NUCLEAR MEDICINE

peo MEDICAL

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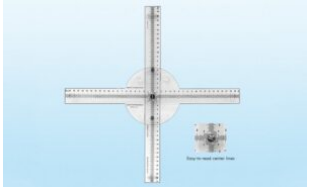
QUART X-Ray QA Solutions is a German-based provider of quality assurance technologies for diagnostic imaging and radiological applications. Their offerings encompass QA phantoms, dosimetry tools, measurement systems, and analysis software, supporting medical professionals in maintaining high standards of patient safety and imaging accuracy.

Product offering

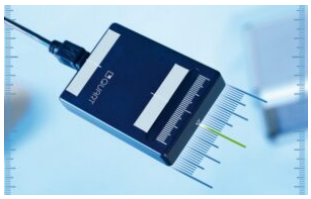
ED 150

Gamma Twin

X-Ray Ruler



QUART nonius



QUART dido/time M

didoEASY MR / didoEASY+ MR / didoEASY++ MR

QUART didoNEO R

ED 150

Electronic Personal Dose Meter w/ Dose Rate Indicator and Alarm Function

The ED150 is a dose rate meter for the measurement of gamma radiation and X-rays for dose equivalent p(10).
It features an energy-compensated Geiger-Müller-tube detector in a compact casing with a large specially shaped LC display.
The meter provides dose rate indication upon keystroke, reliable and safe measurement of radiation in front of the user‘s body (solid detection at an angle of 180°). Upon request, the alarm thresholds can be configured to customer requirements. In addition, the meter has a switchable acoustic single-pulse indication, menu-driven user navigation storage of dose value, and set parameters also during battery change.
IP67 protection class.

Gamma Twin

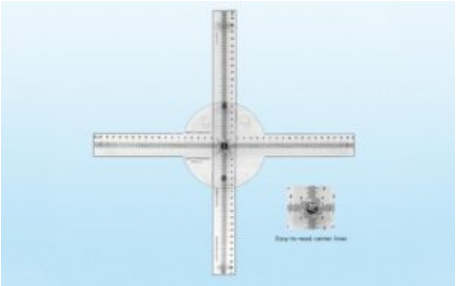
Compact Dose Rate Meter

The Gamma Twin is a PTB-approved dose rate meter for the measurement of gamma radiation and X-rays for ambient dose rate equivalent p*(10) and ambient dose equivalent H*(10) (local dose).
It features an energy-compensated Geiger-Müller-tube detector in a compact casing with a large backlit LC display. The meter provides selectable simultaneous or separate indications of dose and dose rate together with an analog dose rate logarithmic bar graph. Four preset dose and dose rate alarm thresholds are available. Upon request, the alarm thresholds can be configured to customer requirements. In addition, the meter has a switchable acoustic single-pulse indication, automatic and continuous storage of the dose into a non-volatile memory, storage of the dose, and set parameters even at battery change. IP54 protection class (splash proof)

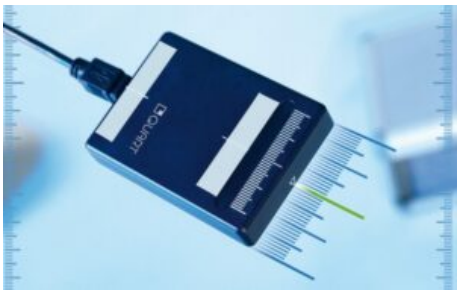
X-Ray Ruler

Cross Shaped Radiopaque X-Ray Ruler

Set of 440 mm “0” center cross-shaped rulers on a center aluminum pin.
The center is designed to easily read all 20 graduations in all directions from the center, with no graduation overlap.
The set swings open for use and closes for storage in the case. The base ruler has a built-in stabilizer with clear rubber feet to keep its position on the image receptor.
A set of lines on the base helps the user quickly align the rulers at 90° to each other.
Felt bumpers keep the rulers from scratching each other.



QUART nonius



Direct Electronic X-Ray Ruler for Field and Fan-Beam Measurement

The QUART nonius is an easy-to-use and very sophisticated measuring instrument to verify the size and geometrical properties of **X-ray fields**. It can also be used to analyze characteristics of **fanned X-ray beams** as used in **CT** or dental panoramic X-rays (**OPG**).
The QUART nonius is incredibly flexible: it is suitable for digital as well as conventional X-ray modalities. In any case, its precision is an absolute strong point – as it achieves a resolution in the so-called nonius range of **0.1 mm**.
The nonius software, to operate the device, is available as a single or multi-user **on-premise installation**.
Digitization in X-ray technology makes traditional screen films less available. Originally, they were used for checks on X-ray beam properties. Today, the QUART nonius performs the same task. And it provides even more substantial features.
The QUART nonius can be used to verify if the light visor matches the actual X-ray field. In addition, the nonius provides the option to assess the position and width as well as the dose profile of fanned X-ray beams. For that purpose, it features markings to line up the light field or positioning lasers.
Recent studies have proven that QUART nonius can also be used for field measurement in radiation therapy applications.*

QUART dido/time M

Routine Test Dosemeter for Mammography QA/QC 25-35 kV

The QUART dido/time meters are designed for straightforward dose/dose reference measurements as required in x-ray routine QA/QC. Routine tests are usually carried out in regular intervals to ensure the adequate performance of X-ray equipment. The QUART dido/time meters are perfect tools for that application.
The meter is ready for use immediately after activation. No presetting procedure is required. Simply position the detector and expose it to acquire the routine check parameters. The QUART dido/time M is calibrated to Mo/Mo radiation quality.
In x-ray quality control the meters are used with an image quality control phantom.

didoEASY MR / didoEASY+ MR / didoEASY++ MR

X-Ray Multi-Meter Series for Service and QA in R&F, Dental and Mammograph

- QUART didoEASY MR, Art. 11117, Basic Configuration
- QUART didoEASY+ MR, Art. 11117+, Added kV Measurement
- QUART didoEASY++ MR, Art. 11117++, Added kV and Direct-HVL Measurement

The QUART didoEASY meters are designed for users who emphasize high precision in dosimetric applications but do not require the performance of a full-range dosemeter package. In basic configuration QUART didoEASY meters can be used to measure parameters that are essential for service and quality assurance operations at x-ray equipment such as dose, dose rate, and time. Of course, as with all QUART meters – with maximum precision.

- kVp and PPV measurements are available in the QUART didoEASY**+** MR version.
- Direct-HVL **and** kVp / PPV measurements are additionally available in the QUART didoEASY**++** MR version.

QUART didoNEO R

X-Ray Multi-Meter for Service and QA in R&F and Dental

The QUART didoNEO line of meters introduce a new approach to the market of diagnostic x-ray measurement:

- The system features the lightest multi-functional base unit ever designed in our industry.
- didoNEO sports the smallest and thinnest multi-parameter detector available.
- The user can access a waveform preview on the unit’s display in the field – without the need to access a PC or laptop.
- Up to 10.000 exposures are stored in the memory for future reference or reporting.

The compact detector design enables measurements at locations with limited space, for instance behind scatter radiation grids to determine the equipment attenuation factor. The small size also has a very low influence on fluoroscopy AEC.

The detector can be easily and efficiently positioned at dental panoramic x-ray equipment*.

Direct-HVL and Total Filtration measurement are integrated and calibrated upon delivery and are not charged extra

NEUTRON DETECTORS

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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 3007 Series

Model 3007 Series

- Digital Meter
- ^{3}He Proportional Detector
- Moderator: 19.5 cm (7.7 in.) dia.
- Sensitivity (^{241}AmBe): 4.5 cpm per µSv/h (45 cpm per mrem/hr) or 10 cpm per µSv/h (100 cpm per mrem/hr)
- Range: 0 to 100 mSv/h (0 to 10,000 rem/hr)
- Internal Detector Option for Exposure/Dose Measurements

QA SOURCES

peo MEDICAL

Partner 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

Beta/Gamma disk sources

Alpha disk sources

Needle Sources – Spectrum Techniques

Tube Sources – Spectrum Techniques

RSS3 Source Set – Spectrum Techniques

RSS-8 Source Set – Spectrum Techniques

RSS-5 Source Set – Spectrum Techniques

Laminated Sources – Spectrum Techniques

Disc Sources – Spectrum Techniques

Beta/Gamma disk sources

Disk sources are designed for use as reference sources in laboratories, radiation protection, training and education, security, and up-and-coming technology.

APPLICATIONS

Disk sources are designed for use in various industries including, but not limited to:

- **Laboratories:** They are ideal for performing functional checks on gamma counters or spectrometers.
- **Radiation Protection:** Disk sources can be used for functional checks and periodic verifications of radiation protection probes and systems.
- **Training and Education:** Disk sources can be used to illustrate fundamental concepts in nuclear physics and radiation science. Students can observe and study radioactive decay, half-life, energy spectra, and interactions of radiation with matter.
- **Security:** Disk sources are also useful for functional checks and periodic verifications of portable devices used to identify radiological threats and for conducting emergency exercises.

AVAILABLE SIZES

Each disk source is constructed using Plexiglas and is available in two sizes:

- 0.125 x 1.0 inches (3.2 x 25.4 mm)
- 0.125 x 2.0 inches (3.2 x 50.8 mm)

The source material deposit will be the same for each size – 2-3 mm in diameter located in the center of the disk.

CALIBRATION OPTIONS

The maximum deviation of the delivered activity from the nominal values listed is ±20%. For enhanced accuracy, you can opt for a secondary calibration, which is performed against a NIST Traceable source, available for an additional cost. This secondary calibration ensures a maximum deviation of only ±5% from the labeled activity. Please note that beta sources are not available for calibration.

Alpha disk sources

Alpha disk sources are designed for use as reference sources in laboratories, radiation protection, training and education, and security.

