

LABORATORY EQUIPMENT



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Partner **Ludlum Measurements Inc.**



Ludlum Measurements, Inc. is a trusted global provider of radiation detection and monitoring instruments, offering rugged, accurate solutions for personnel safety, environmental protection, and security screening. Since 1962, their equipment has been used worldwide in applications ranging from nuclear power and emergency response to border protection and critical infrastructure monitoring.

Product offering

Model 3030E Alpha-Beta Scaler



Model 2000 General Purpose Scaler



Model 2100-1 Sample Counter



Model 2200 Scaler-Ratemeter



Model 2100 Conveyorized Sample Counter



Model 3030E with 43-10-1 Alpha-Beta Sample Counter



Model 3030-2 Simultaneous Alpha-Beta Sample Counter



Model 3030 Alpha-Beta Sample Counter



Model 3030P Alpha-Beta Sample Counter



Probes (Ludlum)



Model 3030E Alpha-Beta Scaler

- Dual Channel Scaler with Independent Readouts
- Connects to External Sample Head/Detector
- CPM & DPM Modes
- Background Subtraction
- Alpha/Beta Alarms
- QC Check
- 8 Hour Battery Operation
- Real Time Clock
- RS-232 Interface
- Includes PC Software

The Model 3030E is a dual channel, scaler-type, sample counter electronics package that will accommodate many detector inputs from external sample head/detectors. This design represents a significant improvement over older analog type scalers by providing greater utility and functionality.

The system incorporates independent backlit LCD readouts to support discriminated alpha and beta sample counting. The system features background subtraction, crosstalk correction, separate alpha/beta alarms, cpm/dpm operating modes, and a pre-scripted QC function with an automatic reminder timer.

The instrument supports both 110 and 220 Vac operation and includes a trickle-charged gel-cell battery for portable offsite use up to eight hours. A wide-range, high-voltage power supply supports virtually any detector.

Status indicators located along the front panel inform the operator when another QC check is required, if the detector is nonfunctional, if it is operating in DPM or CPM mode, and if either an alpha or beta alarm setpoint has been exceeded. The count time is selected via a front panel rotary switch that enables count times ranging from 0.1 to 60 minutes or some other prescribed value as set up via a link to a PC. Other controls include a start count button, audio volume rotary adjustment, and instrument on/off switch.

An RS-232 output from the rear panel supports connection to either a printer or PC. Included in the price is PC control software, which is a Windows application that supports setup of the system, as well as collecting and logging all count results from the 3030E.



Model 2000 General Purpose Scaler

- General Purpose Scaler
- Supports Wide Range of External Detectors
- 95 to 250 Vac Power Input
- Portable Battery Operation
- RS-232 Interface to Printer or PC

The Model 2000 is a general purpose scaler typically used for counting samples. Rugged design and construction accommodates both benchtop and portable applications. The wide-ranging AC power supply and internal batteries are capable of powering the instrument upwards of 120 hours. The Model 2000 supports GM, proportional, and scintillator type detectors, and provides fine adjustment controls for setting the high-voltage and threshold settings.

The scaler reading is presented on a digital, six-digit readout LED that can be set to count from 0.1 to 999 minutes via a front-panel dip switch. An internal switch facilitates counting in seconds rather than minutes, if desired. Other front-panel controls include a start-count button, an HV/Bat switch for displaying the current value on the accompanying analog meter, and a three-way switch for selecting Power Off, Battery, or Line Power.

An RS-232 port on the rear panel allows connection to a PC or printer as set by a rear mounted switch (a RS-232 to USB adapter cable is included). When connected to a PC, the counting may be controlled and results recorded via application software.



Model 2100-1 Sample Counter

The Model 2100-1 manually operated sample counting system processes sample steel slugs to determine whether any radioactive impurities exist. The gamma radiation counting system is a table-mounted, fully integrated design that includes a gamma detector, sample tray, and controller.

