RADIATION SAFETY

peo MEDICAL

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CONTAMINATION MONITORING

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Partner Bertin Technologies

Bertin Technologies is a global provider of advanced radiation detection and environmental monitoring solutions, specializing in handheld monitors, personal electronic dosimeters, environmental monitoring systems, and waste & recycling management technologies. Their instruments are designed to meet the rigorous demands of nuclear facilities, emergency response teams, and environmental agencies.

Product offering

MINITRACE CSDF – Bertin Instruments

SaphyRAD E Multiprobe – Bertin Instruments

MiniTRACE S5 – Saphymo

SaphyRAD MS Dom-420 – Bertin Instruments

MINITRACE CSDF – Bertin Instruments

MiniTRACE CSDF is a unique multipurpose meter for contamination control, survey, dose rate and XRays radiation measurement.

The MiniTRACE CSDF is a multipurpose instrument fulfilling the functions of a contamination, survey and dose rate meter. It is designed to improve the detection and the quantification of radiation contamination, making this a frontline tool in the protection against uncontrolled distribution of radioactive material. MiniTRACE CSDF provides several functions and measurement modes such as the dose rate, the activity or the count rate.

With the activity and surface contamination modes, different nuclides can be selected from the inbuilt library. The surface contamination mode is calibrated according to ISO 7503-1. Combined with the right accessories, wipe tests (surface contamination) and food tests (food contamination) can be performed. A mean value mode and a count up mode are provided to increase instrument accuracy.

Datasheet

Radiation type
• Alpha, beta and gamma

Detector type
• Geiger-Mueller pancake, active counter area 15.5 cm², active diameter 44.5 mm, window 2.0 mg/cm², energy compensated

Display unit
• µSv/h, cps, Bq, Bq/cm² and Bq/L

Measurement range
• Dose rate: up to 5,000 µSv/h (100 mR/h)
• Pulses: up to 10,000 cps (300,000 cpm)
• Activity (depends on the radionuclide): up to 100 000 Bq (999,000 dpm)
• Surface contamination (depends on the radionuclide): up to 5,000 Bq/cm2 (30,000 dm/cm2)
• Food: up to 100,000 Bq/l (1,000,000 pCi/l)

Gamma sensitivity
• 4.3 cps/µSv/h

Energy Range
• 26 keV to 1.25 MeV, lid has to be closed

Sensitivity
• Co60: 0.41 cps/Bq/cm²; C14: 1.65 cps/Bq/ cm²; Sr90+: 10.65 cps/Bq/ cm²; Am-14:4.19 cps/Bq/ cm²; Cl36: 9.57 cps/Bq/ cm²; Cs137: 11.15 cps/Bq/ cm² ; U238: 4.19 cps/Bq/ cm²; I131: 9.71 cps/Bq/ cm²

Display
• 6-digit LCD display, plus 5-digit alpha numeric display for alarm- and status messages

Grid
• 0.8 stainless steel, 80% transparency, easily removable

Integration time
• Automatic, with count up mode adjustable

Energy supply
• 2 Mignon batteries (type: LR6, AA, MN 1500) 1.5V

Battery autonomy
• Up to 2,000 h

Built-in sensors
• IR-interface for software communication

Benefits

Easy and fast monitoring
• MiniTRACE CSDF is easy to use (2 buttons interface) and provides a very fast response time (1sec.). It can also be set up with the optional DataVIEW software.

All-in-one survey meter
• MiniTRACE CSDF allows multipurpose measurements for dose rate H*(10) (µSv/h), count rate (cps), activity (Bq), surface contamination (Bq/cm²) and food contamination (Bq/L). Radionuclide can also be selected.

Designed for harsh environments

• MiniTRACE CSDF is compact and robust with its strong housing protected with a rubber boot. It is suitable for long time operations (battery lifetime: 2,000 h).

Technologies

MiniTRACE CSDF is a unique multipurpose meter for contamination, survey, dose rate, XRays, food and wipe test measurements. It is equipped with a 15.55 cm^2 Geiger-Mueller pancake detector and a 0.8 mm stainless steel grid. In addition to the verification of contamination, it is ideally suited to measuring the environmental dose rate equivalent (H*(10)).

MiniTRACE CSDF displays values in cps, µSv/h, Bq, Bq/cm^2 and Bq/L. For the Bq and Bq/cm^2 modes, the user can select different nuclides with built in nuclide specific calibration library (Cs137, Am241, I131, Sr90, U238, C14, Cl36, Co60).

The Bq/cm^2 mode (for surface contamination) is calibrated according to ISO 7503-1. MiniTRACE CSDF offers a special mode for food measurement: it measures the activity level found in the liquid or smashed food, with a state-of-the-art food measuring kit.

Accessories

• Protective rubber cover (included)
• Communication kit (incl. DataVIEW software and IR transceiver)
• Transparent plastic protection

• Belt pouch
• Suitcase (Pelicase)
• Wipe test kit

• Food measuring kit
• Emergency case
• Pressure-tight container for air transport

SaphyRAD E Multiprobe – Bertin Instruments

SaphyRAD multiprobe alpha & beta contamination meter has been developed to meet all needs of contamination control for multiple markets such as the nuclear and NORM industries, medical structures & first responders, thanks to its integrated nuclide library. Its ergonomic interface and design have been especially conceived for use even by non-specialists.

SaphyRAD's wide range of contamination probes combined with its specific algorithm allow for a very fast and reactive detection. Depending on the probe, the operator can either assess small or large areas to detect alpha, beta/gamma or alpha & beta/gamma radioactive contamination. All data can be stored on an SD card for measurement recordings.

SaphyRAD E advantages

- user friendly embedded alarm & distance control indicator
- wide range of compatible probes
- adaptative nuclide library
- versatile for contamination & measurement operations
- ruggedized for harsh environment

SaphyRAD E

MiniTRACE S5 – Saphymo

The MiniTRACE S5 is a contamination meter designed to improve the safety of workers in all different kinds of fields. It's very sensitive and responds within a second.

Because the device is very user-friendly, it's very easy to detect possible spots of contamination in the controlling areas. The 6-digit display shows the activity value with a fixed decimal point.

The MiniTRACE has four pre-programmed alarm tresholds, but users can also adjust these to their personal needs.

This contamination meter is not only easy to use, but it's also very fast. If the device detects something, it will respond within a second. The device is applicable to many fields, like nuclear power plants, research centers, hospitals, police, fire brigades and the army.

BENEFITS OF THE MINITRACE S5

- High sensitivity
- Fast response time
- Compact and robust
- Ergonomic design
- Easy two-button operation
- 4 alarm tresholds
- Visual and audible alarm output
- Infrared interface
- X-ray sensitivity of >5 keV

If you want to read more about dose rate meters from Bertin, visit their website!

If you are in doubt about what MiniTRACE suits you best...

Read this!

SaphyRAD MS Dom-420 – Bertin Instruments

SaphyRAD MS is the latest multiprobe survey meter designed for operation in harsh environments such as military fields and first responders.

Together with the probes, SaphyRAD MS allows to cover most of the needs of first responders. SaphyRAD MS associates a wide range dose rate meter and external smart probes for source and hot spot search and contamination measurement.
SaphyRAD MS includes a simulation mode which allows to train the users with high reality without the use of radioactive sources. Special care has been taken in the design of man machine interface for quick use by non radiation specialists.

SaphyRAD MS features

- designed for operation in harsh environments
- high resolution and large color LCD display
- built in simulation function for training
- designed for use with CBRN protective clothing
- built in GPS
- specific algorithm for very fast and reactive detection
- wide dose rate range 0.05 µGy/h to 10Gy/h
- comprehensive external smart probes for source search and multiple contamination measurement specially designed for use by non radiation specialists

SaphyRAD MS
SaphyRAD MS probes

Contact our PEO product specialist.

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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

Contamination Monitor T401 – Tracerco

Contamination Monitor T403 – Tracerco

Contamination Monitor T401 – Tracerco

The Contamination Monitor T401 from Tracerco is useful in multiple fields, like oil & gas, medical and life sciences, nuclear, CBRNe and emergency services, NDT, manufacturing, and environmental and waste management industries.

Tracerco's contamination monitors benefit from high-level functionality with added environmental tolerance. They are also highly cost-effective.

This is not an intrinsically safe contamination monitor, but this contamination monitor is particularly suited to the detection of radioactive contamination. This includes nuclear power, land remediation, research and development and medicine applications.

CONTAMINATION MONITOR T401 FEATURES

- Operational reliability
- Direct surface ability mode
- Peak reading
- Dual bar graph meter display of 0-1000 cps
- Digital numeric display provides automatic direct translation to Bq/cm2 for 14+ pre-programmed nuclides, natural and man-made
- Detachable radiation probe with up to 1.5 metres of extendable cable
- Optional extension arm for surveying contaminated pipework, drains, laboratory floors and so on
- Probe stepwise rotatable through 90° for internal surface measurements
- Backlight facility
- Audible response with adjustable alarm thresholds
- Ruggedised nylon 6/6 construction and modular integrated electronics provide an all-weather instrument
- Minimal servicing and maintenance costs

If you want to see all Tracerco's monitors, take a look at our partner's webiste!

Contamination Monitor T403 – Tracerco

The Tracerco™ T403 Radiation Contamination Monitor is designed to meet the challenge of combining the operational reliability under adverse conditions with excellent sensitivity and robust construction.

Specifications Contamination Monitor T403 from Tracerco

Contamination Monitor T403 – 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 26-1 Frisker with integrated GM Pancake – Ludlum

Frisker with Geiger Mueller Pancake Model 26 – Ludlum

Model 26-1 Frisker with integrated GM Pancake – Ludlum

This Frisker with Geiger Mueller is the more advanced version of Ludlum's popular model 26 frisker.

The Model 26-1 Frisker with integrated GM Pancake, is an ergonomically designed, rugged Geiger-Mueller (GM). It incorporates electronics and a time-tested GM. This product is very user-friendly because the design is simple. The device only has three buttons, which are placed so the user can operate them with one hand.

Ludlum designed this frisker in order to check for alpha, beta and gamma contamination at either objects or people.

FRISKER WITH GEIGER MUELLER BENEFITS & FEATURES

- Integrated, lightweight, ergonomic design
- Water-resistant
- Employs standard 15.51 cm^2 GM pancake detector
- Can display in:
  - mR/hr
  - µSv/h
  - dpm
  - Bq
  - cpm
  - cps
- Dead-time correction (DTC) allows gamma measurements up to 500 mR/hr
- Simple three-button operation
- Automatic display backlight
- Bright red flashing alarming LED

If you want to read more

The model 26-1 frisker has three different modes of operation: rate, max and count.

