HANDHELD MONITORS

peo DETECTION

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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 26 – Frisker with Geiger Mueller Pancake

Model 26-1 Frisker with integrated GM Pancake – Ludlum

Model 26-3 – High Range Frisker

Model 26S – Integrated Scintillator Frisker

Model 3000 Digital Survey Meter – Ludlum

Model 3001 Multi-Detector Survey Meter – Ludlum

Model 3002 Alpha-Beta Digital Survey Meter

Model 3003 Series Multi-Detector Ratemeter / SCA

Model 3014 Dual-Detector Digital Survey Meter / SCA

Model 9DP Pressurized Ion Chamber

Model 9DP-1 Pressurized Ion Chamber

Model 9DP* Ambient Dose Ion Chamber

Model 9DP-1* Ambient Dose Ion Chamber

Model 3-IS-1 Intrinsically Safe Gamma Ratemeter

Model 3-IS Intrinsically Safe Survey Meter

Model 12-4 Neutron Dose Survey Meter

Model 30-4 Digital Neutron Survey Meter

Model 12-4-7 Neutron Dose Survey Meter

Model 3007 Series Neutron Dose Survey Meter With Optional Internal Gamma Detector

Model 30-7 Series Lightweight Digital Neutron Survey Meter

Model 12 General Purpose Survey Meter

Model 14C General Purpose Survey Meter

Model 16 General Purpose Survey Meter

Model 18 General Purpose Survey Meter

Model 3 General Purpose Survey Meter

Model 3A General Purpose Survey Meter with Alarm

Model 3-97 Gamma Survey Meter

Model 195 with Model 43-132 High Range Alpha Ion Chamber

Model 3-98 125I & Alpha-Beta-Gamma Survey Meter

Model 194 Dose Equivalent Rate Meter

Model 2403 Pocket-Size Survey Meter

Model 2402 Pocket-Size Survey Meter with Alarm

Model 35 Vehicle-Mounted Digital Survey Meter

Model 30 Digital Survey Meter – Ludlum

Model 44-9 Pancake GM Detector – Ludlum

Model 3001-MERK response kit

Model 3001-2RK Emergency Response & NORM Kit

Model 2241-3RK2 Emergency Response Kit

Model 26-2 – Integrated Frisker with Timed Frisk

Model 70 Series – Ludlum

Model 3019 Digital Background Survey Meter – Ludlum

Model 133-6 GM Detector – Ludlum

Model 133-4 GM Detector – Ludlum

Model 133-2 GM Detector – Ludlum

Model 44-3 NAL Low Energy Gamma Scintillator – Ludlum

Model 44-2 NAL Gamma Scintillator – Ludlum

Model 44-1 Beta Scintillator – Ludlum

Model 44-38 Energy Compensated GM Detector – Ludlum

Model 44-9 Ambient Dose Equivalent Filter – Ludlum

Model 44-9 Exposure Filter Kit – Ludlum

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Model 43-92 Alpha Scintillator – Ludlum

Model 43-65 Alpha Scintillator – Ludlum

Model 43-5 Alpha Scintillator – Ludlum

Model 9DP Ambient Dose Ion Chamber Survey Meter – Ludlum

Model 9DP-1 Ion Chamber Survey Meter – Ludlum

Model 26 – Frisker with Geiger Mueller Pancake

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

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

Features:

- Integrated, Lightweight Design Simplifies Frisking
- Protective Rubber Covering Enhances Ruggedness, Water Resistance, and Non-Slip Comfort
- Employs Standard 15.51 cm^2 GM Pancake Detector
- Ratemeter, MAX Hold, and Scaler Operating Modes
- Simple Two-Button Operation
- Count Rate and Scaler Alarms
- Automatic LCD Backlight Activation
- Wrist Cuff and Lanyard Included

Additional Services

To support optimal performance and compliance with regulatory standards, PEO offers the following services for this device:

Service
Periodic inspections carried out by qualified technicians to assess functionality, identify wear, and detect potential issues early.

Maintenance
Preventive measures, part replacements, and performance checks designed to extend the device's operational lifespan and maintain consistent reliability.

Calibration
Calibration services, performed by qualified technicians. Each unit receives a Calibration Certificate confirming accuracy and conformity.

Leakage Tests
Radiation leakage testing to confirm detector safety and compliance with applicable health and safety requirements.

These services are available through PEO.

For service appointments or contract options, please contact your PEO representative.

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Model 26-1 Frisker with integrated GM Pancake – Ludlum

Overview:

The **Model 26-1 Integrated Frisker** offers fast, one-handed contamination screening with the convenience of an all-in-one design. Equipped with a GM pancake detector, intuitive controls, and a backlit LCD, it delivers reliable radiation measurements in multiple units and modes. Rugged, lightweight, and water-resistant

Ideal for both indoor and outdoor use.

Features:

- Integrated, Lightweight Ergonomic Design
- High-Impact Plastic with Water-Resistant Rubber Seals
- Employs Standard 15.51 cm^2 GM Pancake Detector
- Displays in mR/hr, µSv/h, dpm, Bq, cpm, or cps
- Dead-Time Correction (DTC) Allows Gamma Measurements Up to 500 mR/hr or Up to 1999 µSv/h
- Simple Three-Button Operation
- Count Rate, Exposure, Dose, and Counting Alarms
- Automatic Display Backlight
- Bright Red, Flashing Alarm LED
- Includes Wrist Strap, Detector Cover & Lanyard

Additional Services

To support optimal performance and compliance with regulatory standards, PEO offers the following services for this device:

Service
Periodic inspections carried out by qualified technicians to assess functionality, identify wear, and detect potential issues early.

Maintenance
Preventive measures, part replacements, and performance checks designed to extend the device's operational lifespan and maintain consistent reliability.

Calibration
Calibration services, performed by qualified technicians. Each unit receives a Calibration Certificate confirming accuracy and conformity.

Leakage Tests
Radiation leakage testing to confirm detector safety and compliance with applicable health and safety requirements.

These services are available through PEO.

For service appointments or contract options, please contact your PEO representative.