APPLICATIONS

Alpha disk sources are designed for use in various industries including, but not limited to:

- **Laboratories:** They are ideal for performing functional checks on gamma counters or spectrometers.
- **Radiation Protection:** Alpha disk sources can be used for functional checks and periodic verifications of radiation protection probes and systems.
- **Training and Education:** Alpha disk sources can be used to illustrate fundamental concepts in nuclear physics and radiation science. Students can observe and study radioactive decay, half-life, energy spectra, and interactions of radiation with matter.
- **Security:** Alpha disk sources are also useful for functional checks and periodic verifications of portable devices used to identify radiological threats and for conducting emergency exercises.

AVAILABLE SIZES

Each alpha disk source is manufactured by chemically plating radioactive material on to the surface of a silver disk that is mounted in the bottom of a Plexiglas® disk. The sources are unsealed and are available in two diameters:

- 0.125 x 1.0 inches (3.2 x 25.4 mm)
- 0.125 x 2.0 inches (3.2 x 50.8 mm)

The source material deposit will be the same for each size, 2-3 mm in diameter located on the silver disk located in the center of the disk.

CALIBRATION OPTIONS

Alpha disk sources are not available for calibration. The maximum deviation of the delivered activity from the nominal values listed is ±20%.

Needle Sources – Spectrum Techniques

Needle sources are used to generate a point source of radiation inside cloud chambers for demonstrating alpha and beta radiation tracks. Three different types of isotopes are offered, a pure alpha emitter, a pure beta emitter and a combined alpha /beta emitter.

The sources are constructed by depositing a small, license exempt quantity of radioactive isotope onto the eye of a standard sewing needle which is mounted on a test tube stopper for insertion into the cloud chamber. The needle and stopper are placed into a test tube for protection during shipping and storage.

Contact one of our product specialists.

Tube Sources – Spectrum Techniques

We now offer a selection of exempt quantity gamma sources encapsulated in standard size test tubes or rods for use with well type radiation detectors.These sources are exempt sources and of nominal activity. The isotope is deposited as a point source in the bottom of the tube and is then sealed with epoxy.

Contact one of our product specialists.

RSS3 Source Set – Spectrum Techniques

The RSS-3 contains 1 each Po-210, Sr-90 and Co-60 emitting a range of alpha, beta and gamma radiation’s. This set is ideal for demonstration and introductory nuclear labs covering basic characteristics of radiation. The Co-60 is 1.0 uCi and the Po-210 and Sr-90 are 0.1 uCi activity.

Contact one of our product specialists.

RSS-8 Source Set – Spectrum Techniques

Designed for gamma spectroscopy, the RSS-8 contains eight different gamma emitting isotopes covering the entire energy range from 32 to 1333 keV. Also included in the set is a mixed source of Cs-137 and Zn-65 which students may use to identify an “unknown” isotope. The set consists of Ba-133, Cd-109, Co-57, Co-60, Cs-137, Mn-54. Na-22 and Cs/Zn. Source activities are all 1 uCi, except the Cs/Zn source, which is 0.5 uCi Cs and 1 uCi Zn.

Contact one of our product specialists.

RSS-5 Source Set – Spectrum Techniques

Containing 1 each Cs-137, Co-60, Sr-90, Tl-204 and Po-210, the RSS-5 provides a wide of alpha, beta and gamma emissions making it a popular choice for nuclear science instruction. The set contains two beta emitters, two beta/gamma emitters and one alpha source for in-depth studies of radiation. The Cs-137 is 5 uCi, the Po-210 and Sr-90 are 0.1 uCi activity and the Co-60 and Tl-204 are both 1 uCi.

Contact one of our product specialists.

Laminated Sources – Spectrum Techniques

Plastic laminates provide a convenient alternative packaging being easy to handle and store. The standard laminates have a transmission window of 0.005″ and produce minimum attenuation for photons and higher energy beta particles.

Two sizes are available, 3.75″x2.25″, and a 1″ diameter circular disc. Other sizes are available; just let us know and we will send you a quote. Low energy x-ray, beta and alpha sources can be produced with a 80 µgm/cm2 aluminized Mylar window offering excellent transmission for Fe-55, C-14 and Po-210.

Contact one of our product specialists.

Disc Sources – Spectrum Techniques

Disc sources are available in 1″ and 2″ diameter plastic disc with the 1″ being standard and other sizes on special order.

The Po-210 alpha source is of open window construction with the source material bonded to the surface of a silver foil mounted in the recess of the plastic disc. This design yields excellent emission of alpha particles without window losses.

Contact one of our product specialists.

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.

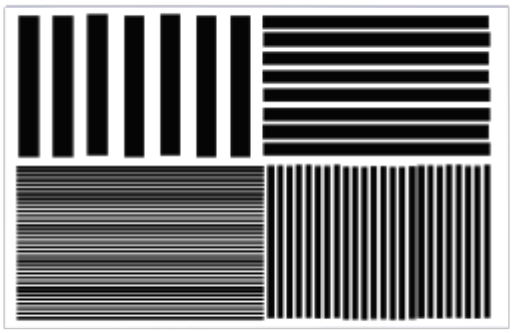
Product offering

Simulated 60Co Source

Simulated 60Co Source

Calibrated 0.1 Bq/g (10 Bq) simulated ^{60}Co radiation source for use with Model 2100 Sample Counter.

QA PHANTOMS



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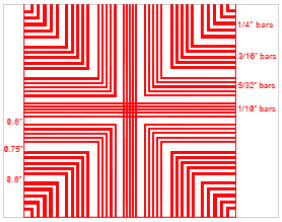
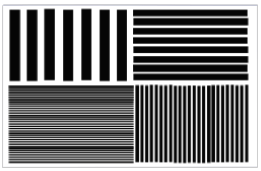
Product offering

Model L-840 Dual Source Scatter Phantom

Model L-890 Gamma Camera Bar Phantom



Model L-820 Extra Large Gamma Camera Bar Phantom



Model L-840 Dual Source Scatter Phantom

The Model L-840 simulates in-vivo scatter conditions required to measure gamma camera deadtime.

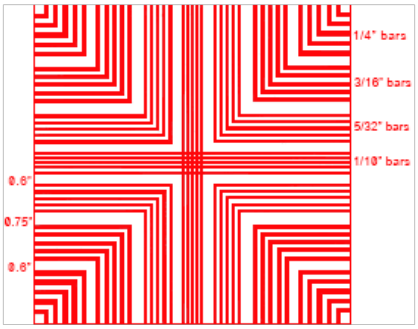
Deadtime is the interval in which a gamma camera while processing incident radiation is insensitive to additional radiation. Measurement of these phenomena is important because during higher count rates, losses of data during the ‘deadtime’ degrade the quantitative data. Accurate measurement allows for the mathematical correction of the deadtime losses.

During standard clinical conditions, the deadtime is a function of the scatter within the radiation source and its immediate surroundings. The phantom provides the simulated characteristics of forward and back scatter of the ^{99m}Tc gamma rays and allow the measurement* of the camera’s deadtime.

**The deadtime measurement can typically be acquired in less than 15 minutes. The phantom is made of acrylic and has two holes, spaced 5 cm apart (and 5 cm from the face of the phantom) to accommodate the radioactive sources (not included) to measure the count rates and associated deadtime.*

Model L-890 Gamma Camera Bar Phantom

The Model L-820 and L-890 are ideal for daily/weekly QA checks of scintillation camera performance. The Bar and Test Pattern Phantoms measure intrinsic and collimator spatial resolution (ability to see small objects) and spatial linearity (ability to correctly position image data), confirming the gamma camera's overall ability to identify and properly display small anatomic objects.

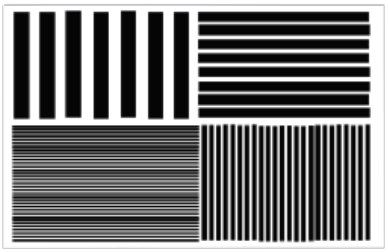


Each of the sets of parallel lines is precisely machined onto a plastic sheet. The lines are filled (cast) with Cerrobend® high-density metal alloy. This causes the gamma radiation to be attenuated, thereby providing the QA image.

The phantom is easy to use and satisfies most regulatory quality control requirements for intrinsic resolution. By checking the gamma camera's resolution on a routine basis with this phantom, it will be possible to make quick adjustments to ensure the consistent quality of the images being taken from the data that is collected.

Model L-820 Extra Large Gamma Camera Bar Phantom

The Model L-820 is ideal for daily/weekly QA checks of scintillation camera performance. The Bar and Test Pattern Phantoms measure intrinsic and collimator spatial resolution (ability to see small objects), and spatial linearity (ability to correctly position image data) confirming the gamma camera's overall ability to identify and properly display small anatomic objects.



Each of the sets of parallel lines is precisely machined onto a plastic sheet. The lines are filled (cast) with Cerrobend® high-density metal alloy. This causes the gamma radiation to be attenuated, thereby providing the QA image.

The phantom is easy to use and satisfies most regulatory quality control requirements for intrinsic resolution. By checking the gamma camera's resolution on a routine basis with this phantom, it will be possible to make quick adjustments to ensure the consistent quality of the images being taken from the data that is collected.

DETECTORS

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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

SP78W – Sodium Iodide Well Detector Assembly

SD78W – Sodium Iodide well detector

SDA38 – Sodium Iodide Detector

GP35 – GM DETECTOR ASSEMBLY

GM35 – GM Detector

SP78W – Sodium Iodide Well Detector Assembly

The SP78W, complete scintillation well detector assembly includes our SD78W, NaI(Tl) scintillation well detector, TS78-1 or 2 vertical stand, and lead shield.

