PERSONAL DOSIMETRY

peo MEDICAL

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Partner Tracerco

Tracerco is a trusted global provider of radiation monitoring solutions, offering specialized instruments for contamination monitoring, dose rate measurement, and personal dosimetry. Their technologies are widely adopted in the medical field, supporting hospitals, radiology departments, and nuclear medicine facilities in maintaining safety and meeting regulatory standards.

Product offering

PED2 (Personal Electronic Dosimeter) – Tracerco

PED2-IS (Personal Electronic Dosimeter) – Tracerco

PED2+ (Personal Electronic Dosimeter) – Tracerco

PED2 (Personal Electronic Dosimeter) – Tracerco

PED-ER+ (Personal Electronic Dosimeter) – Tracerco

PED+ (Personal Electronic Dosimeter) – Tracerco

PED-IS (Personal Electronic Dosimeter) – Tracerco

PED-ER (Personal Electronic Dosimeter) – Tracerco

PED-Blue (Personal Electronic Dosimeter) – Tracerco

Dosimeter software DoseVision™ and DoseVision™ Tracerco


Peak Rate
2.81 µSv/h
Stay Time
>999min
Dose µSv
0.79
Rate
µSv/h
0.39
18:27 12-Jan-2015

PED2 (Personal Electronic Dosimeter) – Tracerco

An intrinsically safe certified personal electronic dosimeter, with handheld survey mode and enhanced features such as Bluetooth, GPS and pop-up message alarms

Easy to use and understand

Large, easy-to-read colour display ensures vital information is clear, simple to understand and visible in any lighting scenario

A single button is used to navigate an intuitive carousel menu

Alarm settings trigger audible, visual, textual and haptic alerts

Flexible radiation protection

Instantaneously measures, records and displays dose rate and accumulated dose in real time

Up to four configurable dose and dose rate alarm settings

Optional extended range calibration up to 1 Sv/h where potential exists for emergency situations

IS certification

PED2-IS and PED2-IS+ are ATEX certified. This European certification is given to equipment that is tested and approved to be intrinsically safe. Giving you the peace of mind that the IS certified PED2 range is able to safely measure radiation exposure in potentially explosive environments.

PED2-IS (Personal Electronic Dosimeter) – Tracerco

An intrinsically safe certified personal electronic dosimeter for use in potentially explosive environments

Easy to use and understand

Large, easy-to-read colour display ensures vital information is clear, simple to understand and visible in any lighting scenario

A single button is used to navigate an intuitive carousel menu

Alarm settings trigger audible, visual, textual and haptic alerts

Flexible radiation protection

Instantaneously measures, records and displays dose rate and accumulated dose in real time

Up to four configurable dose and dose rate alarm settings

Optional extended range calibration up to 1 Sv/h where potential exists for emergency situations

IS certification

PED2-IS and PED2-IS+ are ATEX certified. This European certification is given to equipment that is tested and approved to be intrinsically safe. Giving you the peace of mind that the IS certified PED2 range is able to safely measure radiation exposure in potentially explosive environments.

PED2+ (Personal Electronic Dosimeter) – Tracerco

For use as both a personal radiation dosimeter and a handheld dose rate survey meter including enhanced features, such as Bluetooth, GPS and pop-up message alarms

Easy to use and understand

Large, easy-to-read colour display ensures vital information is clear, simple to understand and visible in any lighting scenario

A single button is used to navigate an intuitive carousel menu

Alarm settings trigger audible, visual, textual and haptic alerts

Flexible radiation protection

Instantaneously measures, records and displays dose rate and accumulated dose in real time

Up to four configurable dose and dose rate alarm settings

Optional extended range calibration up to 1 Sv/h where potential exists for emergency situations

IS certification

PED2-IS and PED2-IS+ are ATEX certified. This European certification is given to equipment that is tested and approved to be intrinsically safe. Giving you the peace of mind that the IS certified PED2 range is able to safely measure radiation exposure in potentially explosive environments.

PED2 (Personal Electronic Dosimeter) – Tracerco

A flexible personal electronic dosimeter for general radiation protection applications

Easy to use and understand

Large, easy-to-read colour display ensures vital information is clear, simple to understand and visible in any lighting scenario

A single button is used to navigate an intuitive carousel menu

Alarm settings trigger audible, visual, textual and haptic alerts

Flexible radiation protection

Instantaneously measures, records and displays dose rate and accumulated dose in real time

Up to four configurable dose and dose rate alarm settings

Optional extended range calibration up to 1 Sv/h where potential exists for emergency situations

IS certification

PED2-IS and PED2-IS+ are ATEX certified. This European certification is given to equipment that is tested and approved to be intrinsically safe. Giving you the peace of mind that the IS certified PED2 range is able to safely measure radiation exposure in potentially explosive environments.