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Model 26-3 – High Range Frisker

The Ludlum Model 26-3 is a rugged, cable-free radiation detector combining a high-sensitivity GM pancake with a large auto-ranging LCD and intuitive one-handed operation. Ideal for detecting alpha/beta contamination and measuring gamma fields, it offers flexible units, three operating modes, and long battery life in a compact, water-resistant design

Features

- Integrated, Lightweight Ergonomic Design
- High-Impact Plastic with Water-Resistant Rubber Seals
- Employs Standard 15.51 cm^2 GM Pancake Detector
- Displays in mR/hr, µSv/h, dpm, Bq, cpm, or cps
- Dead-Time Correction (DTC) Allows Gamma Measurements Up to 1999 µSv/h (1000 mR/hr)
- Simple Three-Button Operation
- Count Rate, Dose/Exposure Rate, and Counting Alarms
- Automatic Display Backlight
- Bright Red Flashing ALARM LED
- Includes Wrist Strap, Clear Pancake Cover & Lanyard

Compact, Powerful, and Cable-Free

The Ludlum Model 26-3 delivers fast, reliable radiation detection in a rugged, water-resistant, and cable-free design—ideal for frisking people and inspecting objects with ease.

High-Performance Detection, Clear Readout

Equipped with a 15.51 cm² GM pancake, loud audible clicks, and a large auto-ranging LCD with backlight, it provides instant feedback. Switch between mR/hr, µSv/h, dpm, and Bq at the touch of a button.

Simple, One-Handed Use

Three intuitive modes—RATE, MAX, and COUNT—offer precise control for real-time monitoring, peak value capture, and timed surveys. All in one durable, ergonomic tool.

Versatile Measurement Options

Display readings in counts, activity, averaged rates, or accumulated dose—tailored to your needs. Add the optional Ambient Dose Filter for improved energy response in dose measurements.

Long Battery Life, Smart Configuration

Powered by just two AA batteries, the Model 26-3 runs for hundreds of hours. Settings can be locked or adjusted based on user or calibrator preference.

User-Friendly Features

A responsive backlight activates in low light, and the audible click can be muted for discreet use—perfect for both routine and sensitive surveys.

Additional Services

To support optimal performance and compliance with regulatory standards, PEO offers the following services for this device:

Service
Periodic inspections carried out by qualified technicians to assess functionality, identify wear, and detect potential issues early.

Maintenance
Preventive measures, part replacements, and performance checks designed to extend the device's operational lifespan and maintain consistent reliability.

Calibration
Calibration services, performed by qualified technicians. Each unit receives a Calibration Certificate confirming accuracy and conformity.

Leakage Tests
Radiation leakage testing to confirm detector safety and compliance with applicable health and safety requirements.

These services are available through PEO.

For service appointments or contract options, please contact your PEO representative.

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Model 26S – Integrated Scintillator Frisker

- Lightweight Design – Only 0.35 kg (0.75 lb)
- Employs 1 x 1 Equivalent Scintillator Detector
- Sigma Audio (or Click Audio Possible) & Alarm Beep
- Displays in mR/hr, µSv/h, dpm, Bq, cpm, or cps
- Simple Three-Button Operation
- Count Rate, Exposure, Dose, and Counting Alarms
- Automatic Display Backlight
- Bright Red Flashing ALARM LED

Model 3000 Digital Survey Meter – Ludlum

Overview:

The Ludlum Model 3000 is a lightweight, durable radiation survey meter designed for alpha, beta, and gamma detection using external probes. It features a large LCD, audible alarms, and three operating modes (RATE, MAX, COUNT), with dual-unit readout capability. Built for field use with a splash-resistant, high-impact plastic housing, it supports data logging (up to 1000 points) and calibration via front panel or optional Lumic kits. Supplied ready-to-use with batteries and calibration certificate.

Features:

- Large, Backlit, Easy-To-Read LCD Screen
- Auto-Ranging
- RATE, MAX, and COUNT Modes of Operation
- Splash-Resistant Construction for Outdoor Use
- All-Digital Calibration
- USB Port
- Lightweight Yet Ruggedly Built
- Simple 5-Button Interface

Options:

- **Calibration & Configuration Kits** – Software packages for setup, calibration, and detector optimization, each with required USB cables
- **Data Logging Solutions** – Includes data logger kit and retrofit handle for enabling or upgrading internal data logging
- **Wireless & Serial Connectivity** – Bluetooth® linker for mobile devices; RS-232 and TTL serial port options for external interfacing
- **Audio Kit** – Headphone jack with adjustable stereo/mono headset for audible alerts
- **Carrying Solutions** – Rugged transport case and adjustable shoulder strap (case modification required)

Additional Services

To support optimal performance and compliance with regulatory standards, PEO offers the following services for this device:

Service
Periodic inspections carried out by qualified technicians to assess functionality, identify wear, and detect potential issues early.

Maintenance
Preventive measures, part replacements, and performance checks designed to extend the device's operational lifespan and maintain consistent reliability.

Calibration
Calibration services, performed by qualified technicians. Each unit receives a Calibration Certificate confirming accuracy and conformity.

Leakage Tests
Radiation leakage testing to confirm detector safety and compliance with applicable health and safety requirements.

These services are available through PEO.

For service appointments or contract options, please contact your PEO representative.

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Model 3001 Multi-Detector Survey Meter – Ludlum

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

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

Model 3001 Multi-Detector Survey Meter features:

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

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

Model 3002 Alpha-Beta Digital Survey Meter

The Model 3002 is a durable, lightweight instrument designed for alpha and beta radiation survey with an external detector. It features a large, easy-to-read LCD screen and audible alarms and is controlled using a simple five-button interface. The unit body is made of high-impact plastic and splash resistant construction allows the instrument to be used outdoors.

Three modes of operation are available – RATE, MAX, and COUNT – which can be selected by pressing the MODE button. Measurements can be collected in cps, cpm, Bq, or dpm units. Pressing the α-β button switches between alpha, beta, or alpha+beta measurements. When enabled with the optional Lumic Data Logger Kit (see Options), data can be logged in any of the operational modes using the LOG button on the handle. Up to 1000 data points can be stored internally.

Instrument setup can be done either through the front-panel controls or via the Lumic Calibration Kit (see Options). The Model 3002 is shipped ready to use with batteries and calibration certificate.