The counting electronics incorporates two channels to distinguish between low and high energy gamma isotopes. All parameters, such as alarm point and count time are user-adjustable from the front panel LCD touch screen via a simple menu selection.

Measurement results for each sample are displayed on the backlit LCD. An Ethernet port reports all results and system status in real time for remote data logging and alarm annunciation. Visual and audible alarms are annunciated via the system's LCD and rear panel mounted buzzer respectively. A built-in relay provides a method for driving an external horn/strobe (available as an option).

One rear panel mounted USB port enables connection to either a keyboard or barcode reader device for the purpose of entering sample IDs.

Features

- High Sensitivity Gamma Detector
- Separate High & Low Gamma Energy Sampling
- User-Adjustable Parameters
- Color LCD Touch Screen
- Ethernet Connectivity
- Remote Alarm Output
- USB Ports for ID Input Devices



Model 2200 Scaler-Ratemeter

- General Purpose Scaler/Ratemeter
- Single Channel Analyzer
- Supports Wide Range of External Detectors
- 95 to 250 Vac Power Input
- Portable Battery Operation
- RS-232 Interface to Printer or PC

The Model 2200 is a general purpose scaler with an accompanying ratemeter, and is typically used for counting samples. Its rugged design and construction allow both benchtop and portable applications. The wide-ranging AC power supply and internal batteries are capable of powering the instrument upwards of 120 hours. The Model 2200 supports GM, proportional, and scintillator-type detectors, and provides fine adjustment controls for setting the high-voltage and threshold settings.

An adjustable discriminator and an adjustable window allow the user to count pulses within a user specified energy range. This portable unit can be powered by wall current or by four "D" cell batteries. The latter allows for continued operations during power interruptions. An optional printer (Model 4167-386) is available for hard copy archival of wipe test results.

The Ludlum Model 2200 Scaler/Ratemeter is the ideal economic solution for routine sample counting, single channel analyzing and routine radiopharmaceutical related procedures, when used with the [Model 243](#) well scintillator (NaI) detector. The well counter's 4π geometry and 1.3 cm (0.5 in.) shielding provides excellent sensitivity to higher energy isotopes like ^{131}I .



Model 2100 Conveyorized Sample Counter

The Model 2100 automated sample counting system processes sample steel slugs to determine whether any radioactive impurities exist. The gamma radiation counting system is a table-mounted, fully integrated design that includes a gamma detector, sample conveyor, and controller to facilitate automated processing.

Once the sample has been positioned on the conveyor, an infrared sensor automatically initiates conveyance of the sample into the lead shielded detector where it is counted for a predetermined time. Once the count is completed, the conveyor again advances until the sample drops into a discard container.

The counting electronics incorporates two channels to distinguish between low and high energy gamma isotopes. All parameters, such as alarm point and count time are user-adjustable from the front panel LCD touch screen via a simple menu selection.

Measurement results for each sample are displayed on the backlit LCD. An Ethernet port reports all results and system status in real time for remote data logging and alarm annunciation. Visual and audible alarms are annunciated via the system's LCD and rear panel mounted buzzer respectively. A built-in relay provides a method for driving an external horn/strobe (available as an option).

One rear panel mounted USB port enables connection to either a keyboard or barcode reader device for the purpose of entering sample IDs.



Model 3030E with 43-10-1 Alpha-Beta Sample Counter

- Alpha-Beta Dual Channel Sample Counter
- Simultaneous Alpha & Beta Counting
- 5.1 cm (2 in.) Diameter Sample Tray
- Independent Readouts
- CPM & DPM Modes
- Background Subtraction
- Alpha/Beta Alarms
- QC Check
- 8-Hour Battery Operation
- Real Time Clock
- RS-232 Interface
- Includes PC Software

This system joins Ludlum's Model 3030E dual channel scaler and the Model 43-10-1 dual phosphor detector with a 5.1 cm (2 in.) diameter sample tray to produce a complete alpha beta sample counting system. The 3030E electronics incorporates independent backlit LCD readouts to support discriminated alpha and beta sample counting. The system features background subtraction, crosstalk correction, separate alpha/beta alarms, CPM/DPM operating modes, and a pre-scripted QC function with automatic reminder timer.

