetry Systems



Direct micro-USB connection for easy charging and data transfer



Easily replaceable AAA battery



Compatible with PM530 Dosimetry System (Hardware and Software Readers)



Compatible with free Polismart Android App



Compatible with free Polismart iOS and Android App



Compatible with PM530 Dosimetry System (Software Reader)

**FROM ROUTINE
TO EMERGENCY
DOSIMETRY**

PERSONAL RADIATION DETECTORS

GAMMA-NEUTRON PRD



GAMMA-ONLY PRD



PM1703GNA-II/BT

PM1703GNA-II MBT

PM1703MO-II BT

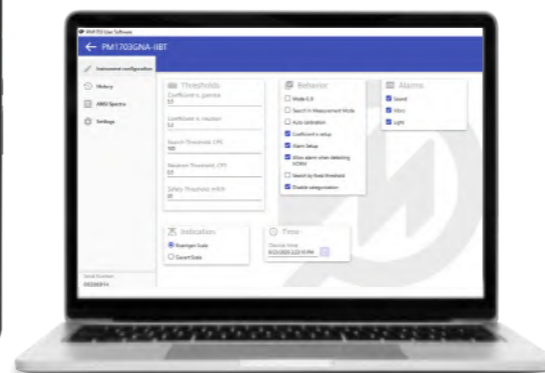
PM1703MA-II/BT

Detector	gamma (CsI(Tl) SiPM) neutron (⁶ LiF/ZnS)	gamma (CsI(Tl) SiPM, GM counter) neutron (⁶ LiF/ZnS)	gamma (CsI(Tl), GM counter)	gamma (CsI(Tl))
Dose rate range	0.1 μSv/h to 300 μSv/h	0.1 μSv/h to 200 mSv/h	0.1 μSv/h to 200 mSv/h	0.1 μSv/h to 300 μSv/h
Dose range	×	0.1 μSv to 10 Sv	1 μSv to 10 Sv	×
Energy range	33 keV to 3.0 MeV (gamma search) 60 keV to 1.33 MeV (gamma measurement) thermal to 14.0 MeV (neutron)		33 keV to 3 MeV (search) 60 keV to 1.33 MeV (measurement)	33 keV to 3 MeV (search)
Gamma sensitivity	100 cps per μSv/h (¹³⁷ Cs) 500 cps per μSv/h (²⁴¹ Am)		100 cps per μSv/h (¹³⁷ Cs) 500 cps per μSv/h (²⁴¹ Am)	100 cps per μSv/h (¹³⁷ Cs) 500 cps per μSv/h (²⁴¹ Am)
Neutron sensitivity	0.035 counts×cm ² /neutron (Pu-α-Be) 1.2 counts×cm ² /neutron (thermal)		×	×
Count rate indication	1 to 9999 cps (gamma) 1 to 999 cps (neutron)		×	1 to 9999 cps (gamma)
NORM differentiation	✓	✓	✓	✓
Ingress protection	IP65	IP65	IP65	IP65
Weight	≤ 200 g	≤ 240 g	≤ 200 g	≤ 200 g
Temperature	-40 °C to 50 °C	-40 °C to 50 °C	-40 °C to 50 °C	-40 °C to 50 °C
PC communication	USB, Bluetooth 4.0 (PM1703GNA-II BT)	USB, Bluetooth 4.0	USB, Bluetooth 4.0	USB, Bluetooth 4.0 (PM1703MA-II BT)
Battery lifetime	≥ 800 hours	≥ 800 hours	≥ 1000 hours	≥ 1000 hours

DETECT AND LOCATE EVEN TRACE AMOUNTS OF RADIONUCLIDES



Models with Bluetooth are compatible with Polismart iOS and Android App



Designated User Software for setting alarms and thresholds, accessing and processing the operating history



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



Optional holster for protecting the PRD from damage



Powered by one easily replaceable alkaline or rechargeable battery



HAND-HELD RADIATION MONITORS

PM1401K-3 series of HHRMs comprises a wide range of all-in-one devices for radiation detection, dose rate and contamination measurements, spectrometry and radionuclide identification. Depending on the task at hand, each model has unique capabilities and features for emergency response, border control, security and environmental monitoring. With its compact and durable design, the PM1401K-3 series is a reliable choice for any application.