Features

- Large Backlit LCD for Ease of Reading
- Auto Ranging, Dual Tone Audio Clicks
- All-Digital Calibration
- Alpha, Beta, or Alpha + Beta Measurements
- Rate, Max, and Count Modes of Operation
- 4-Button Intuitive Interface for Easy Operation
- Lighter Weight Yet Ruggedly Built
- Splash-Resistant Construction for Outdoor Use

Model 3003 Series Multi-Detector Ratemeter / SCA

The Model 3003 is a durable, lightweight instrument designed for alpha, beta, gamma, or neutron radiation survey. It can support up to four external detectors, each with its own set of calibration and user parameters. The Model 3003i is a version that includes an internal GM or scintillation detector. The instrument features a large, easy-to-read LCD screen and audible alarms and is controlled using a simple seven-button interface. The unit body is made of high-impact plastic and splash resistant construction allows the instrument to be used outdoors.

Four modes of operation are available – RATE, MAX, INTG, and COUNT – which can be selected by pressing the MODE button. Measurements can be collected in two sets of units (primary and secondary) for RATE, MAX, and DOSE modes, unless alpha-beta detection is selected.The user can switch between the two sets of units by pressing the UNITS button. The DETECTOR button is used to switch between the active detector settings, indicated by the colored LEDs above the control buttons. When enabled with the Lumic Data Logger Kit (see Options), data can be logged in any of the operational modes using the LOG button on the handle. Up to 1000 data points can be stored internally. The SCA ability allows a scintillator or proportional detector to be set up with an upper window, giving it higher sensitivity to a specific isotope or region. This instrument can be used with external alpha-beta detectors to display alpha, beta, or alpha+beta counts.

Instrument setup can be done either through the front-panel controls or via the Lumic Calibration Kit (see Options). The Model 3003 is shipped ready to use with batteries and calibration certificate.

Features

- 4 Selectable & Configurable Detector Settings
- Single Channel Analyzer (SCA)
- Alpha, Beta, or Alpha+Beta Measurements
- 3003i: Internal Detector Option for Dose Measurements
- Rate, Max, Integrated Dose, and Count Modes
- 4-Button Intuitive Interface for Easy Operation
- 3-Button Handle Interface for One Handed Control
- Digital Calibration, Datalogging, Auto-Ranging, USB
- Bluetooth®, True RS-232, and Headphone Options
- Lightweight and Ruggedly Built
- Large Backlit LCD for Ease of Reading

- Alternative to Ludlum Models 18 and 2221

Model 3014 Dual-Detector Digital Survey Meter / SCA

The Ludlum Model 3014 is a durable, lightweight instrument with both an internal energy-compensated gamma detector and a connection for an external detector. It features a large, easy-to-read LCD screen and audible alarms and is controlled using a simple five-button interface. The unit body is made of high-impact plastic and splash-resistant construction allows the instrument to be used outdoors.

Four modes of operation are available – RATE, MAX, INTG, and COUNT – which can be selected by pressing the MODE button. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes. The user can switch between the two sets of units by pressing the UNITS button. Pressing the DETECTOR button toggles the display between the internal and external detector readings. When enabled with the Lumic Data Logger Kit (see Options), data can be logged in any of the operational modes using the LOG button on the handle. Up to 1000 data points can be stored internally. The SCA ability allows a scintillator or proportional detector to be set up with an upper window, giving it higher sensitivity to a specific isotope or region. This instrument can be used with external alpha-beta detectors to display alpha, beta, or alpha+beta counts.

Instrument setup can be done either through the front-panel controls or via the Lumic Calibration Kit (see Options). The Model 3014 is shipped ready to use with batteries and calibration certificate.

Features

- Internal Gamma Detector for Survey / Accumulated Dose
- Can Be Used with a Variety of External Detectors
- General Purpose Survey Meter
- Rate, Max, Integrated Dose, and Count Modes
- Alpha, Beta, or Alpha+Beta Capable
- Single Channel Analyzer (SCA) Capable
- Large Backlit LCD for Ease of Reading
- 4-Button Intuitive Interface for Easy Operation
- 1-Button Handle Interface for Data Logging
- Digital Calibration, Data Logging, Auto-Ranging, USB
- Bluetooth, True RS-232, and Headphone Options
- Alternative to Ludlum Models 14C and 2221

Model 9DP Pressurized Ion Chamber

Overview:

The Ludlum Model 9DP is a compact, hand-held instrument engineered for reliable radiation monitoring in field environments. Designed for professionals across medical, industrial, and emergency response sectors, it ensures accurate assessment of radiological conditions with minimal operational complexity.

Features:

- **Measurement Range:** Background to 50 mSv/h (5 R/hr)
- **Display Modes:** Real-time Exposure Rate & user-selectable Integrated or Peak Exposure Rate
- **Display:** Sunlight-readable color screen
- **Detection Performance:** Auto-zeroing and auto-ranging functionality
- **Power Supply:** Rechargeable battery pack for extended field operations
- **Alarms:** Integrated audio and visual alarms for threshold breaches
- **Quality-of-Life:** Data logging, USB connectivity, and free firmware updates via the manufacturer's website

Optional additions:

- Software and USB cable for Dimension instrument setup.
- Log real-time data to Excel; available with or without USB cable.
- Adds headphone jack to the instrument.
- Adjustable stereo/mono headphones.
- Rechargeable AA battery pack (8x NiMH).
- Alkaline AA battery pack (8x standard).
- 10 µCi Cs-137 plastic check source.
- Rugged, waterproof medium transport case.
- 1.8 m nylon shoulder strap (case modification required).
- Mini USB keyboard for instrument setup.

Additional Services

To support optimal performance and compliance with regulatory standards, PEO offers the following services for this device:

Service
Periodic inspections carried out by qualified technicians to assess functionality, identify wear, and detect potential issues early.

Maintenance
Preventive measures, part replacements, and performance checks designed to extend the device's operational lifespan and maintain consistent reliability.

Calibration
Calibration services, performed by qualified technicians. Each unit receives a Calibration Certificate confirming accuracy and conformity.

Leakage Tests
Radiation leakage testing to confirm detector safety and compliance with applicable health and safety requirements.

These services are available through PEO.

For service appointments or contract options, please contact your PEO representative.