RATE

The device will display current radiation levels in terms of Rate.

MAX

The device captures the highest rate detected, so it’s possible to determine a peak rate during frisking operations, also when the display is not visible.

COUNT

The device allows the user to perform a survey for a predetermined time.

The user-selected units can display results in a measurement of: scaler counts, activity, time-averaged rates or even accumulated dose.

Model 26-1 Overview https://youtu.be/ijaxIBZjdbE&t=345s

All Model 26-1 options and features

SCAN TO VIEW VIDEO

Frisker with Geiger Mueller Pancake Model 26 – Ludlum

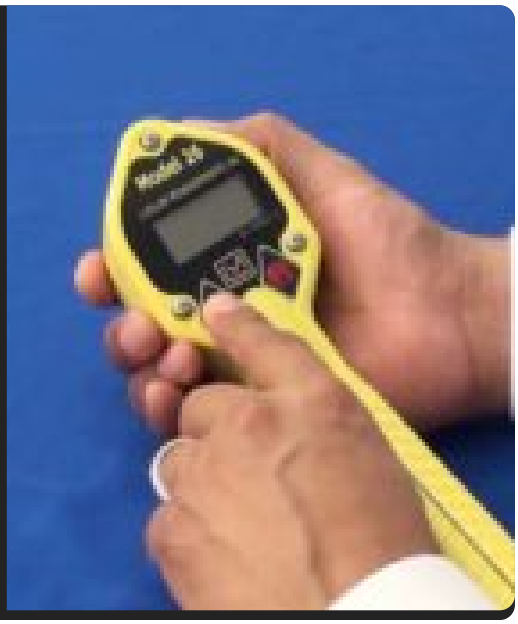
This Frisker with Geiger Mueller (GM) 26 is the simpler version of Ludlum's model 26-1.

Ludlum designed this device especially for frisking people and objects for alpha, beta and gamma contamination. This cable-less device consolidates the electronics and the detector into one ergonomic device. The frisker has a standard 15,51 cm^2 GM pancake detector and a large LCD display.

FRISKER WITH GEIGER MUELLER 26 FEATURES & BENEFITS

- Integrated and lightweight design
- Water resistant
- Ratemeter, peak and scaler operating modes
- Simple two-button operation
- Count rate and scaler alarms
- Automatic LCD backlight activation
- Single-hand use

Another useful feature is the MAX-mode. This mode captures the highest or peak count rate. This feature is especially useful when the display is not visible for the user.



Model 26 Overview https://youtu.be/ybLKYksin6s

All model 26 options and features

Model 26 Tutorial https://youtu.be/uj7aT7ozA50

SCAN TO VIEW VIDEO

SCAN TO VIEW VIDEO

For more information from our partner, visit this page.

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Partner Other

Product offering

MiniTRACE Family – Saphymo

MiniTRACE Family – Saphymo

The MiniTRACE Family (Saphymo) is a range of dosimeters, dose rate meters and contamination meters for Alpha, Beta, Gamma and X-ray detection. The Minitrace is designed to improve the safety of the workers in the control areas of nuclear power plants, reprocessing plants, research centers and hospitals.

MiniTRACE Family features:

- fast response time
- integration time adapted to change of measure value
- additional ‘mean value mode’ for precise measurement of low radiation levels
- long battery lifetime
- four alarm threshold settings
- audible pulse output
- infrared interface

DETECTORS & MISCELLANEOUS

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Partner Spectrum Techniques

Spectrum Techniques

Spectrum Techniques is a U.S.-based provider of radiation detection and measurement solutions, offering a comprehensive range of detectors, quality assurance (QA) sources, alpha, beta, and gamma spectrometry systems, as well as samplers and counters. Their products are designed to support educational institutions, research laboratories, and industrial applications requiring precise and reliable radiation measurements.

Product offering

Isotope Generator – Spectrum Techniques

Isotope Generator – Spectrum Techniques

This Cs-137/Ba-137m Isotope Generator is used to conduct experiment in schools and universities to demonstrate the properties of radioactive decay. Based on the original Union Carbide patented design, it offers exceptional performance combined with ease of use and safe operation.

Contact one of our product specialists.

If you prefer to continue your search for additional information, try this link.

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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

Probes (Ludlum)

Model 133-6 GM Detector – Ludlum

Model 133-4 GM Detector – Ludlum

Model 133-2 GM Detector – Ludlum

Model 44-3 NAL Low Energy Gamma Scintillator – Ludlum

Model 44-2 NAL Gamma Scintillator – Ludlum

Model 44-1 Beta Scintillator – Ludlum

Model 44-38 Energy Compensated GM Detector – Ludlum

Model 44-9 Ambient Dose Equivalent Filter – Ludlum

Model 44-9 Exposure Filter Kit – Ludlum

Model 44-9 Pancake GM Detector – Ludlum

Model 44-7 Alpha Beta Gamma Detector – Ludlum

Model 43-92 Alpha Scintillator – Ludlum

Model 43-65 Alpha Scintillator – Ludlum

Probes (Ludlum)

For any application Ludlum offers a wide range of probes. The probes can be used with all Ludlum models which require an external detector.

Ludlum models with external detector a.o.:

- Model 3000 Digital Survey Meter
- Model 3001 Multi-Detector Survey Meter
- Model 375 Area Monitor Controller
- Model 375/9 Digital Area Monitor
- Model 30 Digital Survey Meter

Model 133-6 GM Detector – Ludlum

The Model 133-6 GM Detector (Ludlum) is a gamma survey detector (GM) that can be used with any scaler instrument, ratemeter or area monitor that delivers the appropriate amount of voltage (see datasheet below) with an input sensitivity of 30 ±10mV.

Model 133-6 GM Detector features:

- waterproof (optional)
- halogen quenched
- stainless steel tube
- range: 40 µSv/h to 10 Sv/h
- energy compensated GM

Read more about the Model 133-6 GM Detector on the Ludlum Website

Model 133-4 GM Detector – Ludlum

The Model 133-4 GM Detector (Ludlum) is a gamma survey detector (GM) that can be used with any scaler instrument, portable ratemeter or area monitor that delivers the appropriate amount of voltage (see datasheet below) with an input sensitivity of 30 ±10mV.

Model 133-4 GM Detector features:

- waterproof (optional)
- halogen quenched
- stainless steel tube
- range: 0.01 mSv/h to 100 mSv/h
- energy compensated GM

Read more about the Model 133-4 GM Detector on the Ludlum Website

Model 133-2 GM Detector – Ludlum

The Model 133-2 GM Detector (Ludlum) is a gamma survey detector (GM) that can be used with any scaler instrument, portable ratemeter or area monitor that delivers the appropriate amount of voltage (see datasheet below) with an input sensitivity of 30 ±10mV.

Model 133-2 GM Detector features:

- stainless steel tube
- energy compensated GM
- waterproof (optional)
- halogen quenched
- range: 1 µSv/h–10 mSv/h

Read more about the Model 133-2 GM Detector on the Ludlum Website

Model 44-3 NAL Low Energy Gamma Scintillator – Ludlum

The Model 44-3 NAL Low Energy Gamma Scintillator (Ludlum) is a detector for 125I and low energy gamma radiation survey.

Model 44-3 NAL Low Energy Gamma Scintillator features:

- entry window: 18.4 mg/cm²
- weight: 0.5 kg
- sensitivity: 675 cpm/µR/hr (125I)
- window area: 5 cm² open and avtive
- efficiency (4π): 33.5%–125I (based on 129I efficiency of 18%)
- detector: scintillator, 2.5 cm diameter x 1 mm thick NaI(Tl) crystal
- photomultiplier tube: 3.8 cm diameter

Read more about the Model 44-3 NAL Low Energy Gamma Scintillator on the Ludlum website

Model 44-2 NAL Gamma Scintillator – Ludlum

The Model 44-2 NAL Gamma Scintillator (Ludlum) is a detector for low-level, wide-energy gamma radiation survey.

Model 44-2 NAL Gamma Scintillator features:

- detector: scintillator, 2.5 x 2.5 cm (1 x 1 in.) (Dia x L) thick NaI
- efficiency: 125I for 7%; 57Co for 10%; 137Cs for 3%; 60Co for 3%
- sensitivity: 175 cpm/µR/hr (137Cs gamma)
- background: 1800 cpm
- photomultiplier tube: 2.86 cm (1.125 in.) diameter, magnetically shielded

Read more about the Model 44-2 NAL Gamma Scintillator on the Ludlum website

Model 44-1 Beta Scintillator – Ludlum

The Model 44-1 Beta Scintillator (Ludlum) is a detector for beta radiation survey.

Model 44-1 Beta Scintillator features:

- window area: 9.7 cm² active and open
- efficientcy (4π): 7% for 14C
- background (10 µR/hr): 100 cpm
- weight: 0.3 kg
- detector type: 4.3 x 0.03 cm (1.7 x 0.01 in.) (Dia x L) plastic scintillator

Read more about the Model 44-1 Beta Scintillator on the Ludlum website

Model 44-38 Energy Compensated GM Detector – Ludlum

The Model 44-38 Energy Compensated GM Detector (Ludlum) is a device for beta and gamma radiation survey.

Model 44-38 Energy Compensated GM Detector features:

- weight: 0.5 kg
- detector: 30–45 mg/cm2 stainless steel wall halogen quenched GM
- sensitivity: 1200 cpm per mR/hr (137Cs gamma) with window closed
- range: ± 10% up to 50 mR/hr without DTC and up to 500 mR/hr with DTC
- background: 25 cpm open, 20 cpm closed
- gamma energy response (window closed): within 20% of 137Cs (662 keV) from 60 keV to 1.3 MeV

Read more about the Model 44-38 Energy Compensated GM Detector on the Ludlum website

Model 44-9 Ambient Dose Equivalent Filter – Ludlum

The Model 44-9 Ambient Dose Equivalent Filter (Ludlum) is an expansion on the Model 44-9 Pancake GM Detector. It is an energy compensation filter that flattens the energy response to facilitate measuring Ambient Equivalent Dose.

Model 44-9 Ambient Dose Equivalent Filter features:

- can be purchased separately or together with a Model 44-9 Pancake GM Detector
- flattens the response to within ± 20% referenced to 137Cs (662 keV) over an energy range of 20 keV to 1.2 MeV
- easy to mount and remove

Dose Equivalent Filter Response (green line):

Read more about the Model 44-9 Ambient Dose Equivalent Filter on the Ludlum website

Model 44-9 Exposure Filter Kit – Ludlum

The Model 44-9 Exposure Filter Kit (Ludlum) is an expansion on the Model 44-9 Pancake GM Detector. It is an energy compensation filter that flattens the energy response to facilitate measuring exposure.