PED-ER+ (Personal Electronic Dosimeter) – Tracerco

Radiation safety – simplified

Tracerco's range of personal electronic dosimeters (PEDs) are suitable for oil and gas, medical and life sciences, nuclear, CBRNe and emergency services, NDT, manufacturing and industrial, and environmental and waste management industries. We offer both intrinsically safe and non-intrinsically safe options for all needs.

PED-ER+ (Personal Electronic Dosimeter) from Tracerco

The PED-ER+ provides the ultimate in radiation monitoring, measurement and management for those working in challenging environments. Ideal for use by industrial NDT workers, emergency services and first response teams (CBRNe).

Benefits of the PED-ER+ include:

- An extended dose rate range of up to 1Sv/h
- Weather, shock and drop-proof housing – ideal for rugged environments
- Large clear display
- Portable – can be used as both a personal dosimeter, and a handheld dose rate survey meter
- Pop-up message alarms when dose limits are reached

Would you like to receive more information?

Contact PEO!

PED+ (Personal Electronic Dosimeter) – Tracerco

Radiation safety – simplified

Tracerco's range of personal electronic dosimeters (PEDs) are suitable for oil and gas, medical and life sciences, nuclear, CBRNe and emergency services, NDT, manufacturing and industrial, and environmental and waste management industries. We offer both intrinsically safe and non-intrinsically safe options for all needs.

PED+ (Personal Electronic Dosimeter) from Tracerco

The PED+ can be used as both a personal dosimeter and a handheld dose rate survey meter. It has a number of additional features, such as Bluetooth, GPS and pop-up message alarms.

Benefits of the PED+ include:

- Handheld mode allows the device to be used as a handheld survey meter
- Shows readings in dose rate (Sv or rem) and displays a live trend graph to show activity in real time
- Measurement is corrected for use off-body, so personal accumulated dose is not recorded
- Dose rate data is logged in off-body mode, allowing data review with DoseVision™
- Pop-up alert messages display clear instructions at alarm threshold
- Allows location data to be logged to the device alongside dose and dose rate data, that can be viewed using DoseVision™

Would you like to receive more information?

Contact PEO!

PED-IS (Personal Electronic Dosimeter) – Tracerco

PED-IS FROM TRACERCO

Personal Electronic Dosimeter

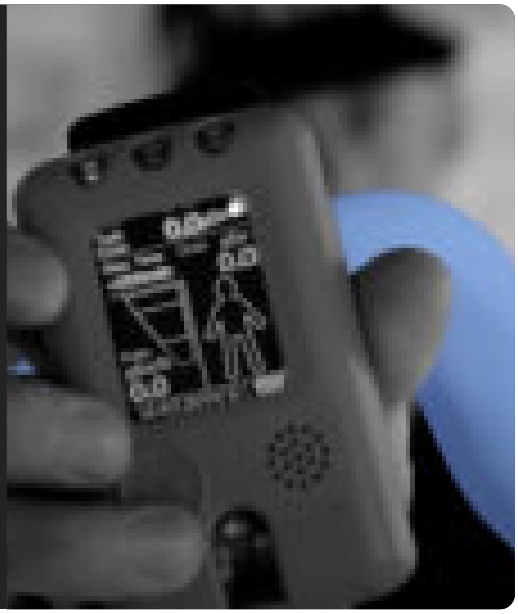
The PED-IS, Personal Electronic Dosimeter is an ideal dosimeter for workers who are not specially trained to measure radiation exposure. The entire PED has ben designed with the user in mind, so it is very user friendly. The AMOLED display features a simple diagram of a man that fills with colour when the dosimeter detects radiation, and it also shows radiation graph measurements.

This IS (Intrinsically Safe) personal electronic dosimeter can measure radiation exposure in potentially explosive environments. The device can detect x-ray and gamma rays ranging from 33 keV to 1,25 MeV and it can alarm you with four different alarm settings. In order to log and manage the data from this Tracerco dosimeter, you can use DoseVision.

The Dosimeter is intrinsically safe, following the ATEX EU directive.

BENEFITS OF THE PED-IS:

- Intrinsically safe (ATEX), so no need for a hot work permit
- Because of the great memory, the risk of data being overwritten when memory is full is reduced
- Easy to read because of the large AMOLED display screen
- User-friendly with Icons and one-touch operation
- 3 radiation measurement modes, and 4 different radiation alarm settings
- Suitable for use in all weathers
- Rotating screen, allowing it to be worn multiple ways



In doubt about which PED is right for you?

Tracerco Radiation Monitors https://youtu.be/Rm9O7FOKeX0

SCAN TO VIEW VIDEO

The Intrinsically Safe Tracerco™ Personal Electronic Dosimeter (PED) PED-IS https://youtu.be/-ebPdJfO6O8

SCAN TO VIEW VIDEO

For more information from Tracerco, take a look at this page.