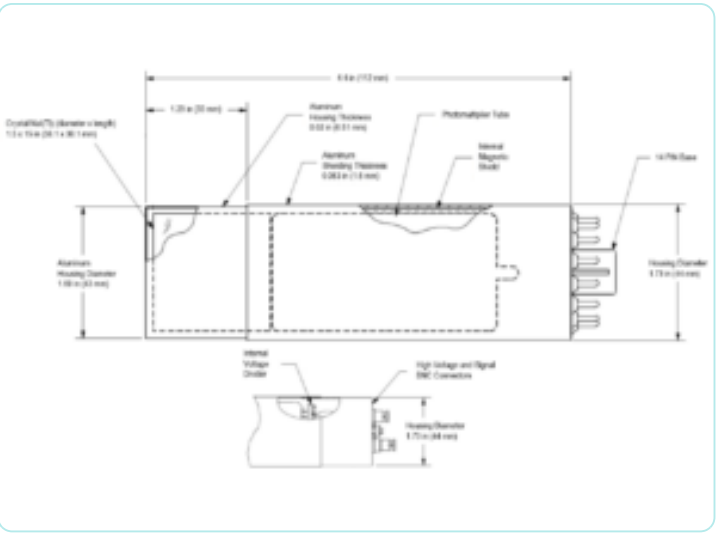
SD78W – Sodium Iodide well detector

The SD78W, sodium iodide (NaI) well scintillator in primarily used for gamma ray assay and wipe test analysis. The SD78W is a positive high voltage detector employing a 1.75 in. x 2 in. (44.5 mm x 50.8 mm – diameter x thickness) NaI(Tl) cylindrical scintillation crystal with a 0.7 in. x 1.5 in (17.8 mm x 38.1 mm) well.

SDA38 – Sodium Iodide Detector

The SDA38 Sodium Iodide Scintillation Detector features a 1.5 x 1.5 inch NaI(Tl) crystal in an aluminum housing, including a photomultiplier tube, an internal magnetic shield, and high voltage and signal BNC connectors.

Cables not included.



GP35 – GM DETECTOR ASSEMBLY

The GP35, complete GM detector assembly includes our GM35, end-window, Geiger-Mueller detector, 3 ft BNC cable, 10 position sample stand, and sample tray.

The detector stand is manufactured from a rugged plastic and has 10 sample tray positions placed 1 cm apart for convenience.

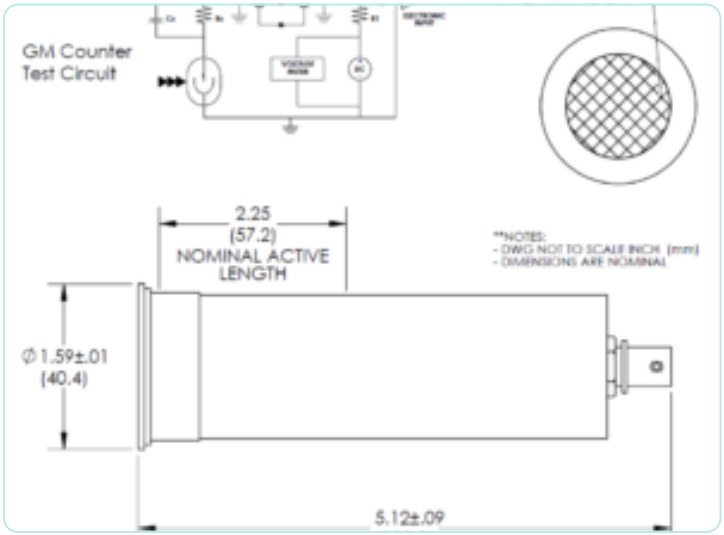
The sample tray has a 1 inch diameter indention which keeps the sample secure and centered directly under the GM detector. This is perfect for our holding our exempt quantity radioactive sources.

GM35 – GM Detector

The GM35, end-window, Geiger-Mueller detector will detect alpha, beta, and gamma radiation.

The thin mica window is protected by a thin steel screen that can be removed. The GM35 detector operates at the manufacturer recommended 900 V.

Cable not included.



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

Mammo Digital Compression Device – Sun Nuclear

Model MA5034 – Portable Blue / Green Sensitometer – Sun Nuclear

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

Mammo Digital Compression Device – Sun Nuclear

The Mammo Digital Compression Device measures compression force to assure accuracy and reproducibility.

The device has a removable display panel that supports prone and standard mammo systems, with compression force up to 34 kg. It also has a backlit LCD screen that displays the force, with continuous monitoring for time study. The screen can display the force in standard, or in metric units.

MAMMO DIGITAL COMPRESSION DEVICE FEATURES

- Removable display pannel
- Backlit LCD screen that displays force in standard or metric units
- Foam-lined tray and foam compression block support and protect curved paddles
- Analog readout easily legible from multiple viewpoints
- Maximum force reading memory
- 1-button reset

If you want to read more about this device or other mammography accessoires, take a look at our partner's website!

Model MA5034 – Portable Blue / Green Sensitometer – Sun Nuclear

For day to day processor quality control, the Gammex MA5034 Portable Blue / Green Sensitometer provides a versatile, reliable, and highly accurate test. Sensitometry is the single most effective way to test the processor operation and consistency.

With its 21 step light modulator, a full range of densities can be tested with a single piece of film. It can be used with a wide range of films

Portable Blue / Green Sensitometer features:

- versatile, reliable, and highly accurate testing device
- can test either blue sensitive or green sensitive film
- easy to expose the film, simply close the cover and listen for the tone
- battery powered
- compact design

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

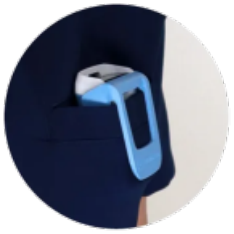
Partner Polimaster

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




Product offering

SPA38 – Sodium Iodide Detector Assembly

SPA38 – Sodium Iodide Detector Assembly

The SPA assembly, when used with our UCS30 spectrometer, offers everything required to set up a scintillation station for counting or identifying radioactive samples. The assembly includes our SDA sodium iodide detector, a lead shield, a 10 position sample stand, sample tray, and high voltage and signal cables.

The detector stand is manufactured from a rugged plastic and has 10 sample tray positions placed 1 cm apart for convenience.

The sample tray has a 1 inch diameter indention which keeps the sample secure and centered directly under the NaI(Tl) detector. This is perfect for our holding our exempt quantity radioactive sources.

ALPHA, BETA & GAMMA SPECTROMETRY

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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

SpectroTRACER Environmental Radiation Monitor – Saphymo

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

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

UCS30 – Universal Computer Spectrometer

UCS30 – Universal Computer Spectrometer

As the successor to our renowned UCS20, the UCS30 Universal Computer Spectrometer is engineered to provide superior flexibility and enhanced capabilities. We offer three models, each equipped with 1024, 2048, or 4096 channels of conversion gain, allowing you to tailor your choice to your specific needs and preferences.

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

Potash Monitor (T206) Tracerco

Potash Monitor (T206) Tracerco

The Tracerco Potash Monitor™ (potassium-40) makes use of a robust detector technology and is very sensitive to the radioactivity of potassium-40.

The instrument is specifically calibrated to measure an accurate direct reading of the percentage of potassium-40 in the surrounding environment. The detector probe is particularly suitable for placement in boreholes.

Specifications Potash Monitor (T206)

Potash Potassium-40 Monitor

Partner Radiation Solutions Inc.

Radiation Solutions Inc. specializes in advanced radiation detection systems designed for high-performance spectrometry applications in medical and research environments. Their handheld and mobile solutions support alpha, beta, and gamma spectrometry, enabling precise identification and quantification of radioactive isotopes in real time.

Product offering

RS-725 Baghouse Dust Spectrometer System – Radiation Solutions

RS-230 BGO Handheld Spectrometer – Radiation Solutions

RS-125 Handheld Spectrometer – Radiation Solutions

RS-725 Baghouse Dust Spectrometer System – Radiation Solutions

The RS-725 Baghouse Dust Spectrometer System (Radiation Solutions) is developed for the monitoring of baghouse dust for radiation. The system provides very tight alarm thresholds which results in early detection of small amounts of radiation.

The RS-725 Baghouse Dust Spectrometer System consists of two components; detector and control box. The system can be used with two different detector models; RS-725/21 and RS-725/128

RS-725 Baghouse Dust Spectrometer System features:

- unique NASVD spectral analysis gives high sensitivity performance (no false alarms)
- control box supports up to 4 detector systems
- display screens and data analysis identical to entrance/gate monitor displays for easy RSO training
- sodium-iodide detectors for maximum performance
- 2 detector sizes permits optimization to the application
- 1024 channel high resolution spectrometer gives spectral analysis
- control box fully integrated into plants LAN top provides easy RSO alarm/performance overview of all units
- RS725/21; 3″x3″ (21 cu ins) sodium-iodide detector mounted in a square housing
- RS725/128; 4 x 2 x 16″ (128 cu in) sodium-iodide detector with internal 0.5′” lead shielding
- detector and controller are separately available

Read more about the RS-725 Baghouse Dust Spectrometer System on the Radiation Solutions website

RS-230 BGO Handheld Spectrometer – Radiation Solutions

The RS-230 BGO Handheld Spectrometer (Radiations Solutions) is a portable handheld radiation survey search device for use in the geophysical industry. Using a BGO give very significant increase in performance over the normally used NaI detector (3x).