Model 44-9 Exposure Filter Kit features:

- flattens the response to within ±20% referenced to ^{137}Cs (662 keV) over an energy range of 33 keV to 1.2 MeV
- easy to mount and remove
- filter can be purchased separately or together with a Model 44-9 Pancake GM Detector

Exposure Filter Response (blue line):

Read more about the Model 44-9 Exposure Filter Kit on the Ludlum website

Model 44-9 Pancake GM Detector – Ludlum

The Model 44-9 Pancake GM Detector (Ludlum) is proven to be the most popular radiation detector used throughout the world. This detector is sensitive to alpha, beta and gamma radiation. The Model 44-9 Pancake GM Detector is enclosed within a rough metal cage but sized and shaped very convenient. It is ideal for checking contamination on people and objects.

Model 44-9 Pancake GM Detector features:

- window area: 15.51 cm^2 (2.4 in^2) active, 12.26 cm^2 (1.9 in^2) open
- pancake-type, halogen-quenched GM detector
- efficiency (4π): 5% for 14C; 22% for 90Sr/90Y; 19% for 99Tc; 32% for 32P; 15% for 239Pu, ≤ 1% for 99mTc; 0.2% for 125I
- sensitivity (137Cs gamma): 3300 cpm/mR/hr
- weight: 0,5 kg

Read more about the Model 44-9 Pancake GM Detector on the Ludlum website

Model 44-7 Alpha Beta Gamma Detector – Ludlum

The Model 44-7 Alpha Beta Gamma Detector (Ludlum) is a device for alpha, beta and gamma survey (sample counting).

Model 44-7 Alpha Beta Gamma Detector features:

- end window, halogen-quenched GM detector
- 6 cm^2 (0.93 in^2) active; 5 cm^2 (0.78 in^2) open window area
- 1.7 ± 0.3 mg/cm^2 mica window
- 2% for 14C; 10% for 90Sr/90Y; 7% for 99Tc; 7% for 239Pu; 0.1% for 125I efficiency (4π)
- 2100 cpm/mR/hr sensitivity (137Cs gamma)
- anodized aluminum housing
- 0.5 kg weight

Read more about the Model 44-7 Alpha Beta Gamma Detector on the Ludlum website

Model 43-92 Alpha Scintillator – Ludlum

The Model 43-92 Alpha Scintillator (Ludlum) is a device for alpha contamination survey.

Model 43-92 Alpha Scintillator features:

- window area: active: 100 cm² (15.5 in²) open: 88 cm² (13.6 in²)
- weight: 0.5 kg
- window: 0.8 mg/cm² metalized polyester (1.2 mg/cm² recommended for outdoor use)
- scintillator: ZnS(Ag)
- efficiency (4π): typically 20% for ^{239}Pu
- removable protective screen
- background radiation: 3 cpm or less
- photomultiplier tube: 2.9 cm (1.13 in.) diameter

Read more about the Model 43-92 Alpha Scintillator on the Ludlum website

Model 43-65 Alpha Scintillator – Ludlum

The Model 43-65 Alpha Scintillator (Ludlum) is a detector designed for alpha radiation survey when used in combination with a general purpose survey meter, ratemeter or scaler instrument.

Model 43-65 Alpha Scintillator features:

- 63 cm² active; 50 cm² open (window area)
- ZnS(Ag) scintillator
- 0.8 mg/cm² metalized polyester window
- 3.8 cm (1.5 in.) diameter photomultiplier tube
- efficiency (4π): 17% for ^{239}Pu; 17% for ^{230}Th

Read more about the Model 43-65 Alpha Scintillator on the Ludlum website

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Partner Centronic Nuclear

Centronic Nuclear was founded more than 70 years ago and has over 40 years experience in the development of semiconductor and gas-filled detectors. For example GM, X-ray, He3 / BF3 neutron and ion chambers for a wide range of applications in Electro-Optical and ionizing radiation detection.

Product offering

Alpha, Beta & Gamma Detectors – Centronic

Gamma Detectors – Centronic

Alpha, Beta & Gamma Detectors – Centronic

The Alpha, Beta & Gamma Detectors (Centronic) are used for the detection of radiation at low dose rates. This range of mica-window tubes is used for monitoring all types of radiation in a wide variety of environments.

Alpha, Beta & Gamma Detectors features:

- circuitry simple
- robust build
- available with compensating filter

Contact our product specialist or download the datasheet below.

Gamma Detectors – Centronic

The Gamma Detectors (Centronic) are used for the detection of radiation at low dose rates. These tubes are suitable for use in environmental monitoring, and for sweeping areas which may have traces of radioactive sources on them.

Gamma Detectors features:

- robust construction
- simple circuitry
- available with compensating filter
- ambient dose compensated versions available

Contact our product specialist or download the datasheet below.

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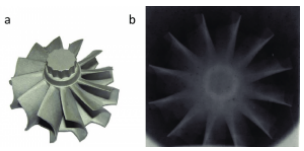
Partner Ashland

Ashland is a global leader in specialty materials, offering innovative solutions that enhance safety, precision, and patient outcomes across various medical disciplines. Their portfolio supports healthcare providers in radiation therapy, diagnostic imaging, wound care, and regenerative medicine.

Product offering

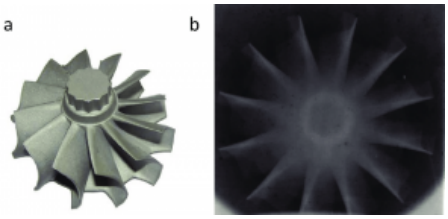
Gafchromic XR-SP2 Industrial Radiographic Film – Ashland



Gafchromic XR-SP2 Industrial Radiographic Film – Ashland

Ashland designed XR-SP2 Industrial Radiographic Film specially for the current demand for security and industrial x-ray imaging applications.

This film is particularly effective in field applications and remote environments, for example, security and non-destructive testing (NDT). This film is at your service when other imaging may not be available.



FILM SENSITIVITY

The film's response depends on the output spectrum of the x-ray generator, or the type and strength of the isotopes. But it also depends on the thickness and composition of the object that you are imaging.

XR-SP2 BENEFITS

- Stand-alone imaging tool
- No screens required
- No cassettes required
- Instantly self-developing
- Resolution >10 microns
- Water and scratch resistant
- Usable in daylight
- Can withstand temperatures from 4,5 ℃ to 60℃ (40℉ to 140℉)
- Stable in real world environment
- The shelf life is over a year

This film comes in boxes of 10 pc. and it's available in two sizes:

- 20,32 cm x 25,4 cm (8″ x 10″)
- 25,4 cm x 30,48 cm (10″ x 12″)

For more information on Ashland radiology film…

Go here!

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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

RadFlash® Electronic Personal Dosimeter

RadFlash® Electronic Personal Dosimeter

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Partner **Other**

Product offering

HPGE and Si(Li) detector accessories

Model 43-5 Alpha Scintillator – Ludlum

HPGE and Si(Li) detector accessories

Ortec HPGE and Si(Li) detector accessories extend the performance of your system. You can choose from several categories including:

- LN2 Accessories
- accessories for X-COOLER III
- shields
- other Acessories

Do you want to know more about the HPGE and Si(Li) detector accessories?

If you want to continue your search for additional information on this product try this link.

Model 43-5 Alpha Scintillator – Ludlum

The Model 43-5 Alpha Scintillator (Ludlum) is a detector developed for alpha radiation survey when used with a common purpose survey meter, ratemeter or scaler instrument. The detector housing is assembled of aluminum alloy with beige powder coat for easy maintenance and durability.

Model 43-5 Alpha Scintillator features:

- efficiency (4π): 13% for 239Pu
- scintillator: ZnS(Ag)
- 0.8 mg/cm² metalized polyester window
- background: 3 cpm or less
- weight: 0.9 kg
- window area: 76 cm² (11.9 in²) active, 50 cm² (7.8 in²) open

Read more about the Model 43-5 Alpha Scintillator on the Ludlum website

DOORWAY & ENVIRONMENTAL MONITORING

peo MEDICAL

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Partner Bertin Technologies

Bertin Technologies is a global provider of advanced radiation detection and environmental monitoring solutions, specializing in handheld monitors, personal electronic dosimeters, environmental monitoring systems, and waste & recycling management technologies. Their instruments are designed to meet the rigorous demands of nuclear facilities, emergency response teams, and environmental agencies.

Product offering

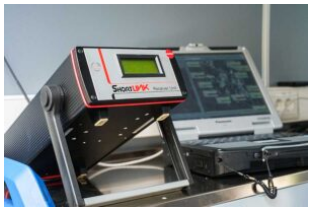
AlphaGUARD-Radon Monitor – Bertin Instruments

SpectroTRACER Environmental Radiation Monitor – Saphymo

AlphaE – Bertin Instruments

SkyLINK Wide-Range Environmental Radiation Monitoring Network – Bertin/ Saphymo

ShortLINK Short-Range Environmental Radiation Monitoring Network – Bertin/ Saphymo



GammaTRACER Spider Autonomous Gamma Monitor for Emergencies – Saphymo

GammaTRACER Autonomous Radiation Monitoring Probe – Saphymo

AlphaGUARD-Radon Monitor – Bertin Instruments

AlphaGUARD is a portable, battery or net-operated radon monitor with high storage capacity. In addition to the radon concentration in air, AlphaGUARD measures and records also simultaneously ambient temperature, relative humidity and atmospheric pressure with integrated sensors.

Thanks to its high sensitivity and long time stable calibration, it is the reference instrument for professional radon monitoring and accurate measurement on site.

The complete product line provides all accessories for radon in air, water, soil, building materials, progeny, thoron and calibration equipment to perform air, water, soil, exhalation measurements. The collected data can be linked to the DataVIEW software, allowing data download and storage as well as professional data analysis and reporting. With AlphaGUARD, bring your Radon Lab everywhere.