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Model 9DP-1 Pressurized Ion Chamber

The Model 9DP-1 is a digital, hand-held pressurized ion chamber that provides highly sensitive exposure measurements of gamma and x-ray radiation at energies above 25 keV and beta radiation at energies above 1 MeV. This meter is specially designed for radiography work where pulsed fields are being measured. It correctly integrates 50 ns pulses (and wider) that other systems typically miss or measure inaccurately. Another feature of this instrument is that the detector chamber is only pressurized to 2.5 atm (22 psig), thus avoiding all (USA) HAZMAT concerns for shipping and handling. However, this reduced pressure also reduces sensitivity, so the minimum “good” measurement point is 2 µSv/h (200 µR/hr).

Measurements and instrument status are displayed on a large 232K-color, backlit LCD screen. The screen displays the current exposure rate as well as simultaneously displaying either the integrated exposure rate or the peak exposure rate in Sv, R, Gy, or rem units. An additional mode, Pulsed Mode, locks the instrument in the highest measurement range in order to improve pulsed radiation response while sacrificing low radiation reading resolution.

The instrument is operated using the four push-buttons below the screen (ON/OFF, FUNCTION, AUDIO, ACK/RESET). In addition to the visual display, click audio proportional to the current exposure rate audibly indicates the exposure rate level. Two alarm levels can be set to alert the user whenever the pre-programmed level has been exceeded. Alarms are indicated on the display and by an audio tone. The instrument can also be configured for data logging. Logged data can either be stored in CSV format and written to a standard USB drive inserted in the instrument’s USB port, or written directly to a Microsoft Excel spreadsheet by connecting the instrument to a computer running Ludlum’s Model 9DP Logging Spreadsheet Software.

The Model 9DP parameter settings can be edited by connecting the instrument to a basic USB keyboard. Instrument setup and calibration can also be configured using the Ludlum Dimension Interface Kit, which includes the Dimension Configuration Manager Software and the required USB cable.

Features

- Range: 2 µSv/h to 500 mSv/h (200 µR/hr to 50 R/hr)
- Special Design for Measuring Pulsed Fields
- Low Pressure Chamber is Non-Hazmat
- Shows Exposure Rate & Either Integrated Exposure or Peak Exposure Rate
- Pulsed Mode for Measuring Pulsed Radiation
- Sunlight Readable Color Display
- Auto-Zeroing & -Ranging
- Rechargeable Batteries
- Audio & Visual Alarms
- Data Logging
- USB Connectivity
- Free Firmware Updates Through Website

Model 9DP* Ambient Dose Ion Chamber

Overview:

The Model 9DP* is a digital, hand-held ion chamber for measuring ambient dose equivalent from gamma, x-ray, and high-energy beta radiation. It features ICRU-compliant dose readings, a color LCD display, audio-visual alarms, and supports data logging via USB or Excel. Settings and calibration are configurable via USB keyboard or software.

Features:

- Provides ICRU-Based Ambient Dose Equivalent Measurements
- Range: Background to 50 mSv/h (5 rem/h)
- Shows Dose Rate & Either Integrated Dose or Peak Dose Rate
- Ambient Equivalent Dose or Dose Rate is Flat within 20% from 40 keV to 1.3 MeV
- Sunlight Readable Color Display
- Auto-Zeroing & -Ranging
- Rechargeable Batteries
- Audio & Visual Alarms
- Data Logging
- USB Connectivity
- Free Firmware Updates Through Website

Optional additions:

- Calibration and setup kit with software and USB cable
- Real-time data logging to Excel
- Headphone jack add-on
- Stereo/mono headphones
- Rechargeable battery pack (8x AA NiMH)
- Alkaline battery pack (8x AA)
- 10 µCi Cs-137 check source
- Rugged, waterproof transport case
- Adjustable shoulder strap (requires case modification)
- USB keyboard for configuration

Additional Services

To support optimal performance and compliance with regulatory standards, PEO offers the following services for this device:

Service
Periodic inspections carried out by qualified technicians to assess functionality, identify wear, and detect potential issues early.

Maintenance
Preventive measures, part replacements, and performance checks designed to extend the device's operational lifespan and maintain consistent reliability.

Calibration
Calibration services, performed by qualified technicians. Each unit receives a Calibration Certificate confirming accuracy and conformity.

Leakage Tests
Radiation leakage testing to confirm detector safety and compliance with applicable health and safety requirements.

These services are available through PEO.

For service appointments or contract options, please contact your PEO representative.

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Model 9DP-1* Ambient Dose Ion Chamber

The Model 9DP-1* is a digital, hand-held pressurized ion chamber that provides highly sensitive ambient dose equivalent measurements of gamma and x-ray radiation at energies above 25 keV and beta radiation at energies above 1 MeV. Ambient dose equivalent is defined as the dose equivalent readout that would be measured at a (human) tissue depth of 10 mm. The Model 9DP-1* measures and displays the ambient dose equivalent in accordance with the ICRU (International Commission on Radiation Units) 30 cm tissue equivalent sphere. This requires a special ion chamber that can provide a conversion of the (air kerma) exposure rate to provide the ambient dose and dose rate.

This meter is also specially designed to measure pulsed radiation fields, correctly integrating 50 ns pulses (and wider) that other systems typically miss or measure inaccurately. Another feature is a detector chamber that is only pressurized to 2.5 atm (22 psig), eliminating (USA) shipping and handling HAZMAT concerns. However, this reduced pressure also decreases sensitivity, reducing the minimum measurement point to 2 µSv/h (200 µR/hr).

Measurements and instrument status are displayed on a large 232K-color, backlit LCD screen. The screen displays the current dose rate as well as simultaneously displaying either the integrated dose rate or the peak dose rate in Sv, R, Gy, or rem units. An additional mode, Pulsed Mode, locks the instrument in the highest measurement range in order to improve pulsed radiation response while sacrificing low radiation reading resolution.

The instrument is operated using the four push-buttons below the screen (ON/OFF, FUNCTION, AUDIO, ACK/RESET). In addition to the visual display, click audio proportional to the current dose rate audibly indicates the dose rate level. Two alarm levels can be set to alert the user whenever the pre-programmed level has been exceeded. Alarms are indicated on the display and by an audio tone. The instrument can also be configured for data logging. Logged data can either be stored in CSV format and written to a standard USB drive inserted in the instrument’s USB port, or written directly to a Microsoft Excel spreadsheet by connecting the instrument to a computer running Ludlum’s Model 9DP Logging Spreadsheet Software.