Would you like more information on PED's?

Contact PEO!

PED-ER (Personal Electronic Dosimeter) – Tracerco

PED-ER FROM TRACERCO

Personal Electronic Dosimeter with extended range

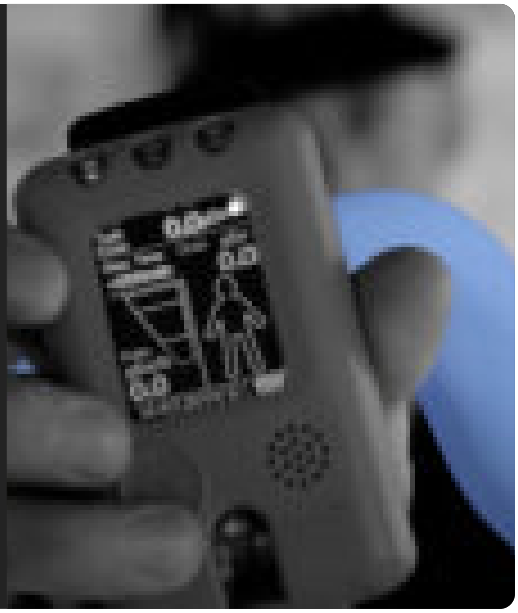
The PED-ER is a robust, light and user-friendly personal electronic dosimeter. You can use it to effectively monitor, measure and manage radiation exposure. This PED is the same as the PED-Blue from Tracerco, only the ER stands for Extended Range, so the range is bigger.

This personal electronic dosimeter has both audio and visual alarms with vibration. The dosimeter will alarm you when you reach your personally set radiation dose. Because of the extended dose range from the PED-ER, it can detect radiation up to 1 Sv/h.

This dosimeter is not only designed to be robust and lightweight, it's also designed to keep it simple. The device has a large and clear AMOLED display which is very user-friendly. When you use this dosimeter in combination with the accompanying software DoseVison, you can easily manage radiation doses.

BENEFITS OF THIS DOSIMETER:

- The dosimeter has an extended dose range of up to 1 Sv/h
- Large easily readable display and intuitive graphical user interface
- A reliable dosimeter, even for the most challenging radiation monitoring situations
- User-friendly design because of one-button operation
- The user can easily operate it without any training
- You can choose between audio and/or visual alarms, with optional vibration



Tracerco Radiation Monitors https://youtu.be/Rm9O7FOKeX0

SCAN TO VIEW VIDEO

For more information from Tracerco, take a look at this page.

Would you like more information on PED’s?

Contact PEO!

PED-Blue (Personal Electronic Dosimeter) – Tracerco

PED-BLUE FROM TRACERCO

Personal Electronic Dosimeter

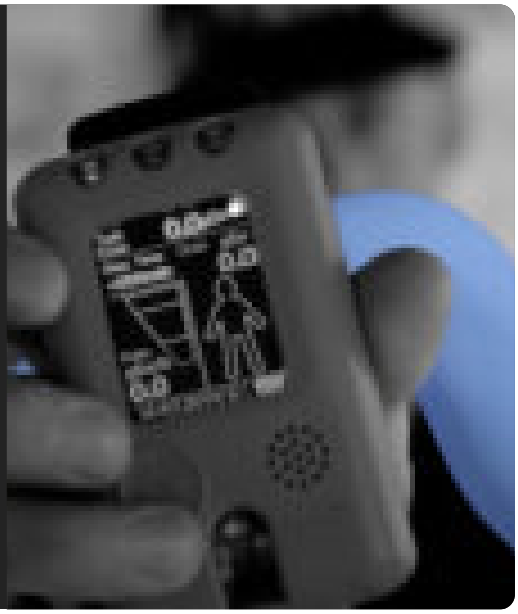
The PED-Blue is a lightweight, non-IS PED. The device can be charged with a direct micro USB connection, so it's more flexible. This dosimeter can also be configured to use either two or four dose alarm levels and is customisable through DoseVision™ software.

The PED Blue also has a task function where you can start and finish a task. After a task is finished you can look back by using DoseVision. This dosimeter is also perfect for clinical environments for example, because of its discreet alarm function.

The dosimeter gives the user immediate feedback so you'll know when the ambient dose is heightened.

BENEFITS OF THE PED BLUE:

- Robust and easy to use
- Direct micro USB connection for greater flexibility
- Large, clear, easy-to-read AMOLED display
- Light weight
- Used with DoseVision™ software ensures ease of use
- IP67 rated
- Simple one-button operation
- Four adjustable alarms
- Immediate detection



In doubt about which PED is right for you?

Tracerco Radiation Monitors https://youtu.be/Rm9O7FOKeX0

SCAN TO VIEW VIDEO

For more info from Tracerco, take a look at this page.