AlphaGUARD - Your Radon lab everywhere
https://youtu.be/oJaaYf9-PbI

SCAN TO VIEW VIDEO

FEATURES

- 0.62 L pulsed ionization chamber
- Measuring range of 2 to 2,000,000 Bq/m³,
- Instrument calibrator error of 3%
- Storage capacity of up to 60,000 measurement points
- Storage of:
  - 400 days at 10 min measuring cycle
  - 2,500 days at 60 min measuring cycle
- Battery life of 10 days (40 days with external battery)
- 329 mm x 355 mm x 123 mm and weighs 6,2 kg (13,7 lbs)

BENEFITS

AlphaGUARD is suitable as a reference device and offers the following features:

- Quality at the highest level
- Long-term stable calibration factor (guaranteed 5 years)
- Calibration traceable to different national standards (PTB, NIST, NPL)

- Inbuilt quality assurance system for permanent validation of system operation and data
- Fast transient response
- Automatic background correction
- No sensitivity to high air humidity

Technology

AlphaGUARD incorporates a pulse-counting ionization chamber (alpha spectroscopy).

Based on optimal chamber geometry and intelligent signal evaluation, this radon monitor is suitable for continuous monitoring of radon concentrations between 2 – 2 000 000 Bq/m³.

The DSP (Digital Signal Processing) technology provides highly effective differentiation ability between “real” radon data and all kinds of artefacts.

Your Radon Lab everywhere

- AquaKIT
- Soil gas Probe
- AlphaPM
- AlphaPUMP / LabPUMP
- Emanation / Calibration Container
- Exhalation Box
- On line Radon in water monitoring

- Valve Selector
- DataVIEW PRO software

REASONS TO CHOOSE ALPHAGUARD – RADON MONITOR

- Reference instrument with high sensitivity
- Calibration stability guaranteed for 5 years
- High performance for versatile applications
- Maintenance-free operation

For more information about the Alphaguard, take a look at our partner's website, or read this PEO article!

SpectroTRACER Environmental Radiation Monitor – Saphymo

SpectroTRACER is a continuous environmental radiation monitor for spectroscopy to measure very low gamma contamination (water: SpectroTRACER AQUA).

The SpectroTRACER produces a spectroscopic analysis of the detected nuclides identification. The SpectroTRACER is used for the measurement of radioactivity when a standard gamma dose rate monitor is not efficient enough and when it is necessary to discover the nature of the gamma radiation.

SpectroTRACER Environmental Monitor features:

- working temperature: -20 ° C to + 50 ° C. / option: -30 ° C to + 60 ° C
- max. 100 meters under water (SpectroTRACER -AQUA)
- IP68 certified
- relative humidity: 100%
- integrated sensors for temperature and humidity

AlphaE – Bertin Instruments

AlphaE is an electronic handheld device for fast and time-resolved radon monitoring in buildings, outdoors and mines. Typically, 80 % of the final result is achieved after 2 hours (faster response for higher values). Due to its ultra-lightweight design and sophisticated features, AlphaE is highly suitable also for surveying the personal radon exposure and dose at workplaces.

The AlphaE’s favourable price-performance ratio makes it also interesting for service companies engaged in radon assessment and mitigation as well as for users in private homes.
Up to 6 months battery life allows long-term measurement without mains power. Permanent operations via mains supply are possible via USB port.

Advantages AlphaE

- ultra-lightweight design
- sophisticated features
- wide measuring range for professional use
- up to 6 months autonomy
- suitable software included

Download the datasheet or contact our product specialist.

SkyLINK Wide-Range Environmental Radiation Monitoring Network – Bertin/ Saphymo

The SkyLINK Wireless Communication System is a wide-range, fully autonomous and private wireless network. You can use this system to transmit online data from connected low-power sensors or instruments to a central station. Unlike public cellular communication system standards (like GSM), this system is not dependant on the existence of an area covering cellular infrastructure. The system generally includes a radiological network like GammaTRACER probes and the DataExpert supervision software.

For more information about Bertin Data Transmission systems, take a look at our partner's website!

The system structure allows its use in every situations, even in the most accidental ones (private wireless communication network and easy-to-install autonomous probes).

SKYLINK WIRELESS COMMUNICATION SYSTEM FEATURES

- Very low power consumption
- Operating distance up to 100 km (60 mi)
- Private network, so no regular transmission fees
- Easy interface to external instruments or host processors
- Turnkey system installation
- Long-term maintenance-free operation

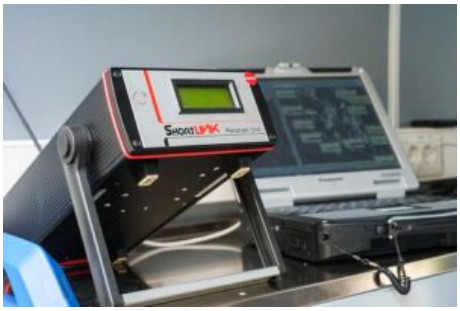
https://youtu.be/59D0HZs64zw

SCAN TO VIEW VIDEO

ShortLINK Short-Range Environmental Radiation Monitoring Network – Bertin/ Saphymo

The ShortLINK Wireless Communication System is a short-range, fully autonomous and private wireless network. You can use this system to transmit online data from connected low-power sensors or instruments to a central station. Unlike public cellular communication system standards (like GSM), this system is not dependant on the existence of an area covering cellular infrastructure. ShortLINK is generally installed in combination with a radiological network, like GammaTRACER and DataExpert supervision software.

If you want to know more about Bertin data transmission systems, take a look at our partner's website!



SHORTLINK WIRELESS COMMUNICATION SYSTEM FEATURES AND BENEFITS

- Very low power consumption
- Operating distance up to 5 km (3 mi)
- Turnkey installation
- Long-term maintenance-free operation
- Can withstand temperatures from -40°C to 60°C (-40°F to 140°F)

GammaTRACER Spider Autonomous Gamma Monitor for Emergencies – Saphymo

The GammaTRACER Spider Autonomous Gamma Monitor (Saphymo) has been designed to cover the needs of first responders in an emergency scenario. Based on the proven GammaTRACER design, the probe provides reliably the measurement of the gamma dose rate and wireless data transmission to the crisis center by means of SkyLINK radio or Iridium satellite modem.

GammaTRACER Spider Autonomous Gamma Monitor for Emergencies features:

- built-in battery for up to 5 years operation
- innovative self-erecting design, very fast deployment
- ultra compact design
- emergency proof communication options
- SkyLINK radio modem (up to 100 km/60 mi)
- satellite modem (Iridium)
- hermetically sealed weatherproof housing
- wide measurement range: 20 nSv/h up to 10 Sv/h
- can be used to quickly enhance density of existing monitoring networks

GammaTRACER Spider demo

GammaTRACER Autonomous Radiation Monitoring Probe – Saphymo

The GammaTracer Autonomous Radiation Monitoring Probe from Bertin is designed to continuously measure, record, and transmit the environmental gamma dose rate. The probes continuously measure the gamma radiation dose.

Worldwide, there are more than 4.000 GammaTRACERs in operation.

The probes also offer a new dimension in wireless data collection. This is possible because the probes are equipped with a radio module, so you can use them with SkyLINK and ShortLINK for wireless data collection. GammaTRACER can store up to 12.800 data sets, depending on the probe type and measurement cycle.

The probe is available in four types: Basic, Wide, High and XL2.

UNLIMITED AUTONOMY

The GammaTRACER is an autonomous radiation monitoring probe. The monitor’s batteries allow maintenance-free, non-stop operation for up to five years, and with an extended battery pack, it will even last up to ten years! This is possible because of the energy-saving chip technology.

But, if you choose the internal solar panel, the autonomy can be unlimited!

They can also resist extreme climatic and environmental conditions because the probes are independent of any physical connections.

GAMMATRACER TYPES

GammaTRACER covers a broad range of radiation monitoring applications because there are multiple types available. The probes are deployable for multiple applications, for example nationwide monitoring, perimeter monitoring, and monitoring for nuclear facilities. The probes are not only suitable for routine, but also for emergency applications.

BASIC

The GammaTRACER Basic has a dose rate measurement range of 20 nSv/h to 10 mSv/h and an energy range of 45keV to 3MeV.

WIDE

The GammaTRACER Wide has a dose rate measurement range of 20 nSv/h to 10 Sv/h and just like the BASIC, also an energy range of 45 keV to 3 MeV.

HIGH

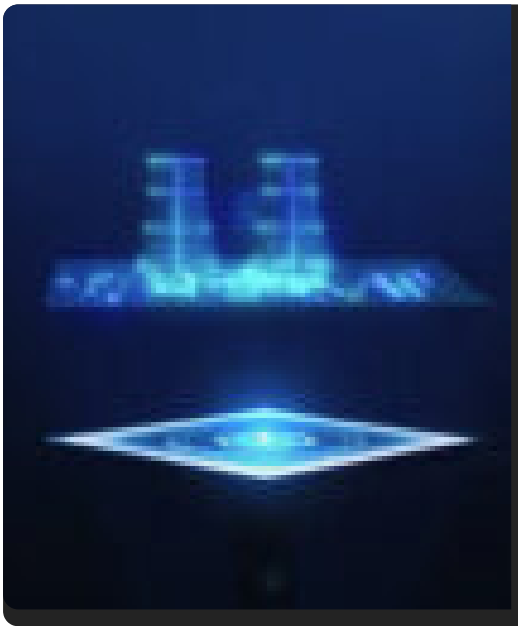
The GammaTRACER High has a dose rate measurement range of 1 mSv/h to 10 Sv/h and an energy range of 80 keV to 4,4 MeV.

XL2

The GammaTRACER XL2 has a dose rate measurement range of 10 nSv/h to 10 Sv/h and an energy range of 45 keV to 2 MeV. The XL2 type also has fast a response mode of 1 second.

ADDITIONAL OPTIONS

Even though the four GammaTRACE options already have a lot of features, there are also options you can choose from. All types can operate in temperatures ranging from -20°C (-4°F) to 50°C (122°F), but you can also choose for the option of -40°C (-40°F) to 60°C (140°F). Furthermore, you can choose additional sensors (rain, wind and weather), power supply by solar panels or a seismic qualified version.



BENEFITS & FEATURES

- Measures x-radiation and gamma radiation
- Measurement cycle, adjustable from 1 second to 120 minutes
- Battery lifetime up to ten years or even unlimited with solar panels
- Can store up to 12.800 data sets
- Type apporval in several countries
- Maintanance-free
- Non-stop operation
- Easy to install

If you want to read more about GammaTRACER, take a look at our partner's website!

https://youtu.be/59D0HZs64zw

SCAN TO VIEW VIDEO

If you have any questions…

Contact PEO!