RS-230 BGO Handheld Spectrometer features:

- single button operation
- high countrate: 65, 535
- protection: IP67
- rugged design
- digital LCD display
- analyses single channel and multichannel
- PC connectivity: USB or Bluetooth
- detector: BGO 2×2“, 103 ccm

Read more about the RS-230 BGO Handheld Spectrometer on the Radiation Solutions website

RS-125 Handheld Spectrometer – Radiation Solutions

The RS-125 Handheld Spectrometer (Radiation Solutions) is an advanced mobile instrument for radiation survey. The device is mainly used for spectral analyses in the geophysical industry. The RS-125 has the highest sensitivity in the market of spectrometers and is simple in use. There are no test sources required, the spectrometer stabilizes automatically on the different forms of radioactivity (K, U and Th).

RS-125 Handheld Spectrometer features:

- single button operation
- digital LCD display
- detector: NaI(Tl) 2×2“
- analyses single channel and multichannel
- PC connectivity: USB or Bluetooth
- high countrate: 65, 535
- protection: IP67
- rugged design

Read more about the RS-125 Handheld Spectrometer on the Radiation Solutions website

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 30-7 Series

Model 334AB Alpha-Beta Air Monitor

RayMon10 Quant

RayMon10

Model 70 Series – Ludlum

Model 30 Digital Survey Meter – Ludlum

Model 3000 Digital Survey Meter – Ludlum

Model 30-7 Series

- Digital Meter
- ^{3}He Proportional Detector
- Moderator: 19.5 cm (7.7 in.) dia.
- Sensitivity (^{241}AmBe): 4.5 cpm per µSv/h (45 cpm per mrem/hr) or 10 cpm per µSv/h (100 cpm per mrem/hr)
- Range: 0 to 99.9 mSv/h (0 to 9.99 rem/hr)

Model 334AB Alpha-Beta Air Monitor

Features

- Integrated LCD and Touch Screen Display
- Acute and Chronic Dose, Concentration, and Flow Logging Measurements
- Radon Compensation
- Built-In Gamma Guard Detector

The Model 334AB is a lightweight, battery-powered, alpha-beta air monitor that can be used as a portable workplace monitor or a portable CAM (continuous air monitor) for emergency-response assessments. It is designed to provide workers with an early warning of an airborne release of alpha and beta emitting particulates. The instrument can monitor up to two alpha isotopes of interest, simultaneously with beta monitoring. It also has radon compensation and a built-in gamma guard detector to compensate for changing ambient gamma background levels.

The Model 334AB has an integrated LCD and touchscreen that displays information on instrument status and readings during operation. The estimated dose of the isotope(s) of interest and the instrument status are displayed at all times. An ion-implanted silicon detector and 1024-channel multi-channel analyzer feed data to the embedded processor board. Operations include beta detection and alpha spectral analysis for radon compensation. Acquired data may be saved in the instrument’s internal memory, or alternately may be written to an SD card for later retrieval and review. It is stored in comma-separated-variable (*.csv) format that is recognized by most spreadsheet and database software.

RayMon10 Quant

Perfect for quantitative volumetric analysis

A RayMon10 handheld gamma detector with a radbeaker. This enables users to use it with distributed (soil, building material sample, liquid waste) and point (air sampling filters, calibration sources) source samples.

RayMon10

Rugged CZT-based isotope detector

Rugged handheld easy to grip RayMon10 tablet, with a GR1 gamma-ray detector spectrometer enabling users to detect, measure and accurately identify gamma-ray emitting radionuclides, providing high-resolution isotope identification.

Model 70 Series – Ludlum

Spectroscopic Personal Radiation Detector

The Ludlum Model 70 Series are high resolution CZT-type detectors that deliver unparalleled performance in express radionuclide identification and radiation dose assessment from low to moderate-high levels.

Each instrument is accompanied by GalaxRayWiz software, a powerful tool which communicates with the device, analyzes gamma-spectra and dose-rate time profiles accumulation of 14 hours. Collected data can be easily transferred via USB or Wi-Fi.

Continuous dose rate monitoring and recording enables the user to be instantly informed about radiation exposure and to carefully analyze radiation dose risks by exploring the dose rate recorded charts.

Features

- Handheld Gamma Spectrometer
- Mobile Phone Sized
- Three Button Operation
- Radiation Dose Assessment
- Dose Rate Time Profile Recording
- Express Nuclide Identification
- One Thousand Gamma-Spectra Storage
- Temperature Stabilized
- Complies with ANSI 42.48-2018

	Detector Dimen
r	CZT detector: 5 x 1
on detector	CZT detector: 5 x 1 Neutron detector: 15 x 40 mm (LiI-6
r	CZT detector: 16 x 1
ron detector	CZT detector: 16 x 1 Neutron detector: 15 x 40 mm (LiI-6

https://youtu.be/_ZSXcECQeho

SCAN TO VIEW VIDEO

Energy Range: 0.03 to 3.0 MeV, 1024 Ch

Energy Resolution: 1.8 to 2.5% at 662 keV

Gamma Dose Rate: within 30% accuracy per ANSI N42-48 from 0.5 µSv/h to 3 mSv/h (5 µR/hr to 300 mR/hr)

Gamma Efficiency: 70/1, 70/2: 0.06 cps per µR/hr 70/3, 70/4: 0.18 cps per µR/hr

Neutron Sensitivity: ≈ 2.4 cps/nv

Nuclide ID Over-Range Dose Rate: 0.5 mSv/hr

Preset Time: 86,400 s

Display: LCD 7.1 cm (2.8 in.), 240 x 320 pixels, backlight

Alarms: Audio (~85 dB), audio jack, vibrator, LED operations, 3-button keyboard

Data Storage: Up to 1000 spectra and up to 24 hours of dose rate time records

Data Transfer: via USB and Wi-Fi

Data Throughput: ≈ 70,000 cps

Power: Lithium-ion rechargeable battery, 3.7 V 5200 mAh

Battery Life: With Wi-Fi on and back-light on: Up to 14 hours with Wi-Fi off and back-light on: Up to 26 hours

Charge Time: 4 – 5 hours, with battery indicator on display

Temperature Range: -10 to 50 °C (-4 to 122 °F). Relative humidity ≤ 95%.

Environmental Rating: IP63 with rubber sleeve

Dimensions: (L x W x H) 100 x 75 x 48 mm (4 x 3 x 1.9 in.)

Weight: 220 g (0.5 lb) with battery

Model 30 Digital Survey Meter – Ludlum

The Ludlum Model 30 is a versatile, lightweight, instrument used with an external detector for alpha, beta, or gamma radiation survey. Three modes of operation – RATE, MAX, and COUNT – are available for the user. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, R/hr, rem, or Sv/h units.

The user can switch between two sets of chosen units by simply pressing the Units button. An internal switch is used to enable or disable the front-panel setup feature to protect desired settings from inadvertent modification. Setup is also available via software available from Ludlum Measurements.

This instrument features a large, easily-readable LCD (liquid crystal display), a piercing audio warning tone, and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 30 to be used outdoors. The unit body is made of lightweight, durable, high-impact plastic.
The Model 30 is shipped ready to use with batteries and calibration certificate.

Model 30 Digital Survey Meter features

- attaches to detector allowing one-handed operation
- large backlit auto-ranging LCD with adjustable viewing angle
- simple green, yellow, and red status indicators
- 3-button intuitive interface for easy operation
- USB port and all-digital calibration
- available in stretch scope configuration

View compatible probes here

Download the datasheets below or contact our product specialist.

Model 3000 Digital Survey Meter – Ludlum

The Model 3000 Digital Survey Meter (Ludlum) is a versatile and lightweight instrument with an ergonomic design. With this meter there are 3 modes of operation possible: MAX, RATE and COUNT.

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

Model 3000 Digital Survey Meter features:

- all-digital calibration
- auto ranging
- splash-resistant construction
- easy operation: 4-button intuitive interface
- port: USB
- Geiger-Mueller (GM), scintillator or proportional detector available
- display range: 0.0 cps to 99.9 kcps; 0.00 cpm to 999 kcpm; 0.00 Bq to 99.9 kBq; 0.00 dpm to 999 kdpm; 0.00 µR/h to 999 R/h; µSv/h to 999 Sv/h
- alarms: count rate, exposure/dose and scaler alarm setpoints adjustable over the display range
- loss of count alarm protection
- response time: auto-response rate fast/slow or user-selectable from 1 to 60 seconds

Read more about Model 3000 Digital Survey Meter on the Ludlum website

Georadis is a Czech manufacturer specializing in advanced radiation detection instruments, offering solutions that support safety and compliance in medical environments. Their portable systems assist healthcare professionals in monitoring radiation levels, ensuring adherence to safety standards.

Product offering

RT-30 Mk II – Georadis

RT-22 Handheld Radiation Detector with GeoView Software – Georadis

RT-50 Laboratory Gamma-Ray Spectrometer – Georadis

RT-30 Gamma-Ray Spectrometer with Nuclide ID Capability – Georadis

RT-20 Compact handheld Radiation Detector – Georadis

RT-21 Handheld Radiation Detector – Georadis

RT-30 Mk II – Georadis

Handheld Isotope Identification Instrument RIID

The RT-30 Mk II is the second generation of popular handheld gamma ray spectrometer RT-30. Strengths of the first generation were copied in the new model. There has to be highlighted a strong alloy body sealed against dust and water, protective removable rubber boot, comfortable grip and low weight.

The Mk II learned of the limitations of the first generation and features a large colored transreflectible sun readable display, improved user's interface with five operation buttons, removable but well-sealed battery pack and clear and loud audio.

The instrument is built as an open platform with potential of fast and simple implementation of special features required by customers. Wide fleet of detectors is supported. The Mk II bridges traditional scintillation detection probes using common vacuum photomultiplier tube with up-to-date silicon photomultipliers technology. Saved significant volume of vacuum tubes is next occupied by larger size of detector.