Would you like more information on PED's?

Contact PEO!

Dosimeter software DoseVision™ and DoseVision™ Tracerco

The dosimeter PC software interface for the PED-IS PED Blue and PED+ is specifically designed for simplicity and interactivity. DoseVision™ allows users to set alarms and reports. This is to assign users to the PED, and download and analyze data.

advantages of DoseVision:

- cumulative dose rate data analysis
- peak dose rates
- data export and easily generate reports
- password protection
- software and firmware updates available for free
- easy management of PED users
- GPS data logging using the PED+

advantages of DoseVison Live™:

- Bluetooth connectivity
- live dose rate data
- management control for up to 7 devices
- live status updates

DoseVision Live dosimeter software Tracerco

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Partner Ludlum Medical Physics (LMP)

Ludlum Medical Physics (LMP), a division of Ludlum Measurements, Inc., specializes in radiation safety and medical imaging quality assurance (QA) solutions. Their comprehensive product line supports healthcare professionals in maintaining high standards of patient safety and diagnostic accuracy across various medical disciplines.

Product offering

Model AT-138S Pencil Dosimeter

Model 23 mrem Electronic Personal Dosimeter

Model 25 Series Personal Radiation Monitor

Model 23-1 Electronic Personal Dosimeter – Ludlum

Model AT-138S Pencil Dosimeter

Features

- Sensitive to Gamma and X-ray
- 0 to 2 mSv
- Lightweight
- Hermetically Sealed
- Sturdy Pocket Clip
- Meets ANSI N13.5 & N322
- Responds Well to Fast Pulse X-Rays
- Low Leakage, Measures Background

This direct reading dosimeter is a ruggedly-constructed precision instrument for measuring and directly reading accumulated dose of gamma and X-ray radiation up to 2 mSv. Applications include personal and environmental monitoring. The low-energy feature has hospital applications including fluoroscopy, portable radiography, and angiography. A hardened sapphire end window provides clean, scratch-proof viewing of measurements. This pocket sized instrument is lightweight and has a sturdy clip to attach to an individual's pocket for constant use.

To ensure accurate readings, the AT-138S must be zeroed before use with a dosimeter charger, such as the AT-909 or The Charger (see the Options tab below for more information).

Model 23 mrem Electronic Personal Dosimeter

Features

- Low Weight and Slim Design
- X-ray and Gamma Radiation Monitoring
- Audible Alarm
- 600 Record Data Logging Option Available

The Ludlum Model 23 mrem Electronic Personal Dosimeter (EPD) is a compact and lightweight (60 g / 2 oz) pen-type personal dosimeter. It is ideal for the measurement and general monitoring of gamma and X-ray radiation in medical and laboratory environments, as well as any controlled or restricted area where personal radiation monitoring is required or desired. The unit is sensitive to a wide range of energies from 35 keV to 3 MeV. Dose, Dose Equivalent Rate, and alarm values are easily seen on the four-digit LCD screen. An audible alarm is activated if the dose or dose rate exceeds the preset value of the dosimeter. The alarm set points are adjustable from the face of the unit.

The optional Model 23 Series Dosimeter Setting Device and Software Kit (see Options tab below) can be used to configure the dosimeter settings and to quickly take data directly from the dosimeter via infrared communication to a PC. Up to 600 data points can be stored in the dosimeter. Note that all collected data is erased when the dosimeter is turned off, so the data must be transferred before the dosimeter is turned off in order to be recorded.

Warning: This dosimeter may not measure pulsed radiation accurately.

Model 25 Series Personal Radiation Monitor

Features

- Dose Rate Range:
  - **Model 25:** 0.01 mR/hr to 999 R/hr
  - **Model 25-1:** 0.001 mSv/h to 9.99 Sv/hr
- Accumulated Dose Range:
  - **Model 25:** 0 to 999 R
  - **Model 25-1:** 0 to 999 Sv
- Lightweight
- Rugged, Shockproof Construction
- Water Resistant Design
- Easy to Use
- 6000 Hour Battery Life
- Audible and Visual Alerts and Alarms
- Backlit LCD Display

The Model 25 and Model 25-1 Personal Radiation Monitors are small, rugged devices designed to warn emergency response personnel of any dangerous fields that they may encounter. These easy-to-use instruments incorporate a GM detector capable of measuring radiation fields up to 9.99 Sv/h (999 R/hr).

The Model 25 Series backlit LCD readout displays dose rate, accumulated dose, and time remaining to the dose limit. Visual and audible alarms can be set over the entire measurement range. No special equipment is required to either calibrate or set up operational parameters.

The units can be worn on a belt, a lanyard, or an armband. A lanyard and a rubber boot with a built-in belt feed through are included with each instrument. See the Options tab below for other available accessories.