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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 375P-3500 Conveyor Monitor – Ludlum

Model 375P-1000 Outdoor Radiation Contamination Monitor – Ludlum

Model 375P-336 Surface Contamination Monitor – Ludlum

Model 375-Dual Digital Area Monitor – Ludlum

Model 375/4 Gamma Area Monitor – Ludlum

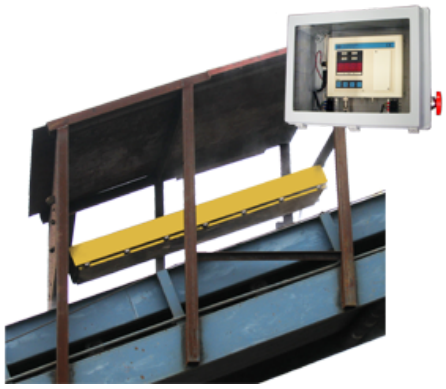
Model 375/2 Digital Area Monitor – Ludlum

Model 375/1 Digital Area Monitor – Ludlum

Model 375 Area Monitor Controller – Ludlum

Model 375P-3500 Conveyor Monitor – Ludlum

The Model 375P-3500 Conveyor Monitor (Ludlum) is a radiation detector system to inspect materials at contamination on a conveyor.



Model 375P-3500 Conveyor Monitor features:

- detector delivers superior sensitivity
- controller can operate totally independently or connected to an ethernet network or wired for remote annunciation
- 57.4 L (3500 in²) plastic detector with 15.2 m cable
- 24-Hour battery backup
- check source (10 µCi)
- electronics housed in a NEMA 4X enclosure with external reset button
- see-through viewing window
- weathertight, lead-shielded enclosure

Read more about the Model 375P-3500 Conveyor Monitor on the Ludlum website

Model 375P-1000 Outdoor Radiation Contamination Monitor – Ludlum

The Model 375P-1000 Outdoor Radiation Contamination Monitor (Ludlum) is a Digital Model 375 controller coupled to 2 shielded 7866 cm² plastic scintillator detectors. The detectors are covered in weathertight enclosures applicable for the outside environment. The Model 375P-1000 Outdoor Radiation Contamination Monitor is perfect for examine outgoing trash and/or medical waste for possible low-level radioisotope contamination.

Model 375P-1000 Outdoor Radiation Contamination Monitor features:

- indicates status, sum alarm, sigma alarm, low battery, det fail and overrange
- 4-digit LED display with 2 cm (0.8 in.) digits
- range: 0.0 to 9999 kcps
- battery backup
- programmable alarms
- network cable
- data output: 9-pin connector providing RS-232 output, signal ground connection, FAIL and ALARM signals and direct connection to battery and ground
- relay output: mains (120 or 240 Vac) output on alarm

Read more about the Model 375P-1000 Outdoor Radiation Contamination Monitor on the Ludlum website

Model 375P-336 Surface Contamination Monitor – Ludlum

The Model 375P-336 is a Digital Model 375 Controller coupled to two 2753 cm plastic scintillation detectors. These components are indoor units that are typically wall-mounted. This simple and cost-effective solution offers a simple system that is easy to operate and maintain.

Model 375P-336 Surface Contamination Monitor features:

- displays µR/hr, mR/hr, R/hr, µSv/h, mSv/h, Sv/h, cpm, cps, and others
- programmable alarms
- battery backup
- network cable
- range: 0.0 to 9999 kcps
- indicates status, sigma alarm, det fail, sum alarm, low battery and overrange

Read more about the Model 375P-336 Surface Contamination Monitor on the Ludlum website

Model 375-Dual Digital Area Monitor – Ludlum

The Model 375-Dual Digital Area Monitor (Ludlum) is a dual-channel digital device to monitor radiation in the surrounding area. The monitor is based on the legacy of the Model 375.

Model 375-Dual Digital Area Monitor features:

- battery backup
- data output/RS-232
- dual LED digital display
- programmable alarm indicators
- low and high alarm
- optional remote

Read more about the Model 375-Dual Digital Area Monitor on the Ludlum website

Model 375/4 Gamma Area Monitor – Ludlum

The Model 375/4 Gamma Area Monitor (Ludlum) is a radiation monitor with an energy compensated GM detector (internally housed) with a range from 0.01 mSv/h to 100 mSv/h.

Model 375/4 Gamma Area Monitor features:

- wall-mount chassis and a four-digit LED display
- networkable
- audio and visual alarms
- budgetfriendly
- weight: 2.1 kg

Read more about the Model 375/4 Gamma Area Monitor on the Ludlum website

Model 375/2 Digital Area Monitor – Ludlum

The Model 375/2 Digital Area Monitor (Ludlum) is a radiation monitor with an internally-housed energy compensated GM detector with a range from 1 µSv/h to 10 mS/h. It has a wall-mount chassis and a 4-digit display (LED) that is readable from a distance of nine meters.

Model 375/2 Digital Area Monitor features:

- visual and audio alarms
- budget friendly
- integrated design
- battery backup
- displays µrem/hr, mrem/hr, µR/hr, mR/hr, R/hr, µSv/h, mSv/h, Sv/h, rem/hr, cpm, cps and others
- readings within 10% of true value with detector connected
- indicates overrange, overload, low-battery, high alarm, low alarm, detector fail and status

Read more about the Model 375/2 Digital Area Monitor on the Ludlum website

Model 375/1 Digital Area Monitor – Ludlum

The model 375/1 digital area monitor is designed for visibility and ease of use. The monitor has an internally housed 18 mm CsI scintillator with a sensitivity of approximately 120 cpm/R/hr.

The monitor has a wall-mount chassis and a four-digit LED display that you can read from 9 meters (20 feet) away.

The indicators warns with an alarm when it detects low radiation (with yellow), high radiation (with red), instrument failure (also red) or when it has a low battery (with yellow).

FEATURES

- Low background sensitivity
- 4-digit LED display, readable from 9 meters away
- Audio and light alarm
- Can withstand temperatures rangin from -20°C to 50°C (-4°F to 122°F)
- Alarm of 68 dB to 100 dB (audio)

If you want to know more about this monitor, read our article!

Model 375 Area Monitor Controller – Ludlum

The Model 375 is a versatile, compact, and very affordable digital electronic controller designed for monitoring radiation in areas. Its simple design accommodates many different detectors suiting a wide variety of applications, and is equipped with a local readout and alarms. These versatile units may also be connected to an optional auxiliary indicator/annunciators for alerting personnel at remote locations.

Choose from a wide range of probes for any application: Ludlum probes

Model 375 Area Monitor Controller features:

- programmable units of measure and alarms
- budget friendly product of good quality
- battery backup
- four-digit LED display with two cm digits
- suggested detectors: neutron, proportional, GM, scintillation
- displays µR/hr, mR/hr, R/hr, µSv/h, mSv/h, Sv/h, µrem/hr, mrem/hr, rem/hr, cpm, cps, and others
- threshold: 2 to 100 mV (adjustable)

Read more about Model 375 Area Monitor Controller on the Ludlum website

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Partner Ultra Electronics

Ultra Electronics acquired Lab Impex Systems on July 17th, 2014. This is a known specialized manufacturer in radiation detection solutions and services for use in the global nuclear industry. Founded in 1976, Laboratory Impex Systems Ltd (LIS) is a leader in designing, developing and manufacturing health physics and radiation protection measurement instrumentation focusing on stack monitoring.

Product offering

Gaseous Monitoring – PG10 Gas Activity Monitor – Lab Impex Systems

CMS Noble Gas Monitor – Ultra Electronics

Gaseous Monitoring – PG10 Gas Activity Monitor – Lab Impex Systems

The PG-10 Gas Activity Detector (Lab Impex Systems) measures beta or positron emitting radioactive gases in the environment (or in a closed loop system). The detector is suitable for PET Radiation monitoring, Noble Gas monitoring and monitoring of Nuclear Medicine Radio-nuclides.

Primarily used for the measurement of emissions from stack and ducts, the PG-10 detector may also be configured to sample the air in the working environment.

Detectors are normally built for the specific application and supplied with NPL traceable calibration.

The CMS (Continuous Monitoring Station) can simultaneously measure the PG-10 output and the flow rate through the stack/duct and report the discharge rate in days/weeks/months/years etc.

PG10 Gas Activity Monitor features:

- accurate measurement of beta gamma gaseous discharge
- reports discharge emissions inline with regulator requirements
- customized systems to suit all applications

Read more about the PG10 Gas Activity Monitor on the Lab Impex Systems website.

CMS Noble Gas Monitor – Ultra Electronics

The LIS Noble Gas Monitor (Lab Impex Systems) is an integrated solution for the measurement of the airborne concentration of radioactive (beta emitting) noble gases. The monitor is suitable for process, stack and health physics applications, and comprises detector, shielding, pump, flow sensor and CMS processor.

The heart of the system is the BG-10 scintillation detector. Offering unparalleled sensitivity to noble gases, the BG-10 uses a specially designed plastic scintillation sensor mounted in a flow through measurement chamber.

Noble Gas Monitor features:

- excellent MDL resulting from minimal detector response to external sources of gamma.- Low response to NORM such as radon and thoron
- available in a fixed or transportable configuration
- CMS analysis algorithm provides a low stable measurement at background, but ensures a fast response to rising concentration levels
- optional gamma dose-rate detector for dynamic gamma background compensation or dose rate measurement

Read more about the Noble Gas Monitor on the Lab Impex Systems website.

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Partner Other

Product offering

Model 375-9 Digital Area Monitor – Ludlum

Model 375-10 Digital Area Monitor – Ludlum

Model 375-9 Digital Area Monitor – Ludlum

The Model 375-9 Digital Area Monitor (Ludlum) has been designed for visibility and ease of use. This monitor provides a fast response to pulsed fields by utilizing an external ion chamber covering any four consecutive decades between 1 µSv/h and 1000 mSv/h.

Choose from a wide range of probes for any application: Ludlum probes

Model 375-9 Digital Area Monitor features:

- user-programmable alarm settings
- affordable area monitor
- battery backup
- fast response to pulsed fields
- 4-digit LED with 2 cm (0.8 in.) character height

Read more about the Model 375-9 Digital Area Monitor on the Ludlum website

Model 375-10 Digital Area Monitor – Ludlum

This wall-mounted area monitor is simple to set up, use, and calibrate. It is both an effective and cost-effective controller, and is paired with an internal scintillation detector normally calibrated to be non-sensitive to low-energy medical isotopes. The detector's removable lead shield provides greater resistance to low-energy sources in order to prevent nuisance alarms.