	PM1401K-3M	PM1401K-3E	PM1401K-3P
Detector	gamma (CsI(Tl), GM counter)	gamma (CsI(Tl), GM counter) neutron (⁶ LiF/ZnS)	gamma (CsI(Tl), GM counter) neutron (⁶ LiF/ZnS)
Dose rate range	0.1 μSv/h to 100 mSv/h	0.1 μSv/h to 100 mSv/h	0.1 μSv/h to 100 mSv/h
Energy range	25 keV to 3 MeV (γ spectroscopy) 15 keV to 15 MeV (γ measurement)	25 keV to 3 MeV (γ spectroscopy) 15 keV to 15 MeV (γ measurement) thermal to 14 MeV (neutron)	25 keV to 3 MeV (γ spectroscopy) 15 keV to 15 MeV (γ measurement) thermal to 14 MeV (neutron)
Gamma sensitivity	200 cps per μSv/h (¹³⁷ Cs) 2000 cps per μSv/h (²⁴¹ Am)	200 cps per μSv/h (¹³⁷ Cs) 2000 cps per μSv/h (²⁴¹ Am)	200 cps per μSv/h (¹³⁷ Cs) 2000 cps per μSv/h (²⁴¹ Am)
Neutron sensitivity	×	0.15 cps·cm ² (Pu-α-Be) 5.0 cps·cm ² (thermal neutrons)	0.15 cps·cm ² (Pu-α-Be) 5.0 cps·cm ² (thermal neutrons)
Identification	✓	×	✓
Spectra acquisition	✓	✓	✓
αβ measurement	✓	✓	✓
¹³⁷ Cs activity measurement	✓	×	✓
Ingress protection	IP65	IP65	IP65
Weight	≤ 820 g	≤ 820 g	≤ 820 g
Temperature	-20 °C to 50 °C	-20 °C to 50 °C	-20 °C to 50 °C
PC communication	USB	USB	USB
Battery	2 AA alkaline or NiMH batteries	2 AA alkaline or NiMH batteries	2 AA alkaline or NiMH batteries
Battery lifetime	≥ 300 hours	≥ 300 hours	≥ 300 hours



User Software for adjusting settings, downloading the operating history and analyzing the gamma spectra



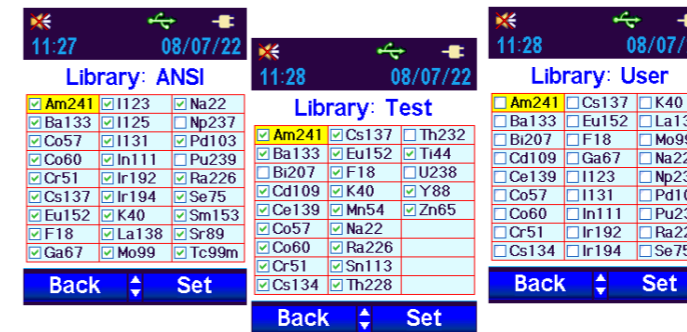
Telescopic extension pole for remote operation and surveys in hard-to-reach areas



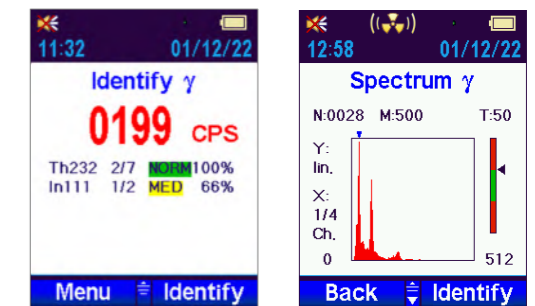
Set of accessories for ¹³⁷Cs activity and αβ flux density measurement (for K-3M, K-3P models)



Neutron moderator for increasing sensitivity to neutron radiation (for K-3E, K-3P models)



3 extensible and editable libraries (ANSI N42.34 compliant, IND, MED, NORM, SNM categorization)