Intrinsically safe versions, the Model 25-IS and Model 25-IS-1, are also available for use in areas where explosion safety is a concern.

NOTE: Model 25 Series instruments are not intended to measure background levels of radiation.

Model 23-1 Electronic Personal Dosimeter – Ludlum

The Model 23-1 Electronic Personal Dosimeter (Ludlum) is a solid and lightweight (55.9 g/2 oz) pen-type personal dosimeter. It can be used for measuring gamma or X-ray radiation in medical and laboratory environments or other areas where personal radiation monitoring is desired or required.

Model 23-1 Electronic Personal Dosimeter features:

- 600 record data logging option available
- low weight and slim design
- audio alarm
- silicon semiconductor detector
- gamma and X-ray (35 keV to 3 MeV)

Read more about the Model 23-1 Electronic Personal Dosimeter on the Ludlum website

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Partner Polimaster

Polimaster is a global provider of radiation monitoring solutions, offering advanced dosimetry and detection technologies tailored for the medical field. Their instruments assist healthcare professionals in maintaining safety and compliance in environments where radiation exposure is a concern.

Product offering

PM1604B Electronic Personal Dosimeter

PM1604A Electronic Personal Dosimeter

PM1605BT Personal Radiation Monitor/Dosimeter

PM1610B X-Ray and Gamma Radiation Personal Dosimeter

PM1610A X-Ray and Gamma Radiation Personal Dosimeter

PM1610 X-Ray and Gamma Radiation Personal Dosimeter

RadFlash® Electronic Personal Dosimeter

PM1703GNA-II/BT Personal radiation detector

PM1604B Electronic Personal Dosimeter

Dosimeters perform monitoring and measurement of personal dose equivalent and personal dose equivalent rate in the wide energy range – from the natural background level up to 5-10 Sv/h (500-1000 R/h). Instruments are stable to dose up to 300 Sv, have two thresholds in DER and DE ranges, have non volatile memory for data storage. Hermetic, water-resistant and shockproof case and the fluorescent backlight on LCD screen allow to use instruments in harsh and extreme conditions.

PM1604A and PM1604B dosimeters are recommended for emergency services, customs and border patrol, radiological and radioisotope laboratories, medical professionals, personnel of nuclear facilities, civil defense, firefighters and police.

Operation Principle

PM1604A and PM1604B models are energy-compensated personal dosimeters of pocket size that measure personal dose equivalent (DE) and personal dose equivalent rate (DER) of both gamma and X-ray radiation. Dosimeters have two alarm thresholds. If the preset dose and dose rate thresholds are exceeded, instruments immediately alert the user through an audible alarm. Dosimeters store up to 1000 events in non-volatile memory and transmit all recorded data via an infrared channel to a PC for further processing and analysis.

Dosimeters may be used independently or as a part of a system for efficient and emergency monitoring of personnel and people at production facilities and other sites, where there is a risk of exposure to external X-ray and gamma radiation.

Modifications

Dosimeter is manufactured in two modifications: PM1604A and PM1604B. PM1604B has extended range of DER measurement.

PM1604A Electronic Personal Dosimeter

Dosimeters perform monitoring and measurement of personal dose equivalent and personal dose equivalent rate in the wide energy range – from the natural background level up to 5-10 Sv/h (500-1000 R/h). Instruments are stable to dose up to 300 Sv, have two thresholds in DER and DE ranges, have non volatile memory for data storage. Hermetic, water-resistant and shockproof case and the fluorescent backlight on LCD screen allow to use instruments in harsh and extreme conditions.

PM1604A and PM1604B dosimeters are recommended for emergency services, customs and border patrol, radiological and radioisotope laboratories, medical professionals, personnel of nuclear facilities, civil defense, firefighters and police.

Operation Principle

PM1604A and PM1604B models are energy-compensated personal dosimeters of pocket size that measure personal dose equivalent (DE) and personal dose equivalent rate (DER) of both gamma and X-ray radiation. Dosimeters have two alarm thresholds. If the preset dose and dose rate thresholds are exceeded, instruments immediately alert the user through an audible alarm. Dosimeters store up to 1000 events in non-volatile memory and transmit all recorded data via infrared channel to a PC for further processing and analysis.

Dosimeters may be used independently or as a part of a system for efficient and emergency monitoring of personnel and people at production facilities and other sites with external X-ray and gamma radiation sources.

Modifications

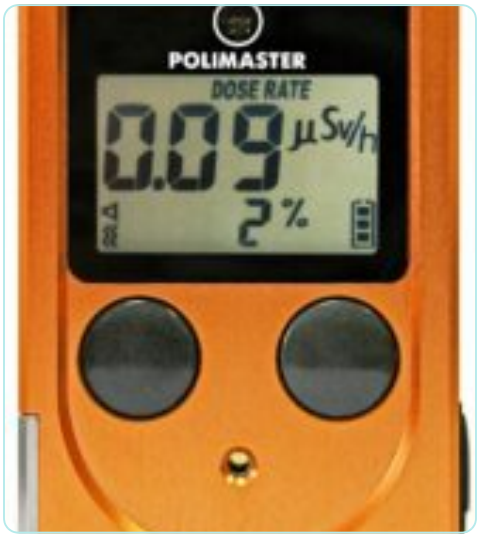
PM1604B- modification has extended DER measurement range.