Model 375-10 Digital Area Monitor features:

- range: 0.1 to 20 µSv/hr
- user-programmable alarms
- networkable
- internal 5.1 x 5.1 cm (2 x 2 in.) (Dia x L) sodium iodide NaI(Tl) scintillator
- indicates: status, high alarm, low alarm, low battery, overrange and overload

Read more about the Model 375-10 Digital Area Monitor on the Ludlum website

DOSE RATE MONITORING

peo MEDICAL

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Partner Bertin Technologies

Bertin Technologies is a global provider of advanced radiation detection and environmental monitoring solutions, specializing in handheld monitors, personal electronic dosimeters, environmental monitoring systems, and waste & recycling management technologies. Their instruments are designed to meet the rigorous demands of nuclear facilities, emergency response teams, and environmental agencies.

Product offering

Skydose Dosimetry System – Bertin Instruments

RadTRACE – Bertin Instruments

MiniTRACE S5 – Saphymo

Skydose Dosimetry System – Bertin Instruments

Skydose is an operational dosimetry system, designed to measure & monitor, in real time, the ambient dose level received by response teams in high exposure areas.

The operational dosimetry system Skydose consists in eight Saphydose γi RT teledosimeters, one Personal Digital Assistant (PDA), one Easydose configuration software, one Saphyr portable reader, as well as one to three RT-ZB05 routers.

The Skydose system is part of an ongoing approach based on the reduction of both collective and individual doses, in compliance with the ALARA principle (As Low As Reasonably Achievable). By optimizing the exposition to ionizing radiation, it aims at improving the operators' conditions of intervention, who will thus be able to focus safely on the objectives of their mission.The Skydose system only takes a **few minutes to install**. Thanks to the PDA, it ensures the in-field monitoring of an eight-person team equipped with Saphydose γi RT teledosimeters using mesh networking.
Flexible & robust, the Skydose system can reliably cover an entire infrastructure (a nuclear power plant, for example), thanks to one or more RT-ZB05 dedicated routers.
Fast & easy to deploy, the Skydose system can be used by operators, first-responders & non-specialists, inside & outside the risk areas.

Features

- easy and quick setting even by non-specialized staff
- automatic network synchronization
- suitable for indoor and outdoor use including reactor buildings
- suitable for emergency situations (sturdy – high dose and dose rate range)
- real-time hotspots detection to reduce the mission dose received by workers
- compliant with use in nuclear facilities (CEI 61526)
- low maintenance costs
- real-time, remote & simultaneous monitoring of the Saphydose γi RT dosimeters, for the team to react immediately in case of emergency
- the Skydose system can be installed and configured in a few minutes, and be safely stored in a ruggedized pelicase – several systems can operate simultaneously, without interference

Specifications

- detector: 2 energy-compensated silicon diodes
- energy range: **from 50 keV. to 7 MeV!**

- dose rate measurement range: 0.5 µSv. to 9,999.99 mSv
- dose measurement range: 1 µSv. to 9,999.99 mSv
- alarms: sound & visual
- battery lifetime in operation: 4,000 hours
- radio range: 300 m

RadTRACE – Bertin Instruments

RadTRACE is a gamma survey meter dedicated to workers and non-specialized staff subject to radiation exposure in professional applications.

RadTRACE is a reliable dose rate meter designed to improve the safety of workers exposed to radiation. Robust, compact and easy to use, this instrument allows the measurement of gamma dose and dose rate on a wide range, with a very fast response time (1 sec.).

The data are automatically displayed on an LCD backlit interface with an auto scale function switching between µSv/h and mSv/h for more accuracy. Initially designed for the French nuclear industry, it also offers a vibration alarm and an internal memory for measurement results. The internal data storage allows users to record the dose and dose rate for later readout (interval free adjustable).

Advantages

- high sensitivity
- fast response time (1 sec)
- light, robust and pocket design
- easy to use
- long battery lifetime: 1,000 h

RadTRACE

MiniTRACE S5 – Saphymo

The MiniTRACE S5 is a contamination meter designed to improve the safety of workers in all different kinds of fields. It's very sensitive and responds within a second.

Because the device is very user-friendly, it's very easy to detect possible spots of contamination in the controlling areas. The 6-digit display shows the activity value with a fixed decimal point.

The MiniTRACE has four pre-programmed alarm tresholds, but users can also adjust these to their personal needs.

This contamination meter is not only easy to use, but it's also very fast. If the device detects something, it will respond within a second. The device is applicable to many fields, like nuclear power plants, research centers, hospitals, police, fire brigades and the army.

BENEFITS OF THE MINITRACE S5

- High sensitivity
- Fast response time
- Compact and robust
- Ergonomic design
- Easy two-button operation
- 4 alarm tresholds
- Visual and audible alarm output
- Infrared interface
- X-ray sensitivity of >5 keV

If you want to read more about dose rate meters from Bertin, visit their website!

If you are in doubt about what MiniTRACE suits you best...

Read this!

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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

Dose Rate Monitor T402 & T402HR - Tracerco

Intrinsically Safe Radiation Dose Rate Monitor (T202) Tracerco™

Dose Rate Monitor T402 & T402HR – Tracerco

The non-intrinsically safe radiation (contamination) Dose Rate Monitors T402 & T402HR offers an alternative to the Tracerco™ T202 Dose Rate Monitor. The instrument is designed for use in a wide range of industrial applications are radioactive substances are present.

Specifications Dose Rate Monitor T402 & T402HR Tracerco

Contamination Dose Rate Monitor T402 & T402HR

Intrinsically Safe Radiation Dose Rate Monitor (T202) Tracerco™

The Tracerco T202 dose rate monitor provides key operational features like peak dose rate memory and personal dose integration. Tracerco designed the monitor specifically to combine intrinsic safety with robust and reliable characteristics.

The monitor is suitable for all kinds of markets like:

- Oil and gas
- First responders
- Military
- Life sciences
- Mining
- Nuclear
- Medical
- Environmental agencies

TRACERCO DOSE RATE MONITOR BENEFITS

- Intrinsically safe, so no need for a hot work permit
- Reads and records peak measurements so you can measure radiation levels remotely
- It can be used in every weather
- Adjustable alarm thresholds
- Lightweight
- Digital bar graph display and dose rate integration
- Easy to decontamination

If you want to know more about Tracerco Dose rate monitors, take a look at our partner's site!

Need advice or do you have a question?

Contact PEO!

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Partner Sun Nuclear Corporation

Sun Nuclear is a leading provider of comprehensive Quality Management solutions for radiation therapy and diagnostic imaging. Their portfolio encompasses positioning systems, dosimetry tools, QA phantoms, detectors, dose rate monitoring devices, analysis software, and training phantoms. These solutions are designed to support medical professionals in ensuring accurate, safe, and efficient patient care.

Product offering

Model 330 – Digital kV, Dose and Time Meter – Sun Nuclear

Model 330 – Digital kV, Dose and Time Meter – Sun Nuclear

The Gammex 330 Digital kV, Dose and Time Meter is a test device for quality control and acceptance testing in radiographic, mammographic and fluoroscopic x-ray systems.

Digital kV, Dose and Time Meter features:

- includes digital display of the quantity PPV (pratical peak voltage) according to IEC 61676
- compact and light-weight
- easy-to-read LC Display
- measures kVp, dose and time non-invasively
- touch key controls

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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 3019 Digital Background Survey Meter – Ludlum

Model 3001 Multi-Detector Survey Meter – Ludlum

Model 9DP Ambient Dose Ion Chamber Survey Meter – Ludlum

Model 9DP-1 Ion Chamber Survey Meter – Ludlum

Model 3019 Digital Background Survey Meter – Ludlum

The Model 3019 Digital Background Survey Meter (Ludlum) is a device with an internal scintillation detector used for gamma radiation survey for background to 500 µSv/hr.

Model 3019 Digital Background Survey Meter features:

- internal CsI, scintillator with 175 cpm/µR/hr sensitivity detector
- count, rate and max
- 4-button intuitive interface for easy operation
- ruggedly built and light weight
- splash-resistant construction
- bright LED and sigma audio simplifies searching
- large backlit LCD for ease of reading
- USB port
- autoranging

Read more about the Model 3019 Digital Background Survey Meter on the Ludlum website

Model 3001 Multi-Detector Survey Meter – Ludlum

The Model 3001 Multi-Detector Survey Meter (Ludlum) is an ergonomically-designed, versatile, lightweight instrument which can support up to 4 external detectors. Each detector with its own user parameters and set of calibration.

Choose from a wide range of probes for any application: Ludlum probes

Model 3001 Multi-Detector Survey Meter features:

- max, rate and count modes of operation
- datalogging and headphone options
- large backlit LCD for ease of reading
- USB port
- ruggedly built and lighter weight
- splash-resistant construction for outdoor use
- Geiger-Mueller (GM), scintillator or proportional detector

Read more about the Model 3001 Multi-Detector Survey Meter on the Ludlum website

Model 9DP Ambient Dose Ion Chamber Survey Meter – Ludlum

The Model 9DP Ion Chamber Survey Meter is a highly sensitive pressurised ion chamber meter. It doesn't only provide a measurement of exposure, but also of exposure rate. The meter measures and displays data conform the ICRU (International Commission on Radiation Units) tissue equivalent.

AMBIENT DOSE EQUIVALENT

Ambient dose equivalent, is the dose equivalent readout that would be measured at a tissue depth of 10 mm. To measure this, the device requires a special ion chamber to provide a conversion of the exposure rate.

This model can simultaneously display the rate, integrated value and highest rate seen by the instrument. If desired, the user can reset the integrated value.

FEATURES

This chamber survey meter has a nice 256K colour, bit-mapped display, which provides an optimised presentation of the data. The screen is also accompanied with icons that inform the user of the active functions and instrument status. The device can write all logged data in csv format.

When the device's alarms go off, the display will flash colours and, if the user wants, it can also make an acknowledgeable sound.

If you want more information about this Ion chamber survey meter, go to our partner's website!

BENEFITS

- Provides ICRU-Based ambient dose measures
- The colour display is also readable in sunlight
- Auto zeroing and ranging
- Rechargeable batteries
- Alarm function
- USB Connectivity
- Data logging
- Chamber volume of 230 cc volume pressurised to 8 atmospheres (117 psi)

- 4-button control

Model 9DP Overview https://youtu.be/UYPJQNVeC_I

Model 9DP* overview

SCAN TO VIEW VIDEO

9DP Control Panel Overview https://youtu.be/HusnR4e90yA

Model 9DP Control Panel Overview

SCAN TO VIEW VIDEO

If you want to know more about this model...