The instrument supports both 110 and 220 Vac operation and includes a trickle-charged gel-cell battery for portable offsite use for up to eight hours. A wide-range high-voltage power supply supports virtually any detector. Status indicators located along the front panel inform the operator when another QC check is required, if the detector is nonfunctional, if it is operating in DPM or CPM mode, and if either an alpha or beta alarm setpoint has been exceeded.



Model 3030-2 Simultaneous Alpha-Beta Sample Counter

- Fully Integrated Alpha-Beta Sample Counter
- Simultaneous Alpha and Beta Counting
- Shielded 5.1 cm (2 in.) Diameter Sample Tray
- Independent Readouts
- CPM, Bq, & CPS Modes
- Background Subtraction
- Alpha/Beta Alarms
- QC Check
- 8 Hour Battery Operation
- Real Time Clock
- RS-232 Interface

The Model 3030-2 Simultaneous Alpha-Beta Sample Counter is a dual-channel counter designed for simultaneous alpha and beta sample measurement.

The counts per minute (CPM), Becquerel (Bq), or counts per second (CPS) modes may be enabled to allow the count to be automatically, and in real time, in CPM, Bq, or CPS. While in Bq and CPS display modes the display will show the count with two decimal places.

The counter incorporates an internally housed ZnS(Ag) plastic scintillator detector with shielded 5.1 cm (2 in.) diameter stainless steel sample tray. This system supplies independent backlit LCD readouts to support alpha and beta sample counting.



Model 3030 Alpha-Beta Sample Counter

- Fully Integrated Alpha-Beta Sample Counter
- Simultaneous Alpha and Beta Counting
- Shielded 5.1 cm (2 in.) Diameter Sample Tray
- Independent Readouts
- CPM & DPM Modes
- Background Subtraction
- Alpha/Beta Alarms
- QC Check
- 8 Hour Battery Operation
- Real Time Clock
- RS-232 Interface
- Includes PC Software

The Model 3030 Alpha-Beta Sample Counter incorporates an internally housed ZnS(Ag) plastic scintillator detector with shielded 5.1 cm (2 in.) diameter stainless steel sample tray into the Ludlum Model 3030 Scaler. This combined system supplies independent backlit LCD readouts to support discriminated alpha and beta sample counting. Key features include background subtraction, crosstalk correction, separate alpha/beta alarms, cpm/dpm operating modes, and a pre-scripted QC function with automatic reminder timer.

The instrument supports both 110 and 220 Vac operation, and includes a trickle charged gel-cell battery for portable offsite use for up to eight hours. A wide-range high voltage power supply supports virtually any detector. Status indicators located along the front panel inform the operator when a QC check is required, if the detector is non-functional, if it is operating in dpm or cpm mode, and if either an alpha or beta alarm setpoint has been exceeded.

The count time is selected via a front-panel rotary switch that enables count times ranging from 0.1 to 60 minutes, or some other prescribed value as set up via a link to a PC. Other controls include a start count button, audio volume rotary adjustment, and instrument on/off switch. An RS-232 output from the rear panel supports connection to either a printer or PC. Included in the price is PC-control software, which is a Windows application that supports setup of the system, as well as collecting and logging all count results from the 3030.