Fast and reliable identification based on analysis of acquired spectra

**ALL-IN-ONE TOOL
FOR ANY RADIATION
CONTROL TASK**

BACKPACK RADIATION DETECTORS

MOBILE DETECTION SYSTEM

Detector	gamma (CsI(Tl), GM counter) neutron (⁶ LiF/ZnS)
Dose rate range	0.05 μSv/h to 30 μSv/h
Energy range	30 keV to 3 MeV (gamma) thermal to 15 MeV (neutron)
Gamma sensitivity	2100 cps per μSv/h (¹³⁷ Cs) 15000 cps per μSv/h (²⁴¹ Am)
Neutron sensitivity	75 cps·cm ² (for ²⁵² Cf in 4 cm HDPE capsule at 1.5 m)
Identification	✓ (identification time < 1 min)
Spectra acquisition	✓
Ingress protection	IP67
Weight (worn part)	≤ 6 kg (G), ≤ 10 kg (GN)
Temperature	-20 °C to 50 °C
PC communication	USB Type C, Bluetooth
Battery	Li-ion battery, 6400 mAh, 3.7 V
Battery lifetime	≥ 72 hours



PoliPack™ BRD

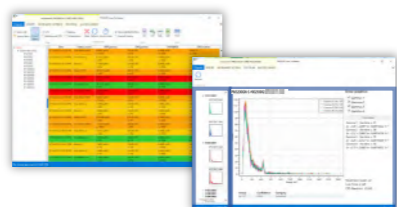
- PoliPack G – gamma-only
- PoliPack G-S – gamma-only spectroscopic
- PoliPack GN – gamma-neutron
- PoliPack GN-S – gamma-neutron spectroscopic



Specially designed durable backpack with straps for secure fastening, comfort wearing and load distribution



Multidetector design for increased stability and reliable results even in case of a detector failure



Desktop Software for adjusting instrument settings, downloading the operating history and analyzing the gamma spectra



Polismart® iOS and Android app for wireless BRD operation allowing to monitor the measurements in real time, record the GPS-referenced waypoints, export and transfer the records



Optional extended range GM detector for dose rate measurement up to 10 Sv/h



PoliGate™ Mobile

gamma (2 scintillators,
each 11000 cm³)
neutron (¹⁰B/ZnS(Ag))

20 keV to 3 MeV (gamma)

2250 cps per nSv/h (¹³⁷Cs)
700 cps per nSv/h (²⁴¹Am)

1.28 · 10⁻³ counts/neutron
(²⁵²Cf)

-30 °C to 50 °C

Ethernet

Vehicle power, portable
generator, backup
rechargeable battery

8 hours

Detector

Energy range

Gamma sensitivity
(at 1.5 m)

Neutron sensitivity
(at 1.5 m)

Temperature

PC communication

Power supply

Battery lifetime



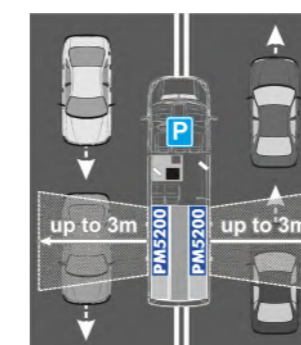
MDS is equipped with Radiation Portal Monitors for prompt detection, and additionally with PM1703 PRD and PM1401K-3 HHRM for localization and identification of detected sources



Operators' compartment consisting of MDS control panel for switching monitors, cameras, charging, etc., a laptop with RPM software, a wall-mounted alarming module and multiple supplementary equipment