PM1605BT Personal Radiation Monitor/Dosimeter

PM1605BT electronic dosimeter is equipped with a Geiger-Mueller counter for extended measurement of the **ambient dose equivalent** and **ambient dose equivalent rate**. Instruments are able to search, detect and locate radioactive sources, alert the user with audible, visual and vibration alarms, transmit stored data to a PC or smartphone.

The dosimeter is designed to withstand **extreme environmental conditions** such as limited visibility, raised noise, high temperatures, exposure to sea water, shock and falls. Control panel with two big buttons allows the using of protective gloves while operating the instrument.

The instruments are recommended for personal radiation protection of first responders, HAZMAT teams, civil defense, firefighters and the other divisions who deal with radiological emergencies.



Operation principle

PM1605BT ambient dosimeter continuously controls the dose and dose rate threshold levels and alerts the user with audible, visual and vibration alarms when the threshold levels are exceeded. The instruments are able to search, detect and locate radioactive sources.

The instrument is supplied with the user software for downloading measurement history to a PC, maintaining the personnel exposure database and adjusting the settings of the dosimeter. PM1605BT is compatible with **Polismart**® Android app via Bluetooth, which allows to monitor the instrument readings in real-time, download and transfer the history and adjust the instrument settings.

Features

- IP68 case for operation in extreme environmental conditions
- Highly visible LEDs on the front and top panels for alarms indication
- Removable clip for secure fastening to a belt or a pocket
- Large buttons suitable for use with protective gloves
- Operating temperature from –30 °C to 65 °C
- Ambient dose equivalent rate up to 10 Sv/h
- Ambient dose equivalent up to 100 Sv
- Bluetooth and USB communication
- Battery lifetime at least 9 months
- Large and easy-to-read LCD

Applications

- HAZMAT and CBRNe teams
- Emergency services
- First responders
- Firefighters
- Police and security
- Paramedics

PM1610B X-Ray and Gamma Radiation Personal Dosimeter

PM1610 series of electronic personal dosimeters (EPDs) are intended for measurement of the personal dose equivalent Hp(10) and personal dose equivalent rate Ḣp(10). The dosimeters are suitable for multiple applications providing the measurement of X-ray (continuous and pulsed) and gamma radiation in the wide energy range.

PM1610B model has an extended dose measurement range up to 20 Sv and improved accuracy of the dose rate measurement. Instead of a rechargeable battery, this model is **powered by AAA (LR03) battery** which is easy to replace, affordable and safe to handle.

PM1610 dosimeters have unique features for operation in workplaces requiring the use of personal protective equipment or a harsh environment, including a shockproof rubberized case, a high contrast display with a fluorescent backlight, and two big buttons for easy use even while wearing protective gloves.

Operation principle

PM1610 EPDs allow the setting of two dose rate alarm thresholds and two dose alarm thresholds. The instruments continuously control the threshold levels and alert the user with audible, visual and vibration alarms when the threshold levels are exceeded. PM1610 automatically records and stores in its non-volatile memory up to 7500 dose rate and dose measurement history events.
EPD is supplied with the user software for downloading measurement history to a PC, maintaining personnel exposure database and adjusting the settings of the dosimeter. PM1610B dosimeters are also compatible with **PM530 Automated Personal Dosimetry System** for maintaining the instrument history database and monitoring personnel exposure.

Features

- Easily replaceable long-life AAA battery: at least 480 hours
- Extended energy range: from 20 keV to 10 MeV
- Wide dose and dose rate measurement ranges
- Measurement of pulsed photon radiation
- Simple navigation with two large buttons
- Audible, visual and vibration alarms
- USB communication with PC
- Shockproof hermetic case
- Small and lightweight

Applications

- Customs and border control
- Healthcare professionals
- Nuclear power plants
- Emergency services
- Police and security
- Industrial facilities
- First responders

PM1610A X-Ray and Gamma Radiation Personal Dosimeter

PM1610 series of electronic personal dosimeters (**EPDs**) are intended for measurement of the personal dose equivalent Hp(10) and personal dose equivalent rate Ḣp(10). The dosimeters are suitable for multiple applications providing the measurement of X-ray (continuous and pulsed) and gamma radiation in the wide energy range.

PM1610A model has an **extended dose measurement range of up to 20 Sv** and improved accuracy of the dose rate measurement.