Model 3030P Alpha-Beta Sample Counter

- Fully Integrated Alpha-Beta Sample Counter
- Simultaneous Alpha and Beta Counting
- Employs PIPS™ Detector
- Ultra Low A/B Crossover & Backgrounds
- Adjustable Alpha Window for Radon Rejection
- Data Logging with USB Connectivity
- 48-Hour Battery Operation
- Includes PC Software

The 3030P with a solid state PIPS™ detector facilitates efficient and cost-effective, simultaneous alpha and beta sample counting for air filters, smears, and swipes. This instrument meets the newer Electric Power Research Institute (EPRI) guideline for detecting a few disintegrations per minute of alpha amidst several hundred-thousand disintegrations per minute beta background. All data are automatically logged and easily retrievable via a USB connection. The light weight and battery operability afford convenient use in the field. With the optional detector shield, the Model 3030P can be used virtually anywhere.

The instrument comes with PC control software that allows the user to set all parameters, view QC check settings, change alpha and beta window and threshold values, perform MDA (Minimum Detectable Activity), and retrieve the sample data saved to the logging memory.



Probes (Ludlum)

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



Ludlum models with external detector a.o.:

- [Model 3000 Digital Survey Meter](#)
- [Model 3001 Multi-Detector Survey Meter](#)
- [Model 375 Area Monitor Controller](#)
- [Model 375/9 Digital Area Monitor](#)
- [Model 30 Digital Survey Meter](#)

Partner **SDEC France**



SDEC France is a specialized manufacturer of environmental monitoring and laboratory equipment, offering comprehensive solutions for waste and recycling management, environmental monitoring, and laboratory applications. With over 30 years of experience, the company designs and produces high-quality instruments to support professionals in environmental science, agronomy, and radiological safety.

Product offering

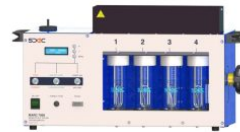
EDP 9002 - Double Mast Electrodeposition Equipment



PRC 14: Maintenance Pump - For Cleaning Pipes for HAGUE 7000 CARBON 14 Bubbler



MARC 7000 - Tritium Bubbler: Atmospheric Monitoring System with 4 Pots (With Oven)



Aerosol and Iodine Sampling Heads



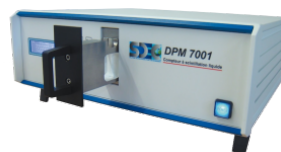
AS 5000 Portable Aerosol & Iodine Sampler DPRC Type for Air Flow Regulation - Maintenance-Free Design



EDP 7000 - Electrodeposition Equipment - Monostation



DPM 7001 Liquid Scintillation Counter - SDEC



H3R 7000 Airborne Tritium Condenser - SDEC



**Single Mast
Electrodeposition
Equipment - EDP
7000 - SDEC**



**Tritium sampler 4
vials MARC 7000 -
SDEC**



EDP 9002 – Double Mast Electrodeposition Equipment

- **SPACE-SAVING & ECONOMICAL DESIGN:** Two measurement stations on a single base, ideal for laboratories with limited workspace. The EDP 9002 is more affordable than purchasing two EDP 7000 devices.
- **TIME EFFICIENCY:** Significant time savings when conducting multiple analyses.
- **SYNTHETIC MATERIALS:** The EDP is made solely from synthetic materials that perfectly resist the sometimes highly corrosive environments of research laboratories, thus ensuring a very long lifespan for the device.
- **HIGH PRECISION:** Ensures optimal trapping efficiency with regulated and constant direct current. The EDP is equipped with a polarity reverser for electrochemical stripping of the stainless steel pellet intended to receive the deposit, thereby ensuring perfect purity of the support.
- **COOLING SYSTEM:** Features high-flow air convection, preventing solution evaporation thanks to a solution cooling system with high-flow air convection.
- **VERSATILE SETTINGS:** Adjust the current intensity up to 5 Amperes and the electrode rotation speed with precision potentiometers and three sizes for solution containers.
- **DIGITAL TIMER:** Set the exact duration of electrodeposition with a digital display timer and an audible alarm.
- **EASY TO USE:** Quick assembly/disassembly of bottles and an internal container for accidental spills. Easy user maintenance of the device. Almost instantaneous assembly/disassembly of bottles.
- **COLLABORATION WITH COGEMA:** Designed in association with the leading French nuclear institute.