A heart of gamma ray spectrometer is FPGA (programmable array) plus fast speed and low consumption ARM type processor. The combination of FPGA with ARM is taken of preceding larger instrument and has been tested for years. Beside gamma ray section the FPGA is capable to handle other sensors at the same time. A Geiger-Mueller counter and a Neutron detector make a standard offer.

Thanks to latest electronic the Mk II opens a platform for supporting most modern existing communication standards. Sharing new and traditional communication standards is guaranteed wide compatibility with older as well as new communication devices. The existing USB was upgraded to level C and beside communication it is used also for unit's battery charging. GPS system is built in the front part of the instrument and is used for localization of the unit and also for time synchronization.

Quickly determining the location of lost radioactive sources in the environment or scrap, monitoring of waste in hospitals or waste incinerators, scanning people or baggage to disclose illicit trafficking of nuclear materials; all are typical applications for the RT-30 Mk II series.

Features:

- Ergonomic, lightweight handheld well balanced, compact;
- Comfortable grip with five buttons operable in glows;
- Removable protective rubber boot;
- Detectors fully build in the housing, protected by rubber foam;
- Large, transreflectible colored display – sharp and high contrast in sunlight, backlighted in dark;
- Loudspeaker with plastic membrane watertight;
- Four status indication LEDs – indication of alarms and health status;
- USB standard C for data transfer and charging;
- Wide fleet of scintillation detectors NaI/Tl, CsI/Tl, CsI/Eu, LaHalide, BGO, GAGG, SrI, Plastic scintillation

detectors PVT;

- Maximum detector size: Diameter 2” and height 2” with standard vacuum PMT or max 5” with Silicon PMT (SiPM or MPPC).

See the full details in the RT-30 Mk II datasheet.

RT-22 Handheld Radiation Detector with GeoView Software – Georadis

The RT-22 model is based on the RT-21 series, the most sensitive from the range of manufactured hand-held radiation detectors. Compared to its predecessor, it comes with an internal memory for storing measurement data, and Bluetooth connectivity allowing the use of an external GPS module. Its robust design makes it suitable for hostile climatic conditions. Our bestseller at the time of the uranium panic. Popular with scrap yard owners.

GeoView provides specificated views on accumulated data such as survey in both doserate or cps. The RT-22 Handheld Radiation Detector can be connected with the software through USB or Bluetooth.

RT-22 Handheld Radiation Detector with GeoView Software features:

- graphical display
- with telescope available (RT-22T)
- sampling period: 20/sec
- detector: NaI(Tl) 2×2“ or BGO 2×2“, 103 ccm
- gamma ray energy range: 30 – 3000 keV
- highest sensitivity
- weather protected
- lightweight, rugged and compact design

Read more about the RT-22 Handheld Radiaotion Detector with GeoView Software on the Georadis website

RT-50 Laboratory Gamma-Ray Spectrometer – Georadis

The RT-50 (Georadis) is a state of the art gamma spectrum analyzer to monitor and detect the presence of radiation in metals, metals by-products, geological samples, construction materials, environmental commodities, food and many other materials. Floor standing and easy to operate, the RT-50 spectrum analyzer is an indispensable part of any analytical laboratory, it rapidly detects and accurately measures extremely low levels of radioactive contamination.

RT-50 Laboratory Gamma-Ray Spectrometer features:

- full sample analysis in less than 5 min
- sensitivity; 0.02 Bq/g
- energy range: 20 keV – 3,0 MeV
- 1024 channel pulse amplitude analyzer
- short calibration times
- NaI(Tl) volume 0.35 l, 76 x 76 mm (3”x3”) detector

Read more about the RT-50 Laboratory Gamma-Ray Spectrometer on the Georadis website

RT-30 Gamma-Ray Spectrometer with Nuclide ID Capability – Georadis

The RT-30 Gamma-Ray Spectrometer with Nuclide ID Capability (Georadis) integrates a radiation survey meter, dose meter and radionuclide identification device in a weather protected, lightweight and easy to use instrument.

RT-30 Gamma-Ray Spectrometer with Nuclide ID Capability features:

- multiple functions; nuclide ID (isotope name), scan and search
- auto-stabilization
- protection: IP66
- single button operation
- sensitivity: Co-60: 270 cps/MBq, Cs-137: 160 cps/MBq, Am-241: 75 cps/MBq
- data interchange; Bluetooth or USB
- readout search mode; 0 – 65535 cps
- energy response: 20 keV to 3000 keV
- energy compensated doserate: 0 – 10 mSv/h (with G/M detector)
- graphic LCD display; 128 x 64 pixels
- 2GB memory

Read more about the RT-30 Gamma-Ray Spectrometer with Nuclide ID Capability on the Georadis website

RT-20 Compact handheld Radiation Detector – Georadis

The RT-20 Compact handheld Radiation Detector is a robust and compact hand held radiation detector specifically designed to quickly scan for radioactive materials. The ruggedness, small size and light weight of the RT-20, combined with its sensitive Gamma Ray scintillation detector makes it a versatile instrument for quick measurements in a large variety of applications.

RT-20 Compact handheld Radiation Detector features:

- 1,3 kg; balanced and lightweight
- reads in counts per second, sampling rate 4 per second
- high sensitivity, NaI/Tl crysta
- adjustable audio threshold
- audio output and numeric LCD display maximum 19999 cps
- automated warning of high dose rate
- protection boot with carrying straps
- supplied in aluminium suitcase with moulded insert
- automatic charger integrated in unit
- dust and sprinkling water resistant (IP66)
- available with telescope (RS-111T)

Read more about the RT-20 Compact handheld Radiation Detector on the Georadis website

RT-21 Handheld Radiation Detector – Georadis

The RT-21 (Georadis) is the most sensitive of numerous manufactured handheld radiation detectors. Its robust design allows it to operate even in the most demanding climatic conditions. Our bestseller at the time of the uranium panic. Popular with scrap yard owners.

RT-21 Handheld Radiation Detector features:

- one button operation
- highest sensitivity
- weather protected
- lightweight, rugged and compact design
- graphical display
- with telescope available (RS-21T)
- sampling period: 20/sec
- detector: NaI(Tl) 2×2“ or BGO 2×2“, 103 ccm
- gamma ray energy range: 30 – 3000 keV

Read more about the RT-21 Handheld Radiation Detector on the Georadis website

Product offering

Scintillation Detector model 905

DETECTIVE-X Trans-SPEC editie- Ortec

Scintillation Detector model 905

A Scintillation Detector model 905 produces a pulse of light that is converted to an electric pulse by a photomultiplier tube (PMT). The PMT consists of a photocathode, a focusing electrode, and 10 or more dynodes that multiply the number of electrons striking at each dynode. A chain of resistors typically located in a plug-in tube base assembly biases the anode and dynodes. Complete assemblies including the scintillator and PMT are available.

The properties of a scintillation material required to produce a good detector are transparency, availability in large size, and large light output proportional to gamma-ray energy. Few materials have good properties for detectors. Thallium-activated sodium iodide and cesium iodide crystals are commonly used, as well as a wide variety of plastics. CsI(Tl) and plastics have much faster light decay times than NaI(Tl) and are primarily used for timing applications.

Do you want to know more about the Scintillation Detector model 905?

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

DETECTIVE-X Trans-SPEC editie- Ortec

The Detective-X Trans-SPEC is a complete spectroscopy range with an integrated auxiliary application spectroscopy computer using MAESTRO-Pro (including), GammaVision, Isotopic and other applications via WiFi, Ethernet and USB connections.

The instrument is an extension of the Detective-X plateform and uses a high-speed German detector with a small battery and a long battery life, a long period of time, rapid reprocessing and additional options for connectivity. n'importe lequel de ses prédécesseurs Trans-SPEC.

The new application Trans-SPEC is designed according to the standard methods of Detective-X, based on the applications of Detective-X, Sleuth and RAPiD, the type of instruments used to utilize the standard spectrometry system and the standard spectroscopy system. traditional spectrometry standard system. Dispositif d'identification de radioisotopes (RIID) « Gold Standard ».

The DETECTIVE-X-TS is a portable spectrum, complete and high resolution for the measurements in situ.

Advantages of the product:

- Grand détecteur de germanium de type P de haute pureté (65 x 50 mm) > 40 % d'efficacité relative
- Refroidisseur à cycle Stirling très fiable avec cryostat durci
- Signal number treatment and active suppression of bass frequency (LFR)
- Conception robuste pour les environnements difficiles (IP65 compliant)
- Compact and lightweight (6.98 kg)
- Longevity of battery life (8 hours) with the batteries replaced with fuel
- Grand écran tactile haute résolution (4.3 pouces), facile à lire en plein soleil
- Storage of internal and amovable files (> 100,000 specters)
- Controller control via USB, Ethernet and Wi-Fi compatible with ORTEC applications
- Mirroring applications for mobile phones, tablets and plate formats for iOS, Android and Windows

Radiation Detector/Cooler

Crystal	High purity P-type Germanium (HPGe). Coaxial construction. Nominal diameter 65 mm x length 50 mm.
Relative efficiency	≥40% typical (ANSI/IEEE 325-1996).
Resolution	≤1600 eV @ 122 keV and ≤2,3 keV @ 1332 keV (FWHM provides optimal settings).
Peak shape	1.9 typical (FWTM/FWHM).
Cryostat and cooler	"Hardened" cryostat, with very reliable and low consumption Stirling cooler. The design of the cryostat is such that the unit can be turned off and back on at any time, without having to wait for a complete thermal cycle (complete warm-up before cooling). This functionality considerably increases system availability during measurement campaigns.

Cooling time	The highly reliable cooler is designed for continuous use. Between measurements, the device is powered by a DC power supply, car battery, or other device. Initial cooling time depends on ambient temperature, but is typically 6 hours at 25°C.