PM1610 dosimeters have unique features for operation in workplaces requiring the use of personal protective equipment or a harsh environment, including a shockproof rubberized case, a high contrast display with a fluorescent backlight, and two big buttons for easy use even while wearing protective gloves.

Operation principle

PM1610 EPDs allow the setting of two dose rate alarm thresholds and two dose alarm thresholds. The instruments continuously control the threshold levels and alert the user with audible, visual and vibration alarms when the threshold levels are exceeded. PM1610 automatically records and stores in its non-volatile memory up to 7500 dose rate and dose measurement history events.
The dosimeter is manufactured in two models: the basic **PM1610**model and the **PM1610A**model with an extended dose measurement range of up to 20 Sv and improved accuracy of the dose rate measurement. EPD is supplied with the user software for downloading measurement history to a PC, maintaining personnel exposure database and adjusting the settings of the dosimeter. PM1610 dosimeters are also compatible with **PM530 Automated Personal Dosimetry System** for maintaining the instrument history database and monitoring personnel exposure.

Features

- Long-life rechargeable battery: at least 650 hours
- Extended energy range: from 20 keV to 10 MeV
- Wide dose and dose rate measurement ranges
- Measurement of pulsed photon radiation
- Simple navigation with two large buttons
- Audible, visual and vibration alarms
- USB communication with PC
- Shockproof hermetic case
- Small and lightweight

Applications

- Customs and border control
- Healthcare professionals
- Nuclear power plants
- Emergency services
- Police and security
- Industrial facilities
- First responders

Important: During long-term storage, the instrument battery may gradually discharge even when the instrument is switched off. Over time, deeply discharged batteries may experience a decrease in capacity. To prevent this, Polimaster recommends periodically charging the battery, at least once every six months.

PM1610 X-Ray and Gamma Radiation Personal Dosimeter

PM1610 series of electronic personal dosimeters (**EPDs**) are intended for measurement of the personal dose equivalent *Hp(10)* and personal dose equivalent rate *Ḣp(10)*. The dosimeters are suitable for multiple applications providing the measurement of X-ray (continuous and pulsed) and gamma radiation in the wide energy range.

PM1610 dosimeters have unique features for operation in workplaces requiring the use of personal protective equipment or a harsh environment, including a shockproof rubberized case, a high contrast display with a fluorescent backlight, and two big buttons for easy use even while wearing protective gloves.

Operation principle

PM1610 EPDs allow the setting of two dose rate alarm thresholds and two dose alarm thresholds. The instruments continuously control the threshold levels and alert the user with audible, visual and vibration alarms when the threshold levels are exceeded. PM1610 automatically records and stores in its non-volatile memory up to 7500 dose rate and dose measurement history events.
The dosimeter is manufactured in two models: the basic **PM1610** model and the **PM1610A** model with an extended dose measurement range of up to 20 Sv and improved accuracy of the dose rate measurement. EPD is supplied with the user software for downloading measurement history to a PC, maintaining personnel exposure database and adjusting the settings of the dosimeter. PM1610 dosimeters are also compatible with **PM530 Automated Personal Dosimetry System** for maintaining the instrument history database and monitoring personnel exposure.

Features

- Long-life rechargeable battery: at least 650 hours
- Extended energy range: from 20 keV to 10 MeV
- Wide dose and dose rate measurement ranges
- Measurement of pulsed photon radiation
- Simple navigation with two large buttons
- Audible, visual and vibration alarms
- USB communication with PC
- Shockproof hermetic case
- Small and lightweight

Applications

- Customs and border control
- Healthcare professionals
- Nuclear power plants

- Emergency services
- Police and security
- Industrial facilities
- First responders

← Back to partner

RadFlash® Electronic Personal Dosimeter

The Ultimate Protection

Only the best instant monitoring and alerts provide the safety professionals deserve. The RadFlash electronic personal dosimeter gives you immediate feedback, high precision, and unmatched flexibility. It’s the perfect tool for minimizing risk and maximizing confidence.

Features

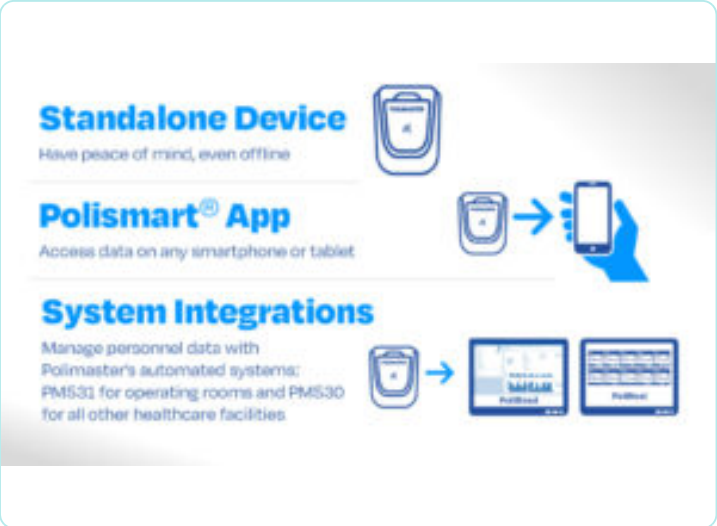
- Independent alarm thresholds for both dose and dose rate
- Automatic calculation of the safe stay time in the Polismart® app
- Miniature, lightweight design
- Intuitive single control button
- Bluetooth integration
- Wireless charging
- Optional integration with PM530 or PM531 automated personal dosimetry systems