The Model 9DP parameter settings can be edited by connecting the instrument to a basic USB keyboard. Instrument setup and calibration can also be configured using the Ludlum Dimension Interface Kit, which includes the Dimension Configuration Manager Software and the required USB cable.

Features

- Provides ICRU-Based Ambient Dose Measurements
- Range: 2 µSv/h to 500 mSv/h (200 µR/hr to 50 R/hr)
- Special Design for Measuring Pulsed Fields
- Low Pressure Chamber is Non-Hazmat
- Shows Dose Rate & Either Integrated Dose or Peak Dose Rate
- Ambient Equivalent Dose or Dose Rate Is Flat Within 30% from 60 keV to 1.3 MeV
- Sunlight Readable Color Display
- Auto-Zeroing & -Ranging
- Rechargeable Batteries
- Audio & Visual Alarms
- Data Logging
- USB Connectivity
- Free Firmware Updates Through Website

Model 3-IS-1 Intrinsically Safe Gamma Ratemeter

This intrinsically safe general purpose ratemeter is patterned after Ludlum’s best-selling Model 3. It was designed and tested to USA standards for intrinsic safety, permitting it to be used in potentially explosive atmospheres.

This instrument includes an internally housed, energy compensated GM detector with a gamma detection range of 0.1 mR/hr to 1.0 R/hr. The Model 3 type instruments are well known for their accuracy and long-lasting dependability. The cast aluminum instrument housing, with its separate battery compartment and accompanying metal handle, offer an industrial robustness and quality that promote long-lasting protection and instrument life. The front panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test, an audio on/off switch, a fast/slow response switch, and a count reset button.

Features

- Intrinsically Safe Gamma Survey Meter
- Rugged
- 4-Range Analog Ratemeter
- Built-in Energy Compensated GM Detector
- 0.1 mR/hr to 1.0 R/hr Detector Range

Model 3-IS Intrinsically Safe Survey Meter

This intrinsically safe general purpose ratemeter is patterned after Ludlum's best-selling Model 3. It was designed and tested to USA standards for intrinsic safety, permitting it to be used in potentially explosive atmospheres. The Model 3-IS can only be used with select detectors to sustain the intrinsic safety rating. Click the tab below to view compatible detectors.

Like the Model 3 before it, the 3-IS retains the well-deserved reputation for accuracy and long-lasting dependability. The cast aluminum instrument housing, with its separate battery compartment and accompanying metal handle, offer an industrial robustness and quality that promote long-lasting protection and instrument life. The front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test, an audio on/off switch, a fast/slow response switch, and a count reset button. The analog meter comes in a variety of measurement ranges and units to support the external radiation detector selected.

A one meter (39 in.) straight type detector cable equipped with special connectors designed to prevent quick or accidental disconnection in the field is included in the price of the instrument.

Features

- Intrinsically Safe
- Rugged
- 4-Range Analog Ratemeter
- Supports GM & Scintillation Type Detectors

Model 12-4 Neutron Dose Survey Meter

The Model 12-4 is an industry standard neutron dose rate instrument that conforms to the RPG curve with a measuring range of 0 to 100 mSv/h (0 to 10,000 mrem/hr) from thermal to 12 MeV.

The detector is a 22.9 cm (9 in.) moderated ^{3}He tube with a gamma background rejection up to 100 mSv/h (10 R/hr). The ratemeter is a four-decade analog meter, designed with a cast aluminum instrument housing incorporating a separate battery compartment, and accompanying metal handle. This design delivers industrial robustness and quality, promoting long-lasting protection and instrument life.

The front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test; an audio on/off switch; a fast/slow response switch; a count reset; and high-voltage test push-button. The Model 12-4 is a complete turn-key system and includes two “D” cell batteries.

Features

- Moderated Neutron Detector
- Range: 0 to 100 mSv/h (0 to 10,000 mrem/hr)
- Gamma Rejection up to 0.1 Sv/h (10 R/hr)
- Rugged
- 4-Range Analog Meter

Model 30-4 Digital Neutron Survey Meter

The Ludlum Model 30-4 joins the Model 30 digital display unit with a 22.9 cm (9 in.) REM ball containing a ^{3}He detector, thereby providing a significant weight reduction and more compact, maneuverable instrument for determining neutron dose rates.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, rem/hr, or Sv/h units. 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 from Ludlum Measurements.

This instrument features a large, easily-readable LCD (liquid crystal display) that may be rotated for maximum ease of use for the operator. The connecting cable is threaded through the rugged carrying handle to simplify use. In addition the display unit may be detached from REM ball permitting the operator to position the detector and the display unit to best advantage within the limits of the cable length. Other features are an audio warning tone and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 30 to be used in outdoor environments. The instrument body is constructed of lightweight, durable, high-impact plastic.

Features

- Multi-Function Digital Display Unit
- Low-Weight Device Substitutes for Ratemeter
- Simple Switching Between Two Sets of Measurement Units
- Moderated Neutron Detector
- Range: 0 to 99.9 mSv/h (0 to 9.99 rem/hr)
- Display Unit Detaches for Greater Versatility

Model 12-4-7 Neutron Dose Survey Meter

The Model 12-4-7 is a neutron dose rate instrument that conforms to the RPG curve with a measuring range of 0 to 100 mSv/h (0 to 10,000 mrem/hr) from thermal to 12 MeV neutrons.

The detector is a 19.5 cm (7.7 in.), moderated ^{3}He tube with a gamma background rejection up to 100 mSv/h (10 R/hr). The ratemeter is a four-decade analog meter, designed with a cast aluminum instrument housing incorporating a separate battery compartment, and accompanying metal handle. This design delivers industrial robustness and quality, promoting long-lasting protection and instrument life.

The front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test; an audio on/off switch; a fast/slow response switch; a count reset; and high-voltage test push-button. The Model 12-4-7 is a complete turn-key system and includes two “D” cell batteries.