Digital MCA and Data Processor

Digital Low Frequency Noise Cancellation	“LFR filter”.
Conversion gain	Up to 16,000 channels.
Display	4.3″ WQVGA display (480 x 272 pixels), sunlight readable, touch sensitive, can be used with finger or stylus.
Data processor	FREESCALE I.MX535 operates at 1 GHz.
Data storage media	Internal RAM and low profile removable USB drive. The device comes with a USB stick that can store more than 100,000 spectra.
File format	ORTEC CHN and SPC spectrum formats.
Computer and device interfaces	Connections USB, Ethernet TCP/IP v4 via standard RJ45 Ethernet connection (10/100 Mbps, auto-sensing), Wi-Fi (IEEE 802.11a/b/g/e/i/h/j and IEEE 802.11n standards with security access protocols, including WPA and WPA2). The mobile MCB server allows remote control via ORTEC CONNECTIONS based applications, such as MAESTRO, GammaVision, etc. Wisemo is used for device mirroring and app control.

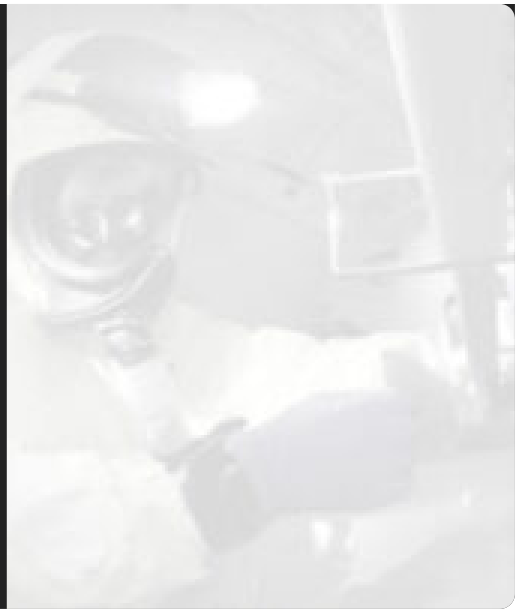
Physically

Maximum overall dimensions	(including handle and Ge detector cap) 39.5 cm L x 16 cm W x 21 cm H (15.5 in. L x 6.25 in. W x 8.25 in. H).
Weight	6.98 kg
Internal battery	2 rechargeable lithium ions. 98 Wh each, nominal. Approximately 8 hours of autonomy at 25°C when the HPGe detector is cold. <4 hours charging time. The internal battery is easy to replace.
External battery	Battery life can be extended indefinitely with the use of optional external battery packs. An external military battery (Model 2590) weighs less than 3.25 pounds and extends its life to >16 hours.
Input power	12 to 17 V DC from battery or DC power supply (universal power supply included).
Energy consumption	Highest during cooling and battery charging: <100 watts. Cold with fully charged battery <35 W.
Operating range	Temperature: –20°C to 50°C. Relative humidity: 95% non-condensing.
Instrument case	IP65 Sealed against dust and water ingress. All perforations are closed with rubber plugs (connectors, memory cards, etc.).

APP FEATURES

- Main view of the spectrum: Log/Lin, Zoom, Area of interest, Start, Stop, Clear acquisition and save the spectrum.
- Peak/ROI data: centroid, FWHM, start/end channel, gross and net area and count rate.
- Configurable spectral marking data: energy, channel, counts.
- Configurable status lines: any two of the following: Real Time, Real Time, Real Time Remaining, Real Time Remaining, Battery Time Remaining, Count Rate,
- Count rate in ROI.
- MCA Controls: ADC conversion gain with high and low level discriminators, coarse and fine amplifier gain, baseline recovery (auto, fast, slow), gain and zero stabilizers, high

voltage acquisition presets: real time, real time, return on investment. Peak and full return on investment.
- Health status: ±12V, +3.3V, detector temperature, cooler body temperature, cold peak temperature, high voltage.
- Security: Password protected user/administrator modes, lock/hide spectrum display during acquisition.
- Energy calibration: quadratic adjustment of energy relative to the channel.
- External applications: Compatible with all applications based on ORTEC CONNECTIONS such as MAESTRO, MAESTRO-Pro, GammaVision, Isotopic,
  Renaissance and the A11 programmer's toolbox for a wide range of applications.



The DETECTIVE-X-TS is a portable, complete and high resolution gamma spectrometer for in situ measurements. It can be used as a standalone instrument to collect spectra in the field or controlled by a computer connected via USB, Ethernet or Wi-Fi using applications such as MAESTRO-Pro (included), GammaVision, Isotopic and others.

The DETECTIVE-X-TS is physically identical to the popular DETECTIVE-X Radioisotope Identifier, which is considered the "Gold Standard" for critical detection and identification. Like ORTEC's older TRANS-SPEC-100T and MICRO-TRANS-SPEC instruments, the DETECTIVE-X-TS is specifically intended for use as a more cost-effective, high-resolution portable gamma spectrometer for field measurements rather than for identification automatic isotopic. DETECTIVE-X-TS model includes guaranteed resolution performance and MCA emulation software, but excludes isotope identification applications included with other DETECTIVE-X models (Detective DETECTIVE-X-TS can be upgraded to the DETECTIVE-X 3 MeV and 8 MeV models, as well as a current dose rate calibration.

SAMPLERS / COUNTERS

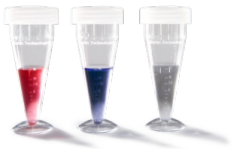
peo MEDICAL

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

Coriolis Consumables – Bertin Instruments

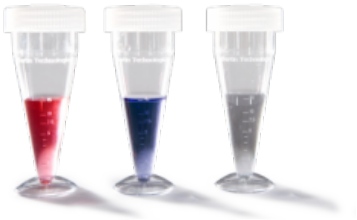


Coriolis RECON – Bertin Instruments

Coriolis Micro – Bertin Instruments

Coriolis Consumables – Bertin Instruments

Coriolis consumables are part of the cyclonic technology: the separation of the airborne particles from the air flow is due to the air flow rate, the air intake geometry, the design of the cones and the collection liquid (surfactant in low concentration).



Introduction video

Consumables

- cones & caps : The cones and caps are designed specifically for the use with the Coriolis µ
- collection liquid doses
- LTM consumables : collection liquid in bottle and tubing kit
- air intake : depending of your research you can adapt the air intake
- standard air intake : air take compatible with all Coriolis for classical samplin
- LTM air intake : dedicated to long time monitoring collection (only compatible with the LTM platform)
- 25 mm connection LTM : designed to propose a hose attachment (testing chamber, confined space ...)

Advantages Coriolis consumables

- dedicated cones to perform high efficiency collection
- adaptor to connect to any 25 mm diameter connector
- easy set up with calibrated 15 ml collection liquid dose
- liquid collection compatible with any downstream experiment
- cones available sterile and non-sterile

Please contact our product specialist.

Coriolis RECON – Bertin Instruments

The Coriolis RECON is a portable, light and ruggedized bio-air sampler for biological warfare agents detection, dedicated to CBRN teams or first responders, with quick deployment in case of an event with biological attack suspicion. The Coriolis RECON have been designed to collect large concentrations of aerosols in the breathable range of 0.5 to 10 µm with an air flow rate at 600L/min, thus being more representative of the environment than traditional bio-aerosol samplers.
Thanks to its ability to collect bio-aerosol particles into liquid format, this system can be used with rapid identification techniques for biological agents (immunoassay, PCR, etc.) to provide an early warning of aerosolized biological warfare agents.

Introduction video

Advantages Coriolis RECON

- the most efficient concentration of biological warfare agent
- high air flow rate
- compatible with any downstream experiments for rapid identification
- bio surveillance with long time monitoring – up to 6 hours
- quick deployment in a military / first responder context

Download the datasheet or contact our product specialist.

Coriolis Micro – Bertin Instruments

Coriolis µ is an innovative biological air sampler for bio-contamination assessment, mainly dedicated to air quality control and air quality monitoring in environmental and pollution research, pharmaceutical, food and veterinary industries, biomedical and health environment...
Based on a cyclonic technology, combined to a high air flow rate, Coriolis µ offers the most efficient particles collection in 10 minutes. The biological particles such as toxins, virus, bacteria, molds, pollens, spores are collected and concentrated in a liquid ready to be analyzed with microbiological and cellular and molecular biology methods.

Introduction video

Advantages Coriolis Micro

- the most efficient concentration of biological particles
- high air flow rate & long time monitoring option – up to 6 hours
- compatible with any downstream experiments – divisible samples for several analysis in parallel
- flexible liquid sample output
- no saturation of the collection media for charged environment

Download the datasheet or contact our product specialist.

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

ST365 – Radiation counter

ST365 – Radiation counter

The ST365 is a versatile radiation counter designed to excel in routine sample counting tasks across a wide spectrum of applications, including education, training, advanced research, radiation safety, and emerging technologies.

Partner SDEC France

SDEC France is a leading provider of environmental monitoring technologies, offering a specialized range of samplers and counters designed to support radiological safety in medical settings. Their solutions assist hospitals, laboratories, and research facilities in monitoring airborne and surface contamination, ensuring compliance with health and safety regulations.

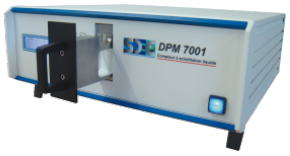
Product offering

Carbon 14 Sampler with 2 Vials – SDEC

Carbon 14 Sampler with 4 Vials – SDEC

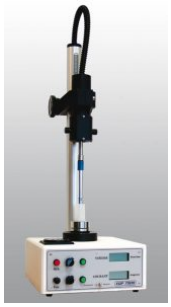
Tritium Sampler with 2 Vials – SDEC

DPM 7001 Liquid Scintillation Counter – SDEC



H3R 7000 Airborne Tritium Condenser – SDEC

Single Mast Electrodeposition Equipment – EDP 7000 – SDEC



AS 3000 AEROSOL & IODINE SAMPLER – SDEC

Tritium sampler 4 vials MARC 7000 – SDEC

AS 5000 Aerosol & Iodine Sampler – SDEC

Carbon 14 Sampler with 2 Vials – SDEC

The Carbon 14 Sampler with 2 Vials (SDEC) has been designed to capture CARBON gas (CO_2 or CO). It can be equipped with a cooling system that will prevent all sample loss due to evaporation in the feeding bottles.