Video surveillance system for recording the objects that caused the alarm



Up to 3x2.5 m control zone allowing to scan objects at 8 km/h speed

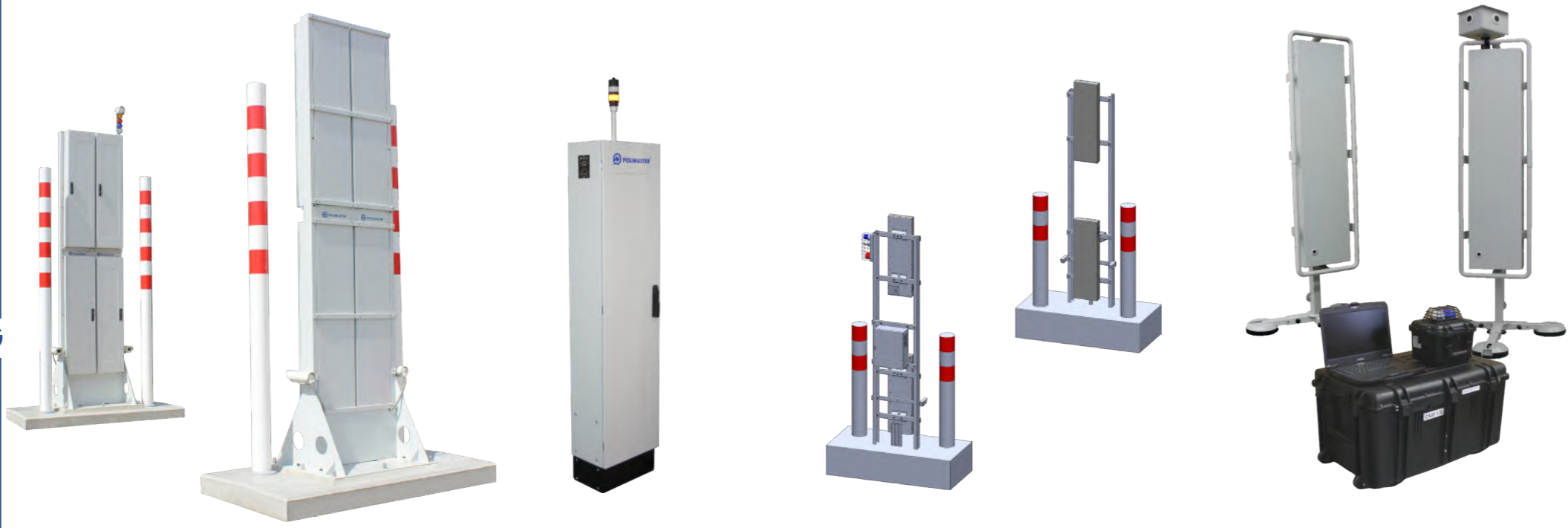
DETECTION AND IDENTIFICATION ON-THE-GO

STAY AHEAD OF THREATS WHILE ON PATROL

RADIATION PORTAL MONITORS

RPMs are an essential tool for safeguarding against the potential threat of nuclear materials entering secure areas and can be used both at permanent and temporary checkpoints for screening trains, trucks, vehicles, cargo containers, luggage and people. Polimaster RPMs are easy to operate and maintain, require minimal training and are supplied with user-friendly software that provides real-time data and alarms.

	RPM PoliGate™ VEHICLE	RPM PoliGate™ PEDESTRIAN	RPM PoliGate™ LIGHT	RPM PoliGate™ DEPLOYABLE
Type	Fixed mount	Fixed mount	Fixed mount	Portable
Objects of control	Trains, trucks, vehicles, cargo, luggage, people	Luggage, people	Vehicles, cargo, luggage, people	Vehicles, cargo, luggage, people
Control zone height	up to 4.5 m	up to 2 m	up to 4.5 m	up to 2 m
Control zone width	up to 6 m	up to 1.5 m	up to 6 m	up to 3 m
Scanned objects speed	up to 20 km/h	up to 5 km/h	up to 20 km/h	up to 5 km/h
Gamma detector	Organic plastic scintillator (11 l)	Organic plastic scintillator (11 l for gamma-only and 6.6 l for gamma-neutron models)	Organic plastic scintillator (8.8 l)	Organic plastic scintillator (5.3 l)
Neutron detector (optional)	¹⁰ B/ZnS(Ag)	¹⁰ B/ZnS(Ag)	×	×
Energy range	20 keV to 3 MeV	20 keV to 3 MeV	20 keV to 3 MeV	30 keV to 3 MeV
Gamma sensitivity (²⁴¹ Am)	241 cps per nSv/h	241/145 cps per nSv/h (G/GN models)	121 cps per nSv/h	78 cps per nSv/h
Gamma sensitivity (¹³⁷ Cs)	57 cps per nSv/h	57/35 cps per nSv/h (G/GN models)	43 cps per nSv/h	26 cps per nSv/h
Gamma sensitivity (⁶⁰ Co)	27 cps per nSv/h	27/16 cps per nSv/h (G/GN models)	22 cps per nSv/h	12 cps per nSv/h
Ingress protection	IP65	IP65	IP55	IP65
Temperature	-30 °C to 50 °C	-30 °C to 50 °C	-30 °C to 50 °C	-30 °C to 50 °C
PC communication	Ethernet	Ethernet	Ethernet	Wi-Fi, Ethernet
Video cameras (optional)	✓	✓	✓	✓
Power supply	Mains or built-in battery	Mains or built-in battery	Mains or built-in battery	Mains or built-in battery
Backup battery lifetime	≥ 8 hours	≥ 8 hours	≥ 8 hours	≥ 8 hours