Features

- Smaller, Lighter 7-inch Polyethylene Ball
- Moderated Neutron Detector
- Range: 0 to 100 mSv/h (0 to 10,000 mrem/hr)
- Gamma Rejection up to 0.1 Sv/h (10 R/hr)
- Rugged
- 4-Range Analog Meter
- Complete Turn-Key System

Model 3007 Series Neutron Dose Survey Meter With Optional Internal Gamma Detector

The Model 3007 Series of neutron dose survey meters combines a handheld digital meter with a 19.5 cm (7.7 in.) diameter REM ball containing a ^{3}He detector to measure and monitor neutron radiation. Several versions of these instruments are available. The Model 3007 and Model 3007B use similar detectors that only differ by the boron concentration in the internal borated layer. The Model 3007 has a lower boron concentration and offers a typical sensitivity of 10 cpm per µSv/h (100 cpm per mrem/hr), but tends to overrespond in the 5 keV range. The Model 3007B has a higher boron concentration and a lower sensitivity, typically 4.5 cpm per µSv/h (45 cpm per mrem/hr), but does not have the same overresponse issue. The Model 3007-1 has a higher pressure detector that offers greater sensitivity, typically 17 cpm per µSv/h (170 cpm per mrem/hr), but falls under shipping regulations due to the pressure. “i” versions include an internal gamma detector in the meter for exposure or dose measurements.

Each instrument features a large, easy-to-read LCD screen and is controlled using a simple five-button interface. The meter body is made of high-impact plastic, and splash resistant construction allows the instruments to be used outdoors.

Four modes of operation are available – RATE, MAX, COUNT, and DOSE – which can be selected by pressing the MODE button. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, mR/hr, mrem/hr, or µSv/h units. The user can switch between two sets of units by pressing the UNITS button. Audible alarms can be set in all modes of operation. When enabled with the optional Lumic Data Logger Kit, data can be logged in any of the operational modes using the LOG button on the handle. Up to 1000 data points can be stored internally.

Instrument setup can be done either through the front-panel controls or via the Lumic Calibration Kit. The Model 3007 is shipped ready to use with batteries and a calibration certificate.

Features

- Small & Light 19.5 cm (7.7 in.) REM Ball
- Moderated Neutron Detector
- Range: 0 – 100 mSv/h (0 – 10,000 mrem/hr)
- Gamma Rejection up to 0.1 Sv/h (10 R/hr)
- “i” Versions: Internal Gamma Detector Option for Exposure/Dose Measurements
- Rate, Max, Integrated Dose & Count Modes
- Digital Calibration, Data Logging, Auto-Ranging, USB
- Large, Backlit, Easy-to-Read LCD Screen
- Simple 5-Button Interface

Model 30-7 Series Lightweight Digital Neutron Survey Meter

The Model 30-7 Series are handheld, lightweight neutron dose detectors that join the Model 30 digital meter with a 19.5 cm (7.7 in) diameter REM ball containing a ^{3}He detector. The instruments use similar detectors that only differ by the boron concentration in the internal borated layer. The Model 30-7 detector has a lower boron concentration and offers a greater sensitivity, typically 10 cpm per µSv/h (100 cpm per mrem/hr), but tends to overrespond in the 5 keV range. The Model 30-7B detector has a higher boron concentration and a lower sensitivity, typically 4.5 cpm per µSv/h (45 cpm per mrem/hr), but does not have the same overresponse issue as the Model 30-7.

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, rem/hr, or Sv/h units. 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 the Lumic calibration software (see Options tab).

Each instrument features a large, easily-readable LCD (liquid crystal display) that may be rotated for maximum ease of use by the operator. The connecting cable is threaded through the rugged carrying handle to simplify use. In addition, the display unit may be detached from REM ball, permitting the operator to position the detector and the display unit to best advantage within the limits of the cable length. Other features are an audio warning tone and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 30-7 Series to be used in outdoor environments. The display body is constructed of lightweight, durable, high-impact plastic.

Features

- Small & Light 19.5 cm (7.7 in.) REM Ball
- Moderated Neutron Detector
- Digital Display with Adjustable Viewing Angle
- Range: 0 to 99.9 mSv/h (0 to 9.99 rem/hr)
- Low-Weight Unit Provides Same Readings as Standard REM-ball from Bare AmBe and Lower Energies
- Includes Adjustable Shoulder Strap

Model 12 General Purpose Survey Meter

This general purpose, handheld analog ratemeter supports GM, proportional, and scintillation type detectors. The analog meter face comes in a variety of options to support the measurement units and ranges for the optional external detector selected.

The cast aluminum instrument housing with its separate battery compartment and accompanying metal handle offer an industrial robustness and quality that promote long lasting protection and instrument life. The front panel controls include a rotary switch for selecting the four-decade range, instrument shut-off and battery test, an audio on/off switch, a fast/slow response switch, a high voltage display button, and a count reset button.

A one-meter (39 in.) straight type detector cable with “C” style connector and batteries are included in the price of the instrument.

Features

- Low Price
- Rugged
- 4-Range Analog Ratemeter
- Supports GM, Proportional, and Scintillation Type Detectors
- Greater Than 2000 Hour Battery Life

Model 14C General Purpose Survey Meter

This general purpose, handheld analog ratemeter supports operating two separate radiation detectors. A switch allows the user to select between the internally mounted GM detector with an exposure range of 0 – 20 mSv/h (0 – 2000 mR/hr) or an external GM or scintillator detector of choice (see table below).

The cast aluminum instrument housing, with its separate battery compartment and accompanying metal handle, offer an industrial robustness and quality that promote long-lasting protection and instrument life. The front-panel controls include a rotary switch for selecting the five-decade range and instrument shut-off, an audio on/off switch, a fast/slow response switch, a high voltage display button, and a battery test button.

The analog meter face comes in a variety of options to support the measurement units and ranges for the additional external detector selected. A one meter (39 in.) straight type detector cable with “C” style connector is included in the price of the instrument.

Features

- Low Price
- Rugged
- 5-Range Analog Ratemeter
- Operates Two Detectors
  - Built-in Internal GM Detector (0 to 2000 mR/hr)
  - External GM or Scintillation Detector

Model 16 General Purpose Survey Meter

This general purpose, handheld analog ratemeter supports GM, proportional, and scintillation type detectors. The cast aluminum instrument housing, with its separate battery compartment and accompanying metal handle, offers an industrial robustness and quality that promotes long-lasting protection and instrument life.