Carbon 14 Sampler with 2 Vials features:

- in compliance with the nf m60-812-1 norm
- excellent trapping efficiency (close to 99%)
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- easy to use
- connectable to all sampling lines

Read more about the Carbon 14 Sampler with 2 Vials on the SDEC website

Carbon 14 Sampler with 4 Vials – SDEC

The Carbon 14 Sampler with 4 Vials (SDEC) brings original solutions in the exploitation of sampling systems for carbon gas and carbon water. This sampler is mainly used for the detection of chimney rejects and carbon wastes degassing.

Carbon 14 Sampler with 4 Vials features:

- excellent trapping efficiency (close to 99%)
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- easy to use
- connectable to all sampling lines
- in compliance with the NF M60-812-1 norm

Read more about the Carbon 14 Sampler with 4 Vials on the SDEC website

Tritium Sampler with 2 Vials – SDEC

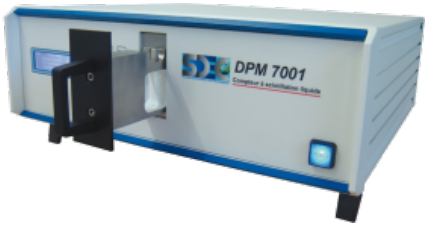
The Tritium Sampler with 2 Vials (SDEC) brings original solutions in the exploitation of trapping systems for tritium gas and tritiated water. This collection system is mainly used for the detection of chimney rejects and tritium wastes degassing.

Tritium Sampler with 2 Vials features:

- goodtrapping efficiency
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- very robust
- easy to use
- connectable to all sampling lines

Read more about the Tritium Sampler with 2 Vials on the SDEC website

DPM 7001 Liquid Scintillation Counter – SDEC



The DPM 7001 Liquid Scintillation Counter (SDEC) is a mobile liquid scintillation counter equipped with two photomultipliers, giving it a high counting efficiency and low background noise. It is specially designed for the counting of tritium and carbone-14. Due to its small size and its light weight (16kg), it can be transported easily on monitoring sites for quick measurements.

DPM 7001 Liquid Scintillation Counter features:

- high counting efficiency (H3 > 37%, C14 > 94%)
- low background noise (< 40 CPM)
- light weight : 16 kg
- control and reading on LCD display or on PC (optional software)
- data export in excel format
- two counting channels for two simultaneous countings

Read more about the DPM 7001 Liquid Scintillation Counter on the SDEC website

H3R 7000 Airborne Tritium Condenser – SDEC

The H3R 7000 Airborne Tritium Condenser (SDEC) is an innovative instrument in the field of Tritium in air sampling. It collects samples of Tritium in its vapor form and produces results in less than 40 minutes. The sample obtained can be measured down to a detection limit of 0.01 Bq/m3 by deferred measurement using liquid scintillation.

H3R 7000 Airborne Tritium Condenser features:

- quick start mode
- measurement and calculation in real time of the absolute humidity in ambient air in g/m3
- automatic calculation of trapping time depending on the required water quantitya
- automatic drying under high temperature of the trapping circuit to avoid a crossed contamination
- selection of the drying time
- USB output : data recuperation on USB key
- thermic printer integrated : printing of data on sticker to place on to sample vial

Read more about the H3R 7000 Airborne Tritium Condenser on the SDEC website

Single Mast Electrodeposition Equipment – EDP 7000 – SDEC

The measure of radio-isotopes is used in nuclear medicine to control and follow the contamination level of a patient who has manipuled radio-isotopes. Usally when measuring a radio-isotope, the first thing to do is to trap it and make it deposit on a support.

The Single Mast Electrodeposition Equipment – EDP 7000 system is the most efficient principle for trapping a radio-element in liquid solution.This principle allow to deposit the radio-isotopes contained in a solution onto a metallic plate. To measure the quantity of radio-element trapped, the metallic plate is afterwards placed into a suitable machine (spectrometer or other one).

single mast electrodeposition equipment – EDP 7000 features:

- synthetic materials.
- temperature control of the solution.
- three sizes of solution containers.
- quick screw/unscrew.
- easy maintenance by operator.
- reverse polarity switch.
- independent timer.

Read more about the Single Mast Electrodeposition Equipment on the SDEC website

AS 3000 AEROSOL & IODINE SAMPLER – SDEC

The AS 3000 Aerosol & Iodine Sampler (SDEC) has been designed to make sampling of aerosols and iodine on filter papers and/or carbon cartridges. It has many technological innovations like the automatic regulation of air flow and the data report on USB key.

AS 3000 Aerosol & Iodine Sampler features:

- automatic regulation of air flow from 10 to 50 LPM
- diaphragm pump (no maintenance)
- compatible with all paper filters and cartridges
- automatic recognition of filter paper or cartridge per drive scanner option
- independent pump (easy dismantling in case of contamination)
- installation of the filter holder by quick system on horizontal or vertical axis
- operating on power supply or battery
- waterproof keyboard

Read more about the AS 3000 Aerosol & Iodine Sampler on the SDEC website

Tritium sampler 4 vials MARC 7000 – SDEC

The Tritium sampler 4 vials (MARC 7000) equipment is designed to sample the tritium which is contained in a volume of air (gas H3, tritiated water HTO or organically combined). Tritiated water vapor is trapped in the first two feeding bottles by means of the bubbling principle. To trap the tritium which is combined to organic materials, an oxidation reaction is created in the oven. A catalyser is used to lower the combustion level. This causes tritium to react chemically to form tritiated water vapor which is trapped in feeding bottles n°3 & 4. After a certain time, the tritiated water contained in the bottles is measured in a laboratory. The quantity of tritium measured is related to the volume of air which has passed through the equipment.

Tritium sampler 4 vials features:

- excellent trapping efficiency (close to 99%)
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- easy to use
- connectable to all sampling lines

Read more about the Tritium sampler 4 vials (MARC 7000) on the SDEC website

AS 5000 Aerosol & Iodine Sampler – SDEC

The AS 5000 Aerosol & Iodine Sampler (SDEC) is a stationary equipment made for the sampling of aerosols and airborne iodine at high flow on paper filters and cartridges. It is particularly adapted for continuous sampling in stacks according to ISO 2889 standard.

AS 5000 Aerosol & Iodine Sampler features:

- automatic air flow regulation up to 100 liters per minute (6 Nm3/h)
- mass flow-meter with pressure and temperature compensation : display of the air flow in Nm3
- sampling compartment and electrical separated
- detection of filter clogging or accidental leakages
- safety : sampling head access door with key lock, differential circuit breaker
- alarm report via relay output, (optional Ethernet output)
- sampling parameters settings and clogging level threshold protected by access code
- stationary installation (wall mount) or mobile installation on trolley

Read more about the AS 5000 Aerosol & Iodine Sampler on the SDEC website

STACK & AIR MONITORING

peo MEDICAL

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

Mud Monitor Tracerco™

Mud Monitor Tracerco™

De Tracerco™ Mud Monitor is intrinsiek veilig (is getest en gecertificeerd voor gebruik in explosiegevaarlijke omgevingen, zone 0, 1 en 2). Het instrument wordt eenvoudig vastgeklemd aan de buitenzijde van het modder circulatiesysteem dankzij de krachtige magneet. Het systeem heeft een gevoelige detector die verbonden is met een boring controlesysteem. Het instrument bewaakt continu achtergrond stralingsniveaus. Bij detectie van een verhoging van straling, geeft het systeem een duidelijk signaal van radioactieve lekkage aan de bemanning van het boorgat.

Specifications Mud Monitor From Tracerco

Mud Monitor Tracerco

Partner SDEC France

SDEC France is a leading provider of environmental monitoring technologies, offering a specialized range of samplers and counters designed to support radiological safety in medical settings. Their solutions assist hospitals, laboratories, and research facilities in monitoring airborne and surface contamination, ensuring compliance with health and safety regulations.

Product offering

Isokinetic Sampling Probes – SDEC

Isokinetic Sampling Probes – SDEC

The Isokinetic Sampling Probes (SDEC) are recognized in the nuclear industry and adapted for all type of sampling in single-point or in multi-points.

Isokinetic Sampling Probes features:

- quality and durability
- high level of finish
- customized manufacture
- the best price

Read more about the Isokinetic Sampling Probes on the SDEC website

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 334A Alpha Air Monitor

Model 334A Alpha Air Monitor

Features

- Easy Setup and Use
- Integrated LCD and Touch Screen Display
- English or SI Units of Measurement
- Acute and Chronic Dose Modes
- Significantly Reduced False Alarms Using Peak Shape Fitting Capability
- 8-Hour Battery Life
- Radon Mode Option

The Model 334A is a compact, lightweight, and portable alpha air monitor designed to function both as a workplace monitor and a Continuous Air Monitor (CAM) for measurements in emergency response situations. Its functionality is enhanced by its splash- and dust-proof enclosure with splash-proof electronics.

Spectral analysis is conducted via a 1024-channel analyzer that feeds data to the embedded processor. Factory configuration provides either special nuclear materials (SNM) or radon progeny measurements of potential alpha energy concentration (PAEC).