**PREVENTION OF
ILLICIT TRAFFICKING
OF NUCLEAR AND
RADIOACTIVE
MATERIALS**

DOSIMETRY SOLUTIONS

PM530 Automated Personal Dosimetry System

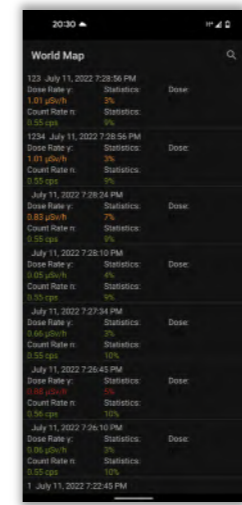
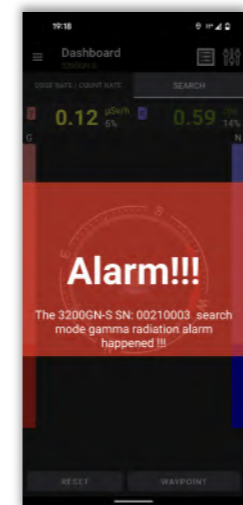
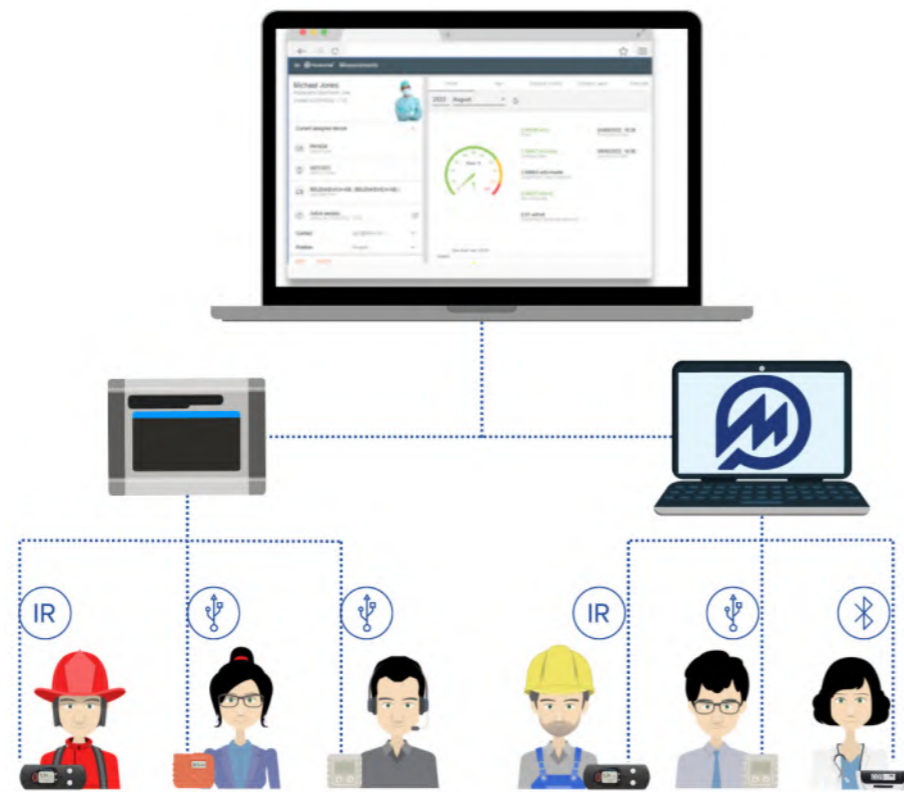
- Software or hardware reader for data read-out and server software for management, analysis and reporting
- Compatible with the RadFlash®, PM1610 and PM1703MO-1BT
- Adjustment and assigning of the dosimeters via readers
- Integration of up to 10000 dosimeters and 500 readers
- Easy set-up and configuration

PM530 Server Software

- Data export and reporting (various types of reports)
- Creation of a customizable hierarchical database
- Adding new dosimeters and users to the APDS
- Setting individual and collective thresholds
- Accumulation and storage of dose data
- Password-protected three-level access
- Assigning dosimeters to users