The front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test, an audio on/off switch, a fast/slow response switch, a high-voltage display button, a count reset button, and a window in/out switch. The analog meter face comes in a variety of options to support the measurement units and ranges for the additional external detector selected.

A one-meter (39 in.) long straight type detector cable with “C” style connector is included in the price of the instrument.

Features

- Low Price
- Rugged
- 4-Range Analog Ratemeter
- Supports GM, Proportional, & Scintillation Type Detectors
- Adjustable Window

Model 18 General Purpose Survey Meter

This general purpose, handheld analog ratemeter supports GM, proportional, and scintillation type detectors. The analog meter face comes in a variety of options to support the measurement units and ranges for the optional external detector(s) selected.

The unique capability this instrument offers is its ability to select between three different detector setups. This feature facilitates switching detectors in the field without requiring calibration adjustments. In addition to the three-position detector selector switch, the front panel also provides the user with the capability to switch the operating window between an open (gross) channel and a pre-selected narrower setting when targeting specific energies. Other front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off and battery test, an audio on/off switch, a fast/slow response switch, a high-voltage display button, and a count reset button.

The cast aluminum instrument housing with its separate battery compartment and accompanying metal handle offer an industrial robustness and quality that promote long-lasting protection and instrument life. A one meter (39 in.) straight type detector cable with “C” style connector is included in the price of the instrument.

Features

- Low Price
- Rugged
- 4-Range Analog Ratemeter
- Supports GM, Proportional & Scintillation Type Detectors
- Adjustable Window
- 3-Detector, High-Voltage Setups

Model 3 General Purpose Survey Meter

The Model 3 is Ludlum's best selling, general purpose, handheld, analog ratemeter known for accuracy and long-lasting dependability. It comes in a variety of measurement ranges and units to support the external radiation detector selected.

The cast aluminum instrument housing with a separate battery compartment and metal handle offer an industrial robustness and quality that promote long-lasting protection and instrument life. The front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test, an audio on/off switch, a fast/slow response switch, and a count reset button.

A one meter (39 in.) straight type detector cable with "C" style connector is included in the price of the instrument.

Features

- Low price
- Rugged
- 4-Range Analog Ratemeter
- Supports GM & Scintillation Type Detectors
- Greater than 2000 Hour Battery Life

Model 3A General Purpose Survey Meter with Alarm

The Model 3A is identical to Ludlum’s best selling, general purpose, Model 3 handheld analog ratemeter with the addition of an audible alarm. It is likewise known for its accuracy and long-lasting dependability. The cast aluminum instrument housing with its separate battery compartment and accompanying metal handle offer an industrial robustness and quality that promote long-lasting protection and instrument life.

The front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test, an audio on/off switch, a fast/slow response switch, and a count reset button. The analog meter comes in a variety of measurement ranges and units to support the external radiation detector selected.

A one meter (39 in.) long straight type detector cable with “C” style connector is included in the price of the instrument..

Features

- Low Price
- Rugged
- 4-Range Analog Ratemeter
- Alarms
- Supports GM & Scintillation Type Detectors

Model 3-97 Gamma Survey Meter

The Model 3-97 provides a great solution for locating potential contamination and then accurately measuring the exposure rate, or for simply measuring the ambient exposure levels over a wide range. The instrument is equipped with an internal 2.5 x 2.5 cm (1 x 1 in.) NaI detector that is highly sensitive to gamma, with readings in the µR range between 0 to 3000 µR/hr (0 to 3 mR/hr). The instrument is additionally equipped with an external Model 44-38 energy-compensated GM to extend the detection range up to 200 mR/hr. The ratemeter is Ludlum's venerable Model 3-series, which employs a robust cast aluminum instrument housing with a separate battery compartment for long-lasting protection and instrument life. The front-panel controls include a rotary switch for selecting the 4-decade range, instrument shut-off and battery test, audio on/off switch, fast/slow response switch, count reset button, and internal/external detector switch. The Model 3-97 is a complete turn-key system with the detector cable and two "D" cell batteries.

Features

- Wide Range from µR/hr to 200 mR/hr
- High-Sensitivity Gamma
- Rugged
- 4-Range Analog Ratemeter

Model 195 with Model 43-132 High Range Alpha Ion Chamber

The high-range alpha ion chamber system uses the Model 43-132 Ion Chamber and the Model 195 readout unit. The Model 43-132 is designed to enhance alpha detection, although it is also sensitive to beta-gamma radiation. The Model 195 has a rugged cast aluminum instrument housing with sealed battery compartment that offer an industrial robustness and quality that promote long-lasting protection and instrument life.

Model 3-98 125I & Alpha-Beta-Gamma Survey Meter

Ludlum's Model 3-98 is uniquely configured to optimize measurements for ^{125}I and any alpha, beta, or gamma contamination. The dual detector design allows the user to select the detector for the task at hand. The internally-housed GM pancake detector can be used to measure gamma. This detector's face can be exposed via a slide located along the bottom of the instrument, thus making it sensitive to alpha and beta as well. The external NaI detector, Ludlum Model 44-3, is optimized for low-energy gamma from ^{125}I.

The ratemeter is Ludlum's venerable Model 3-series, which employs a robust, cast aluminum instrument housing with a separate battery compartment for long-lasting protection and long instrument life. The front-panel controls include a rotary switch for selecting the 4-decade range, instrument shut-off and battery test, audio on/off switch, fast/slow response switch, count reset button, and internal/external detector switch. Also included are a standard 1-meter (39 inch) cable with series "C" connector (others available), detector clip, and two "D" cell batteries.

Features

- Dual Purpose Detection
- ^{125}I & Alpha-Beta-Gamma Contamination
- 4-Range Analog Ratemeter
- Rugged Construction
- 0 to 500 kcpm
- User-Selectable Internal and External Detectors

Model 194 Dose Equivalent Rate Meter

Features

- Accurate (Energy-Flat) Ambient Dose Equivalent Rate Measurements
- Eliminates High False Readings of Typical microR Meters
- Rugged Scintillator, Will Not Leak
- Low Range: Background to 19.99 µSv/h (1999 µrem/hr)
- High Range: 1 to 1999 µSv/h (0.1 to 199.9 mrem/hr)
- Improved Replacement for Bicron Microrem
- “/E” Extended Version Has Low-Energy, 3.2 mg/cm^2 Window for Operation Below 50 keV

Model 2403 Pocket-Size Survey Meter

The Model 2403 is a pocket-size ratemeter with an analog display that may be connected to a number of detectors. This unit supports mR/hr exposure and cpm count-rate measurements. The metallic case and convenient size make this a nice tool to for a wide variety of applications.

