CONTAMINATION 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

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.

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

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

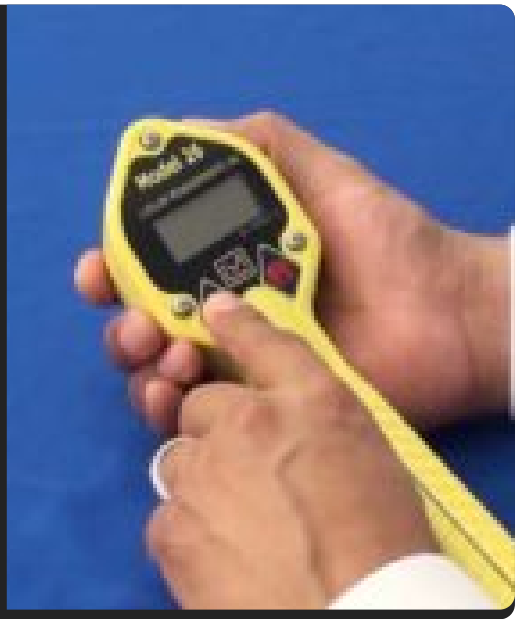
This Frisker with Geiger Mueller (GM) 26 is the simpler version of Ludlum's model 26-1.

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

SCAN TO VIEW VIDEO

All model 26 options and features

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

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For more information from our partner, visit this page.

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