**MONITOR & REDUCE
OCCUPATIONAL
EXPOSURE**

PM530 APDS



MOBILE APP

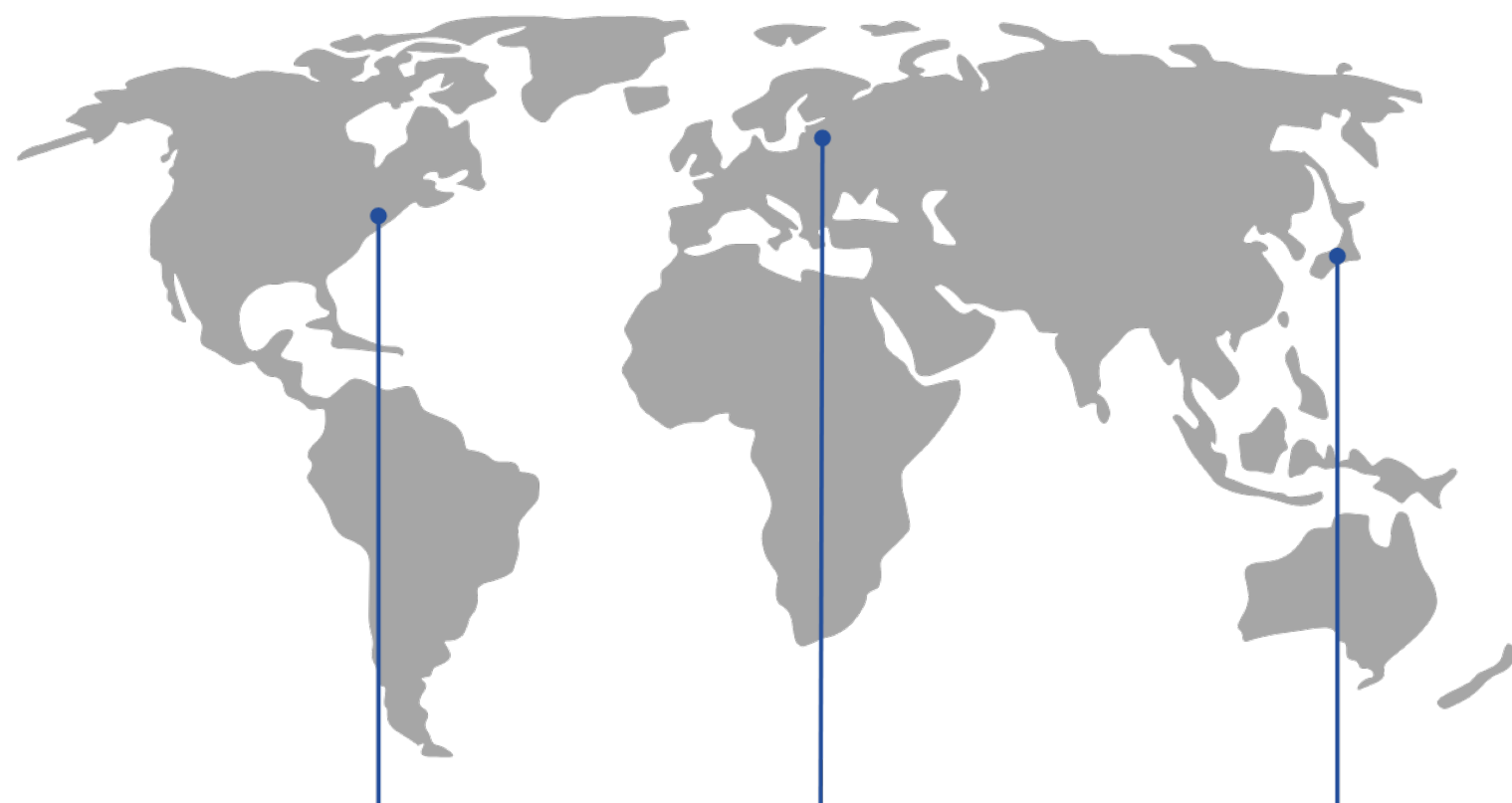
Polismart® iOS and Android App is designed to remotely operate the Polimaster instruments via a smartphone

The Polismart App allows to:

- Operate remotely RadFlash EPD, PM1703 PRDs and PoliPack BRD
- View measurements in real time
- Change the instruments' settings
- Export stored measurements to your phone
- Send the measurement history by email
- Record GPS-referenced measurements (tracks)
- Add photos to recorded waypoints
- Indicate the direction to the detected radiation source (for BRD)
- View the identified radionuclides (for BRD)

**REAL-TIME DATA
AT YOUR
FINGERTIPS**

www.polimaster.com



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