Real-Time Data at Your Fingertips

With RadFlash, the instant your radiation exposure increases, you know it. Continuous monitoring and custom alerts provide immediate, precise feedback, empowering you to react in-the-moment to changes in your exposure environment.
The dosimeter is capable of solving a wide range of personal dose monitoring tasks, including measurement of personal dose equivalent *Hp(10)* and personal dose equivalent rate $\dot{H}p(10)$ of X-ray (continuous and pulsed) and gamma radiation.

Hassle-Free Flexibility

RadFlash adapts to your needs and your unique situation. Unlike other electronic personal dosimeters, while it can function as a stand-alone device, it also has the capability to be integrated into a real-time dosimetry system, offering additional benefits and functionalities. Or you can pair it with the Polismart® App to view readings and manage settings from any phone or tablet. To simplify data management and ensure the safety of all personnel, you can also use it with the Polimaster automated personal dosimetry system.



Who Can Benefit?

- Medical personnel, including radiologists, surgeons, anesthesiologists, nurses, physician's assistants, technicians, and medical physicists
- Laboratory researchers and operators
- Customs and security officers
- All professionals who work under the risk of X–ray and gamma radiation exposure

PM1703GNA-II/BT Personal radiation detector

The PM1703-II series personal radiation detectors (PRDs) are highly sensitive and rugged devices that can detect and locate even trace amounts of radioactive materials.

Equipped with a clip for multiple carrying options and easy to operate even for non-specialists, PRDs became the perfect fit as radiation beepers for public security services, including border controls, rescue teams, police and anti-terrorist units that need to quickly search for radioactive materials in public places.

PM1703GNA-II models are gamma neutron PRDs equipped with a high-sensitivity scintillator for measuring the personal dose rate up to 300 µSv/h.

PM170

Working principle

PM1703GNA-II models are gamma neutron PRDs equipped with a high-sensitivity scintillator for measuring the personal dose rate up to 300 µSv/h. While ensuring high-quality detection for any scenario, the PM1703-II PRD provides confidence in personal safety by continuously monitoring the measured dose equivalent rate and alerting the user with visual, audible and vibrating alarms when preset radiation thresholds are exceeded.

Operating history is stored in the instrument's non-volatile memory (up to 2000 data points), protecting data even if the battery is removed. The stored data can also be transferred to a PC via USB. The storage data format is designed to comply with ANSI N42.42.

The PRD has a special operating mode "Mode 0...9" specifically designed for monitoring the gamma radiation dose rate within a numerical range. This mode is particularly user-friendly, making it easier for non-professionals to understand and navigate.

Polimaster PRDs offer a significant advantage with their NORM suppression algorithm. This algorithm distinguishes alarm signals when there is an increase in the natural gamma background values and detection of naturally occurring radioactive materials (NORM). When NORMs are detected, a green indicator light is displayed. However, if other types of radionuclides (IND, NUC, MED) are detected, a red indicator light and an audible alarm will be activated. This feature provides clear and distinct indications based on the specific type of radiation being detected.

Models

- PM1703GNA-II PRD is a basic model.
- PM1703GNA–II BT PRD is additionally equipped with a Bluetooth module that enables communication with smartphones for advanced control via the free Polismart® Android app.
- PM1703GNA–II MBT PRD/Dosimeter is additionally equipped with a Bluetooth module and a Geiger-Mueller counter for comprehensive measurement of the personal dose rate up to 200 mSv/h and the personal dose up to 10 Sv.

Functions

- NORM suppression algorithm for distinguishing color-coded alarms triggered by natural or man-made radiation materials
- Special scale mode from 0-9 with unitless dose indication for ease of use and minimal training
- Free Polismart® iOS and Android app for advanced control
- USB and Bluetooth communication (PM1703GNA-II BT).
- Long life alkaline or rechargeable battery
- Acoustic, visual and vibrating alarms

- Shockproof hermetic housing IP65

Applications

- Customs and border control
- HAZMAT and CBRNe teams
- Steel and recycling industry
- Waste management locations
- Counter-terrorism teams
- Homeland security
- First responders
- Special forces
- Public safety