Read our article! **Or contact PEO!**

Model 9DP-1 Ion Chamber Survey Meter – Ludlum

Ludlum designed the Model 9DP-1 Ion Chamber Survey Meter for radiography work where pulsed fields are being measured. This instrument correctly integrates 50 nanosecond pulses (and wider) that other systems typically miss or measure incorrectly.

The detector chamber is only pressurised to 1,36 atm (20 psi). The device has a nice 256-colour, bit mapped display, which provides an optimised presentation of the data. The instrument also has with icons that inform the user of the active functions and instrument status and which make it simple to use.

FEATURES

This chamber survey meter has an alarm that uses colour changes in the screen and an acknowledgeable audio output. It also has a rechargeable battery that delivers up to 30 hours of operation between charges.

The instrument writes the data in csv format for convenient retrieval.

The device measures both exposure and exposure rate, and can simultaneously display the exposure rate, integrated value and highest rate seen by the instrument.

BENEFITS

- Special design for measuring pulsed fields
- Low pressure chamber is non-hazmat
- Range from 0-500 mGy/h
- Sunlight readable colour display
- Auto zeroing & rangin
- Rechargeable batteries
- Alarming capability
- Data logging

If you want to know more, read our article, or take a look at our partner’s website!

Model 9DP Overview https://youtu.be/UYPJQNVeC_I

SCAN TO VIEW VIDEO

9DP instrument overview

9DP Control Panel Overview https://youtu.be/HusnR4e90yA

SCAN TO VIEW VIDEO

9DP control panel overview

How To Decompress the Model 9DP https://youtu.be/JzbUaH9kfjU

SCAN TO VIEW VIDEO

Decompressing the Ion Chamber

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Partner Centronic Nuclear

Centronic Nuclear was founded more than 70 years ago and has over 40 years experience in the development of semiconductor and gas-filled detectors. For example GM, X-ray, He3 / BF3 neutron and ion chambers for a wide range of applications in Electro-Optical and ionizing radiation detection.

Product offering

Beta & Gamma Detectors – Centronic

Beta & Gamma Detectors – Centronic

The Beta & Gamma Detectors (Centronic) are used for the detection of radiation at low, intermediate and high dose rates. These types have a wide range of applications e.g. personal dosimetry, military and defence equipments.

Beta & Gamma Detectors features:

- robust construction
- simple circuitry

Contact our product specialist or download the datasheet below.

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Partner Other

Product offering

MiniTRACE Family – Saphymo

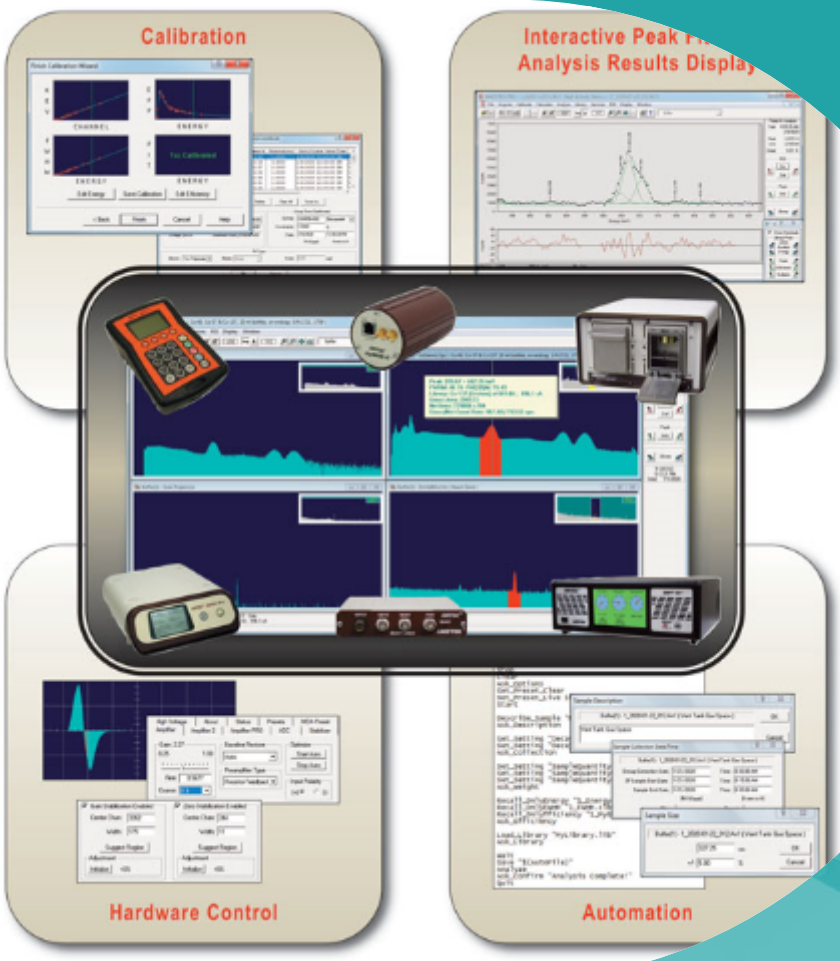
MiniTRACE Family – Saphymo

The MiniTRACE Family (Saphymo) is a range of dosimeters, dose rate meters and contamination meters for Alpha, Beta, Gamma and X-ray detection. The Minitrace is designed to improve the safety of the workers in the control areas of nuclear power plants, reprocessing plants, research centers and hospitals.

MiniTRACE Family features:

- fast response time
- integration time adapted to change of measure value
- additional ‘mean value mode’ for precise measurement of low radiation levels
- long battery lifetime
- four alarm threshold settings
- audible pulse output
- infrared interface

SOFTWARE



peo MEDICAL

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Partner Bertin Technologies

Bertin Technologies is a global provider of advanced radiation detection and environmental monitoring solutions, specializing in handheld monitors, personal electronic dosimeters, environmental monitoring systems, and waste & recycling management technologies. Their instruments are designed to meet the rigorous demands of nuclear facilities, emergency response teams, and environmental agencies.

Product offering

Dataexpert Software Solution – Saphymo

Dataexpert Software Solution – Saphymo

DataEXPERT software is a solution you can use to collect, manage, chart and evaluate data measured by sensors from Bertin Instruments for example. DataEXPERT is a very user-friendly solution that offers a powerful web-based interface available, not only on computers and laptops, but also for mobile use on tablets and smartphones.

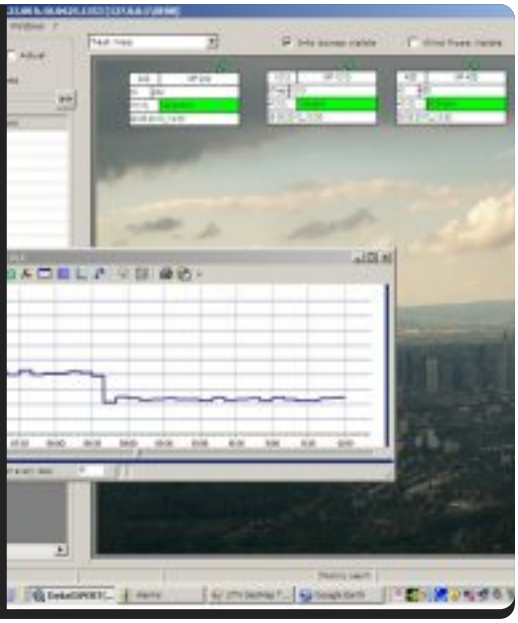
The software shows the data in charts or tables, and with static or dynamic GIS map layers, so the data is easy to analyse. DataEXPERT eases the system management because it shows all technical and radiological events of the connected probes. The users have access to the system overview, and they can also adjust all instruments parameters with remote setup functions.

You can combine this software perfectly with Bertin's GammaTRACER probes for example.

DATAEXPERT SOFTWARE BENEFITS

- Can also import and display data from DVD-files (older data can be imported)
- Select data from different tools or measurement series in the database and display it
- Use alarm, zoom, display, mathematics and report functions
- Easily exportable data to Excel or SQL databases
- Use a display module like GEOMAP or Google Earth
- User friendly
- Compatible with Windows

Do you want to read more about the possibilities, visit our partner's website!



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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

Dosimeter software DoseVision™ and DoseVision™ Tracerco

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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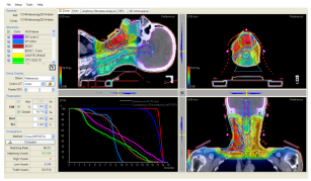
Partner Sun Nuclear Corporation

Sun Nuclear is a leading provider of comprehensive Quality Management solutions for radiation therapy and diagnostic imaging. Their portfolio encompasses positioning systems, dosimetry tools, QA phantoms, detectors, dose rate monitoring devices, analysis software, and training phantoms. These solutions are designed to support medical professionals in ensuring accurate, safe, and efficient patient care.

Product offering

GRID VIEW ® – CIRS

3DVH Software for Patient QA – Sun Nuclear



GRID VIEW ® – CIRS

CIRS developed GRID-VIEW for mammography. It specifically addresses inadequacies in the post operative handling of surgical breast biopsy specimens and multiple core biopsy specimens.

The unique design and radio-opaque grid, provide an efficient system for imaging, transporting and identifying breast biopsies.

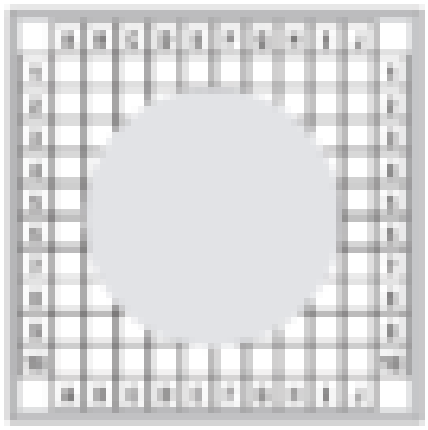
The product is available in three grid patterns and can be purchased as a carton of 12 units, or as a case of 12 cartons (144 units).

GRID-VIEW BENEFITS

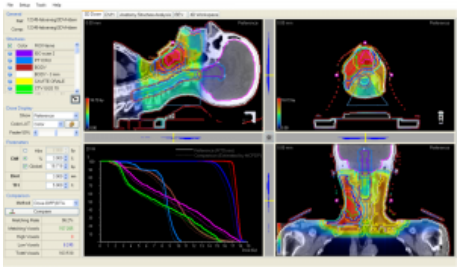
- Reduces surgery time through improved imaging turn-around.
- Improves communication between surgery, radiology and pathology.
- Eliminates physical handling of specimens in radiology.
- Eliminates the need for needles or wires.
- Reduces risk of exposure to blood-borne pathogens.