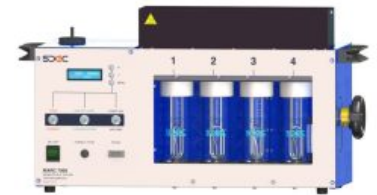
PRC 14: Maintenance Pump - For Cleaning Pipes for HAGUE 7000 CARBON 14 Bubbler

- **RELIABILITY:** PRC 14 self-priming centrifugal pump with a 150-hour motor life, operates continuously without cooling.
- **VERSATILITY:** Specifically designed for HAGUE 7000 bubblers using a diluted acid solution. This operation dissolves and evacuates the solid deposits that have accumulated inside the Ø 3 mm stainless steel pipes and in the drilled block, mainly between pots 1 and 2. It is ideal for various applications, ensuring efficient capture of atmospheric ^{14}C .
- **DURABLE CONSTRUCTION:** Equipped with an ABS impeller, stainless steel motor shaft, and nitrile seal, ensuring longevity and resilience with a constant flow rate of 10l/h.
- **ENERGY EFFICIENCY:** Maximum consumption of 60 Watts, operates ideally at 12-15 volts DC, compatible with 12V battery.
- **ECONOMICAL SOLUTION:** Offers reliability and performance at an attractive price.



MARC 7000 - Tritium Bubbler: Atmospheric Monitoring System with 4 Pots (With Oven)

- **EFFICIENCY:** The MARC 7000 monitors atmospheric tritium, capturing vapor and gas, with oxidation in an oven.
- **PERFORMANCE:** 99% HTO trapping efficiency and 98% oven conversion efficiency for precise tritium monitoring.
- **INTEGRATED ADVANCED FUNCTIONS:** Offers adjustable airflow, real-time display of various parameters, automatic regulation, and default data storage. Designed for user-friendly operation and accurate readings.
- **PERFORMANCE:** Automatic air flow regulation, durable diaphragm pump, and 316L stainless steel circuit.
- **INTEGRATED ADVANCED FUNCTIONS:** Adjustable air flow, automatic regulation, real-time display, and anomaly storage.
- **OPTIONS FOR ENHANCED FUNCTIONALITY:** Cooling circuit, Ethernet connectivity, and alarms.
- **VERSATILE APPLICATIONS:** Suitable for the nuclear industry, research centers, waste storage, and laboratories.
- **SUPPLIER CONFIDENCE:** Officially supplied to major organizations such as IRSN, the French Navy, EDF, ANDRA, CEA, and internationally to IAEA and various nuclear power plants.
- **CERTIFICATION:** NF ISO 20045 & NF ISO 20041-1



Aerosol and Iodine Sampling Heads

These holders are used for sampling aerosols and volatile compounds on filter paper and cartridge(s). They can be used for ambient sampling or connected to a line (e.g., type DPRC). They are made of anodised aluminium or stainless steel (on request) for various diameters of filter paper and cartridge(s):



AS 5000 Portable Aerosol & Iodine Sampler DPRC Type for Air Flow Regulation - Maintenance-Free Design

- **HIGH-QUALITY SAMPLING:** The AS 5000 excels in aerosol and iodine sampling, fully compliant with NF ISO 2889 standards.
- **ADJUSTABLE AIR FLOW:** Microprocessor for airflow setting from 30 to 100 liters/minute, customizable options.
- **EASY FILTER HANDLING:** TPHP head for easy installation and retrieval of filters, without interrupting the air circuit.
- **EASY DATA TRANSFER:** Transmits data via Ethernet, an available option.
- **PRECISE MONITORING:** Tracks sampled air volume and alerts for clogging and leaks, with audible and written reports.
- **CERTIFICATION:** NF ISO 2889