Measurements may be taken in both fast-responding (Acute) or high-sensitivity (Chronic) assessments, and report in English or SI units. The Model 334A stores acquired data in comma-separated-variable (.csv) format that is recognized by most spreadsheet and database software. Data may be saved in the instrument's internal memory, or alternately may be written to an SD card for later retrieval and review.

Independent determination of nuclide peaks means they are impervious to radon equilibrium changes, thereby contributing to low probabilities of error and false alarms. Precise fitting of the ^{218}Po tail results in excellent sensitivity.

This Model 334A features an integrated LCD and touch screen that displays information on instrument status and readings during operation. The estimated dose of the isotope(s) of interest and instrument status is displayed at all times. A window below may be switched from showing historical readings and battery status,

or displaying the current spectrum.

Factory-configurable Radon Mode allows the instrument to monitor potential-alpha-energy-concentration (PAEC) of radon progeny.

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

CMS Iodine Monitor – Lab Impex Systems

Gaseous Monitoring – PG10 Gas Activity Monitor – Lab Impex Systems

PET Cyclotron Facility Stack Monitoring – Lab Impex Systems

CMS Noble Gas Monitor – Ultra Electronics

Stack and Duct Sampling and Real Time Monitoring – Lab Impex

Shrouded Probes – Lab Impex Systems

Continuous Air Monitor – SmartCAM (Alpha & Beta) – Ultra Electronics

CMS Iodine Monitor – Lab Impex Systems

The CMS Iodine Monitor (Lab Impex Systems) is an advanced system for monitoring airborne concentration of radioiodine in the workplace and other areas of interest (stacks, cells and glove boxes).

The monitor is available in isotopic specific configurations including I-124, I-125, I-129 and I-131, and offers real time measurement of both molecular and organic forms of iodine.

In addition, the system is available in a skid, enclosure or cart mounted configuration.

The sensor element of the Iodine Monitor is a patented detector called the CGADC (Continuous Gas Analysis and Detection Chamber). The CGADC combines a sensitive scintillation detector with a stainless steel measurement chamber housing a radioiodine filtration cartridge. The CGADC is packaged as an integrated device, with shielding, pump, flow sensor and CMS processor, and is available in either a fixed or transportable configuration.

CMS Iodine Monitor features:

- filtration mechanism captures all forms of radioiodine
- achieves low MDL’s through unique detector design with Brehmstrahllung shield
- automatic background compensation
- temperature spectrum stabilization reduces inaccurate measurement due to spectrum drift
- CMS analysis algorithm provides a low stable measurement at background, but ensures a fast response to rising concentration levels

Read more about the CMS Iodine Monitor on the Lab Impex Systems website.

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.

PET Cyclotron Facility Stack Monitoring – Lab Impex Systems

The PET Cyclotron Facility Stack Monitoring (Lab Impex Systems) provides continuous monitoring of effluent discharges from cyclotron (and other positron gas users) facilities. The well established system measures the activity concentration of effluent being discharged as well as continuously measuring flow of the monitored stack. This allows calculation of the total radioactive effluent discharged to atmosphere.
A software package (9205 PET) provides a comprensive record of all raw data which can be analysed and facilitates the production of standard daily, weekly, monthly and annual reports for the regulator.

The key parts of the LIS Positron Gas Stack Monitor are:

- a continuous monitoring station (CMS PET) which continuously displays realtime indication of activity concentration in the stack and provides local audible and visual alarms.
- a radioactive gas detector (PG-10) which provides accurate measurement of activity concentration of positron gas.
- stack flow measurement device which uses an averageing Pitot and differential pressure monitor (DP2001) to measure the continuous and accumulated flow up the facility stack.

PET Cyclotron Facility Stack Monitoring features:

- designed to provide fast response to positron gas concentration, the CMS-PET system will provide a display of concentration (Bq/m3 or PCi/ml) and volumetric stack flow (m3/sec or CFM).
- the CMS PET Stack monitor can be networked to a facility control centre computer for remote monitoring, alarm annuciation, historical data collection and reporting function. See the 9205PET for more information on this package.

Read more about the PET Cyclotron Facility Stack Monitoring 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.

Stack and Duct Sampling and Real Time Monitoring – Lab Impex

Lab Impex Systems have the capability to survey, design, supply, install and commission complete isokinetic sampling and stack flow monitoring systems.

Within any stack monitoring installation accurate flow measurement is an important consideration. Depending upon the geometry and the length of straight duct, either an averaging Pitot or a Pitot array can be used. The Pitot array assembly can contain a section of flow straightener to maximise flow monitoring accuracy by minimising the effects of turbulence and cross flow.

Differential pressure generated by stack airflows tends to be small (typically less than 100 Pascals) therefore the DP2001 Differential Transmitter has been designed specifically for use on this type of facility. The DP 2001 can display flow locally via its integral LCD, provide alarm contacts for high or low flow and can transmit a 4-20 mA signal back to a building management PC.

Isokinetic sample probes can also be included as part of the Pitot Array assembly if required, or installed directly into the stack/duct as individual items. The gas sample may be fed either to a SAS Static Air Sampler or to a CMS 2000 Mk6 or SmartCAM alpha/beta Continuous Air Monitor.

Stack sampling instrumentation can be built into stand-alone cabinets, skids or wall-mounted enclosures. Also included in these assemblies would be vacuum pumps and control gear.

The scope for addressing each projects needs is endless. For example, a stack sampling scheme may call for only one pump, or it could require a duty and standby pump, with automatic or manual switchover in the event of a pump failure or maintenance.
The complete system can be tailor made to suit each customer’s individual site needs, with the number and type of samplers /monitors varying from project to project.

Read more about the Stack and Duct Sampling and Real Time Monitoring on the Lab Impex website

Shrouded Probes – Lab Impex Systems

The Sampling Shrouded Probes (Lab Impex Systems) for extracting particulate matter from stacks and ducts, has several advantages over non-shrouded probes. These include lower internal wall losses, better off-angle performance, lower sensitivity to flow stream turbulence, and the ability to operate in either a fixed flow or variable flow rate mode.

Continuous sampling of effluent discharge gases from stacks and ducts that could possibly emit significant quantities of radio nuclides in the form of gases and aerosols are required to have installed continuous extractive sampling (CES) systems installed by regulatory agencies such as the U.S. Environmental Protection Agency (EPA). To ensure that the quality of the emission data is maintained, it is important that any losses within the sample probe and transport lines are kept to a minimum. A shrouded probe is used to extract the sample from the flow stream in the stack; with an optimally designed transport system used to convey this sample to the sampling or monitoring equipment.

Shrouded probes features:

- lower Internal wall losses
- better off-angle performance
- low sensitivity to flow stream turbulence
- can operate in either fixed or modulating flow rates
- the Shrouded Probe can operate over a range of flow rates.

Read more about the Shroudes probes on the Lab Impex Systems website.

Continuous Air Monitor – SmartCAM (Alpha & Beta) – Ultra Electronics

The Ultra Energy SmartCAM is a next-generation Continuous Air Monitor (CAM) that provides the user unparalleled performance in terms of its detectable limit, sensitivity and speed to alarm. The SmartCAM utilizes state-of-the-art Spectral Measurement Analysis in Real Time (SMART) Technology, that provides real advances in alpha measurement techniques. Using an isotope peak fitting algorithm proven to be more accurate than regions-of-interest or tail-fitting methods, results are faster, more accurate and more reliable than ever.

In operation, the SmartCAM continually monitors alpha and beta particulates deposited on a static filter with a high-efficiency detector. Air is drawn through the filter by an external wall mounted vacuum pump or distributed vacuum main.

Continuous Air Monitor – SmartCAM Features:

- Large color touchscreen display.
- Measurement of alpha and/or beta particulate.
- Allows the user to identify air concentration by isotope or as gross alpha.
- Detachable head assembly for remote monitoring.
- Full alpha spectral analysis with unique radon-thoron peak fitting algorithm.
- Improved measurement quality as a result of alpha spectrum stabilization, by means of continuous air pressure and temperature measurement.
- Fixed filter or moving filter configurations available.

- The SmartCAM gives a real time spectral display.
- Simple to navigate, touch-screen display
- Passcode protected interface
- Automated calibration routines

- SmartCAM Moving Filter Detector Head

- SmartCAM Fixed Filter Detector Head

STERILIZATION IRRADIATION INDICATORS

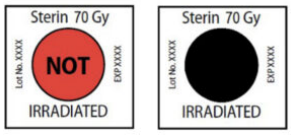
peo MEDICAL

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

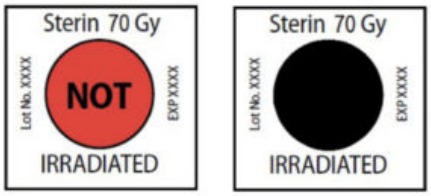
Sterin Insect Irradiation Indicators – Ashland



Sterin Insect Irradiation Indicators – Ashland

Sterin Insect Irradiation indicators provide positive, visual verification of irradiation. The indicators are manufactured using Gafchromic film.

Ashland designed the indicators for the Sterile Insect Technique (SIT) program to provide visual verification of irradiation.



HOW DOES IT WORK?

Sterin shows wether a container with insects has been irradiated when it's attached to the container. Before the insects are radiated, the indicator reads "NOT IRRADIATED", but after the insects are radiated, it reads "RADIATED".

One box of Sterin, contains 500 indicators and has a shelf life of 3 years.

BENEFITS

- Film-based indicator
- Easy to read
- Color-blind friendly
- Indicators can be stored at room temperature
- Dispenser box keeps indicators protected from room light
- Sustainable packaging (boxes can be recycled)

Sterin is available for 4 different doses: 70 Gy, 100 Gy, 125 Gy, and 145 Gy.

If you have any questions about this product, go to our partner's website!