If you want to know more about this product, take a look at our partner's website.

Or… contact PEO!



3DVH Software for Patient QA – Sun Nuclear



3DVH Software transforms the field of per-patient dose QA by generating clinically-relevant and intuitive analyses of complex IMRT and VMAT plans. With proven accuracy, 3DVH estimates the 3D dose to the patient-specific geometry.

3DVH Software features:

- fast results with automated tools – Quick Stat Templates,
- quick Dose Profiles, DICOM compliant workflow
- no forward dose calculation into the patient CT
- no commissioning
- uses existing measurements and devices
- with optional Respiratory MotionSim module, analyze the dosimetric impact of a moving target
- transform 2D measurements to 3D dose volume for advanced analysis
- perform 3D dose and DVH QA analysis on patient – not phantom – geometry
- supports coplanar and non-coplanar beams
- identify TPS and beam delivery errors
- intuitive and familiar presentation of dose and DVH with statistics per anatomical structure

3DVH Software compatibility:

- hardware: ArcCHECK, MapCHECK 2
- software: SNC Patien, EPIDose
- rotational therapy: RapidArc, VMAT
- static gantry: IMRT
- treatment planning systems: Pinnacle, Eclipse, and most TPS systems that can export DICOM data
- FFF & non-FFF deliveries

Read more about 3DVH Software on the Sun Nuclear website

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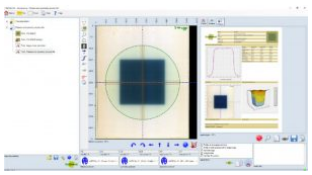
Partner Ashland

Ashland is a global leader in specialty materials, offering innovative solutions that enhance safety, precision, and patient outcomes across various medical disciplines. Their portfolio supports healthcare providers in radiation therapy, diagnostic imaging, wound care, and regenerative medicine.

Product offering

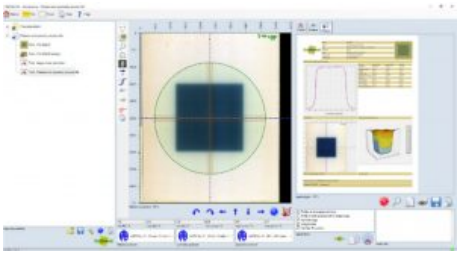
FilmQA Pro™ Software version 7 – Ashland



FilmQA Pro™ Software version 7 – Ashland

a sophisticated, quantitative analysis tool for Gafchromic™ Film

FilmQA Pro™ software is a sophisticated, quantitative analysis tool specifically designed to simplify and streamline the intensity-modulated radiation therapy quality assurance (IMRT QA). Our software is also effective for QA of SRS, SBRT and VMAT procedures. It allows you to scan or open images of exposed film and calculate the optimized dose maps.



FilmQA Pro™ software uses proprietary multi-channel dosimetry which eliminates or mitigates film and scanner artifacts by detecting whether errors are being made during scanning. In addition,, the software also has the one-scan analysis feature which combines calibration and plan verification in a single scan. The one-scan protocol requires only the patient film, a reference patch, and an unexposed patch. This protocol eliminates error sources such as interscan variability, which enables you to reduce errors to within 2 percent.

With FilmQA Pro™ software, you can get your results in minutes, post-exposure growth no longer is an issue and there is no waiting overnight for changes in the film to diminish. You can do an analysis any time you want, even at a moment's notice. The software delivers gamma passing rates ≥ 95 percent at 2 percent at 2 mm instead of using 3 percent at 3 mm.

key features and benefits

- lateral scan correction: apply a correction to compensation for lateral artifacts that can show in the scan
- new user friendly interface with a quick start menu
- one-scan protocol: fast and efficient method to achieve dose accuracy within 2%
- triple-channel dosimetry: use three color channels to optimize accuracy of dose calculations
- accurately calibrate: an entire lot with just four strips of film using our film-specific mathematical function
- quick-start screen: easily access the module you need at start-up
- dose error recognition: ability to identify accuracy of delivered dose
- superior resolution: get 100 percent of the picture from millions of measurements instead of just 0.1 percent
- no angular dependence: shoot the film from all angles, an entire plan on a single Gafchromic™ film, and validate the plan in the same way that the patient receives it

FilmQA Pro™ Software carries a CE Mark

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
Dose µSv
>999min
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

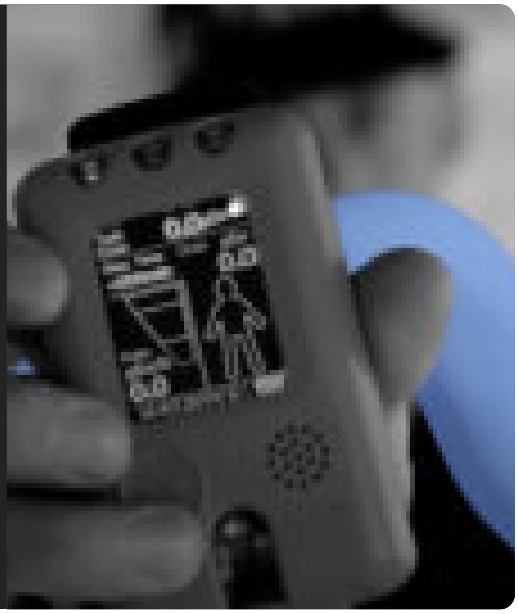
The PED-IS, Personal Electronic Dosimeter is an ideal dosimeter for workers who are not specially trained to measure radiation exposure. The entire PED has ben designed with the user in mind, so it is very user friendly. The AMOLED display features a simple diagram of a man that fills with colour when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

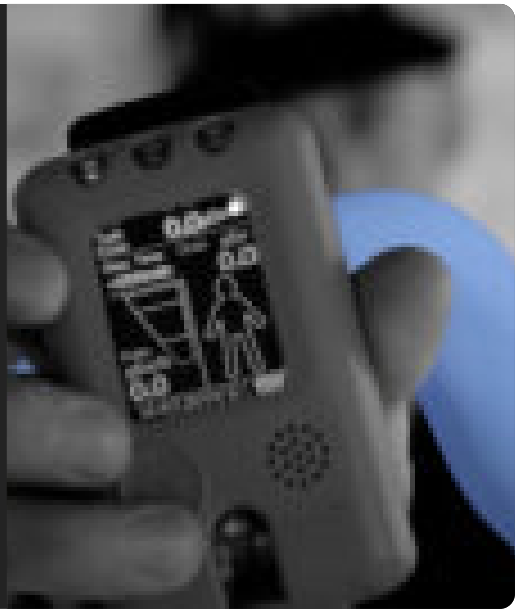
The PED-ER is a robust, light and user-friendly personal electronic dosimeter. You can use it to effectively monitor, measure and manage radiation exposure. This PED is the same as the PED-Blue from Tracerco, only the ER stands for Extended Range, so the range is bigger.

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

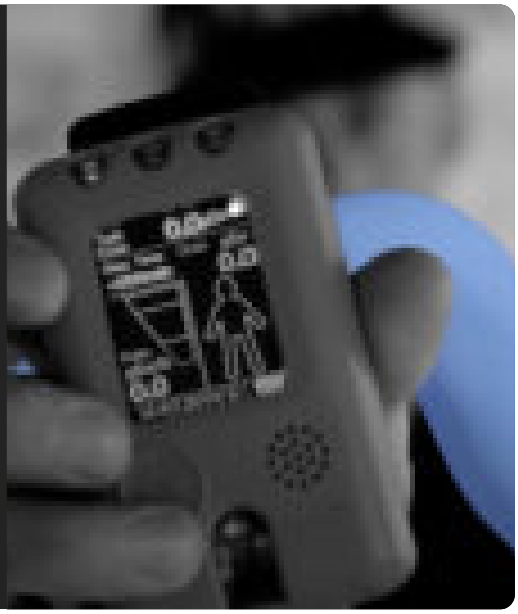
The PED-Blue is a lightweight, non-IS PED. The device can be charged with a direct micro USB connection, so it's more flexible. This dosimeter can also be configured to use either two or four dose alarm levels and is customisable through DoseVision™ software.

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

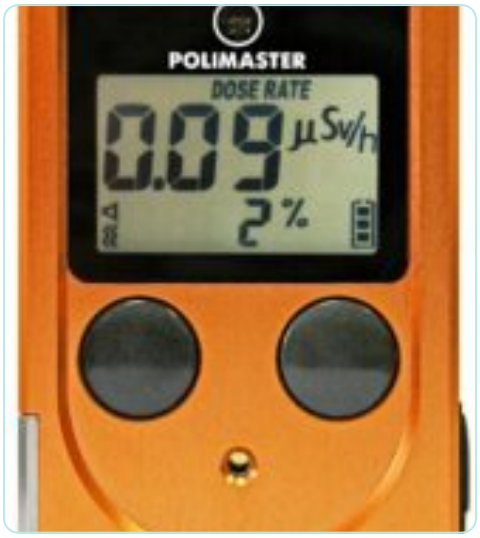
PM1604B- modification has extended DER measurement range.

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

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

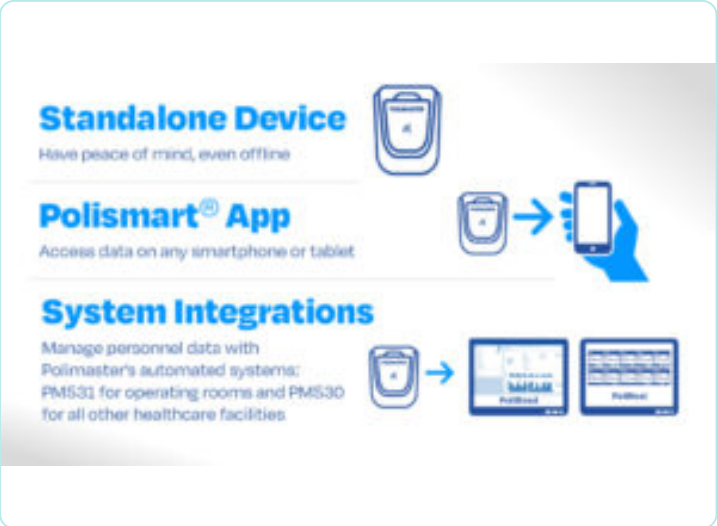
- Independent alarm thresholds for both dose and dose rate
- Automatic calculation of the safe stay time in the Polismart® app
- Miniature, lightweight design
- Intuitive single control button
- Bluetooth integration
- Wireless charging
- Optional integration with PM530 or PM531 automated personal dosimetry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