EDP 7000 - Electrodeposition Equipment - Monostation

- **SYNTHETIC MATERIALS:** Made from synthetic materials resistant to the corrosive environments of laboratories, ensuring longevity of the EDP.
- **HIGH PRECISION:** Ensures optimal trapping efficiency with a regulated and constant direct current. The EDP is equipped with a polarity reverser for electrochemical stripping of the stainless steel pellet intended to receive the deposit, thereby ensuring perfect purity of the support.
- **COOLING SYSTEM:** High-flow air convection to prevent solution evaporation, thanks to a cooling ventilation system.
- **VERSATILE SETTINGS:** Precise settings for current intensity up to 5 Amperes and electrode rotation speed.
- **DIGITAL TIMER:** Timer with digital display and audible alarm for exact duration of electrodeposition.
- **INTUITIVE USE:** Quick installation of bottles, internal container for spills, easy maintenance.
- **COLLABORATION WITH COGEMA:** Designed in partnership with COGEMA, a leading French nuclear institute.



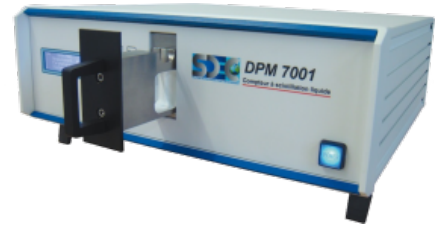
DPM 7001 Liquid Scintillation Counter - SDEC

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 quantity
- 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 manipulated radio-isotopes. Usually 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 allows 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](#)

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](#)

Partner **Spectrum Techniques**

Spectrum Techniques Spectrum Techniques is a leading provider of radiation detection and measurement solutions, specializing in laboratory equipment and radioactive sources. Their offerings include a range of instruments and detectors designed to support educational, research, and industrial applications.

Product offering

Advanced Spectroscopy System



SCINTILLATION WELL COUNTING SYSTEM



Intermediate Nuclear Laboratory System



Advanced Spectroscopy System

The Advanced Spectroscopy System, your comprehensive solution for advanced nuclear experimentation and analysis.

Sophisticated Capabilities: Our cutting-edge systems are engineered to meet the demands of diverse applications, from academic research and industrial quality control to environmental monitoring and nuclear medicine. They empower users with the tools needed to delve deep into the intricacies of radiation spectroscopy.

Tailored Solutions: Offering a range of models and configurations, these systems are highly customizable to align perfectly with your specific requirements. Whether you need energy resolution, peak analysis, or nuclide identification, our systems are designed to adapt.

Superior Detector Technology: At the heart of our spectroscopy systems lies advanced detector technology, delivering unparalleled sensitivity and accuracy. From scintillation detectors to high-purity germanium detectors, our instruments are optimized for peak performance.

User-Friendly Interface: Navigating the complexities of radiation analysis has never been easier. Our intuitive software interfaces simplify data acquisition and analysis, allowing users of all skill levels to achieve precise results.

Reliability and Support: Backed by Spectrum Techniques' decades of expertise, these systems are built for longevity and backed by top-notch technical support. We're committed to ensuring your success in radiation spectroscopy.

Elevate your research, enhance your quality control, and make breakthroughs in nuclear science with Spectrum Techniques' Advanced Spectroscopy Systems. Explore the limitless possibilities today.

The System is built around the UCS-30 and a 1.5" x 1.5" NaI(Tl) detector; it is designed for conducting a wide selection of spectroscopy experiments.



SCINTILLATION WELL COUNTING SYSTEM

The Wipe System – a state-of-the-art solution for the precise and efficient collection of radioactive contamination.

Effortless Contamination Detection: Our Wipe System is designed to simplify and enhance the process of identifying and quantifying radioactive contamination. With meticulous attention to detail, it enables you to maintain the highest standards of safety and environmental protection.

Comprehensive Solution: This system comprises user-friendly software and specialized wiping materials, ensuring a comprehensive approach to contamination monitoring. It empowers users across various industries, including nuclear facilities, healthcare, and environmental laboratories.

Accurate and Reliable: Spectrum Techniques' Wipe System is built on cutting-edge technology, offering unparalleled accuracy and reliability. It allows you to confidently detect and measure radioactive contaminants, safeguarding your personnel and the environment.

Customizable for Your Needs: We understand that different applications have unique requirements. Our Wipe System is customizable to meet your specific needs, offering flexibility in terms of sample size, detection thresholds, and reporting options.

Exceptional Support: As with all Spectrum Techniques products, our Wipe System is backed by a team of experts dedicated to ensuring your success. Our technical support and training resources are available to assist you every step of the way.

Upgrade your contamination monitoring process with Spectrum Techniques' Wipe System. Stay compliant, protect your environment, and mitigate risks with precision and confidence.



Intermediate Nuclear Laboratory System

The Intermediate Plus Nuclear Laboratory System, your comprehensive solution for advanced nuclear experimentation and analysis.

Unparalleled Versatility: This cutting-edge system is meticulously crafted to cater to the evolving needs of educational institutions, research facilities, and nuclear science enthusiasts. With its versatile design, it's perfectly suited for a wide range of applications, including teaching, advanced research, and radiation safety studies.

Precise Data Acquisition: Equipped with state-of-the-art technology, the Intermediate Plus Nuclear Laboratory System ensures precise data acquisition. It empowers users to conduct experiments with confidence, facilitating a deeper understanding of nuclear phenomena.

Seamless Integration: Our system seamlessly integrates with an array of detectors, amplifiers, and software, providing a comprehensive toolkit to explore and analyze radiation sources effectively. It's engineered for ease of use, making it accessible to both novice and experienced users.

Enhanced Features: The Intermediate Plus Nuclear Laboratory System boasts an array of enhanced features, including user-friendly software for data analysis, adaptable detector options, and flexible connectivity options, allowing you to tailor your experiments to your specific requirements.

Reliability and Support: Backed by Spectrum Techniques' commitment to quality and customer satisfaction, this system is built to last and comes with exceptional technical support to ensure your research and educational objectives are met with ease.

Unlock the potential of nuclear science with confidence, precision, and versatility using the Spectrum Techniques Intermediate Plus Nuclear Laboratory System. Elevate your experiments and research to new heights with this comprehensive solution.



Partner **GEORADIS s.r.o.**



Georadis s.r.o. is a specialized manufacturer of advanced radiation detection and monitoring instruments, offering a comprehensive suite of solutions for field and laboratory applications. Their product portfolio includes handheld monitors, portable isotope identifiers, environmental monitoring devices, and laboratory equipment, all designed to meet the rigorous demands of professionals in sectors such as environmental monitoring, industrial safety, and public security.

Product offering

**RT-50 Laboratory
Gamma-Ray
Spectrometer -
Georadis**



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](#)

Partner **Kromek**



Kromek Group plc is a global leader in advanced radiation detection technologies, specializing in compact, high-resolution solutions for security, defense, nuclear, and research applications. Leveraging proprietary Cadmium Zinc Telluride (CZT) semiconductor technology, Kromek delivers a versatile portfolio that includes handheld monitors, portable isotope identifiers, CZT-based gamma cameras, and laboratory-grade spectrometers.

Product offering

Quant GR1



Quant GR1

The Quant GR1 is a complete mobile or benchtop solution for quantifying doses of Gamma radiation released by radionuclides. Its high resolution of $<2\%$ and count spectrum range of 4096 channels enables any isotope to be identified and its associated dose quantified, even from complex mixtures.

The ability to quantify radiation doses in real time eliminates the need for further analysis in the lab, as data can both be collected and processed on site, saving time and costs.



Partner **Ultra Electronics**

ULTRA.

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**



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 Brehmstrahlung 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](#).