Features

- Pocket-Size Ratemeter
- Accommodates a Variety of Detectors
- Metallic Case
- Easy to Use

Model 2402 Pocket-Size Survey Meter with Alarm

The Model 2402 is a pocket-sized ratemeter with an analog display that may be connected to a number of available detectors. This unit supports mR/hr exposure and cpm count-rate measurements. It also has a built-in audio and visual alarm. The metallic case and convenient size make this a nice tool to for a wide variety of applications.

Features

- Pocket-Size Ratemeter
- Accommodates a Variety of Detectors
- Audio & Visual Alarm
- Metallic Case
- Easy to Use

Model 35 Vehicle-Mounted Digital Survey Meter

The Ludlum Model 35 is a versatile, lightweight, vehicle mounted instrument with an external detector used for alpha, beta, or gamma radiation survey. It remains unobtrusive until an alarm is reached. At that point the monitor can be quickly removed from the mount for closer inspection. 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), an audio warning tone, and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 35 to be used outdoors. The instrument body is made of lightweight, durable, high-impact plastic. The Model 35 is shipped ready to use with batteries and calibration certificate.

Features

- Includes Rotatable Ball-Mount Stand
- Optional Windshield and Under-Dash Mounts Available
- Powered by Connected Vehicle or Internal Batteries
- Large Backlit Auto Ranging LCD with Adjustable Viewing Angle
- Simple Green, Yellow, and Red Status Lights
- 3-Button Intuitive Interface for Easy Operation
- USB Port and All-Digital Calibration

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 44-9 Pancake GM Detector – Ludlum

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

Model 44-9 Pancake GM Detector features:

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

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

Model 3001-MERK response kit

Medical Environment Response Kit

This response kit is an ideal tool for any nuclear medicine department or emergency department. It offers a detector complement optimized for medical isotopes and includes personal radiation monitoring. The kit fits securely in a foam-padded, padlockable, rugged storage and transport case, and will easily meet the radiation requirements of the emergency response plan.

The Model 3001-MERK Medical Environment Response Kit includes:

- Model 3001 Multi-Detector Digital Survey Meter
- Model 44-9, Alpha-Beta-Gamma Detector
- Model 44-2, Gamma Scintillator Detector
- Model 44-142, Beta Scintillator Detector
- Model 25 or Model 25-1 Personal Radiation Monitor
- 1 µCi (^{137}Cs) check source
- 1 m (39 in.) long detector cable
- Carrying case for easy transportation of the kit to the affected site

Ludlum offers several versions of pre-packaged response kits suitable for a wide variety of applications. If you desire more or different detectors, or other changes to our standard kits, please contact us regarding a customized kit.

Model 3001-2RK Emergency Response & NORM Kit

The Model 3001-2RK is composed of two dependable, high-quality detectors matched with the versatile Model 3001 survey meter and packaged in a rugged transport and storage case.

The Model 3001 can be configured with up to four detector setups, enabling the user to quickly exchange detectors in the field. Once the detector system is configured, a user can select a detector's parameters with a press of a button and choose the desired measurement units and operation mode.

The kit includes the Model 44-9 alpha-beta-gamma detector for general survey measurements and the Model 44-2 high-sensitivity gamma detector for locating the source of high readings. The case is cushioned with dense foam padding, and has a large, comfortable grip, a manual pressure relief valve, and padlockable hasps. The kit also includes a 1 µCi (^{137}Cs) check source, check source holder, cable, and batteries, making this kit ready-to-go for emergency response or NORM applications.

Ludlum offers several versions of pre-packaged response kits suitable for a wide variety of applications. If you desire more or different detectors, or other changes to our standard kits, please contact us regarding a customized kit.

Features

- Ready-to-Go Kit in Rugged Case
- Ergonomic Survey Meter with 4 Selectable and Configurable Detector Settings
- Measures Alpha, Beta, and Gamma Contamination
- Convenient In-Field Detector Switching
- For Emergency Response or NORM Applications
- Includes:
  - Model 3001 Multi-Detector Survey Meter
  - Model 44-9 Alpha-Beta-Gamma Detector
  - Model 44-2 High Energy Gamma Detector
  - Check Source, Cable, Batteries
  - Transport & Storage Case with dense foam padding

Model 2241-3RK2 Emergency Response Kit

All of the basic radiation measurement tools likely required to rapidly react to a radiological emergency are conveniently assembled in the Model 2241-3RK2 Response Kit. The digital, auto-ranging Model 2241-3 scaler-ratemeter stores 4 parameter setups to allow for quick detector changes in the field.

The Model 2241-3 has a backlit LCD and user-adjustable alert and alarm for both scaler and ratemeter modes. The rugged transport and storage case is foam-padded with custom cutouts for the instruments and gives air- and watertight, corrosion-proof, and padlockable protection. A check source with mountable holder is included to ensure instruments are functioning properly.

Ludlum offers several versions of pre-packaged response kits suitable for a wide variety of applications. If you desire more or different detectors, or other changes to our standard kits, please contact us regarding a customized kit.

Features

- Ready-to-Go Response Kit in Rugged Case
- Digital Scaler-Ratemeter with User-Adjustable Audible & Visual Alarms
- Includes Check Source and Cable
- Measures Alpha, Beta, and Gamma Contamination
- Convenient In-Field Detector Switching

Model 26-2 – Integrated Frisker with Timed Frisk

- Integrated, Lightweight Design
- High-Impact Plastic with Water-Resistant Rubber Seals
- GM Pancake Detector
- Ratemeter, Peak, and Timed Frisk Operating Modes
- Simple Two-Button Operation
- Automatic LCD Backlight
- Comfortable Non-Slip Grip, Includes Lanyard & Adjustable Wrist Strap
- Daylight-Visible Green & Red Status LEDs

Model 70 Series – Ludlum

Spectroscopic Personal Radiation Detector

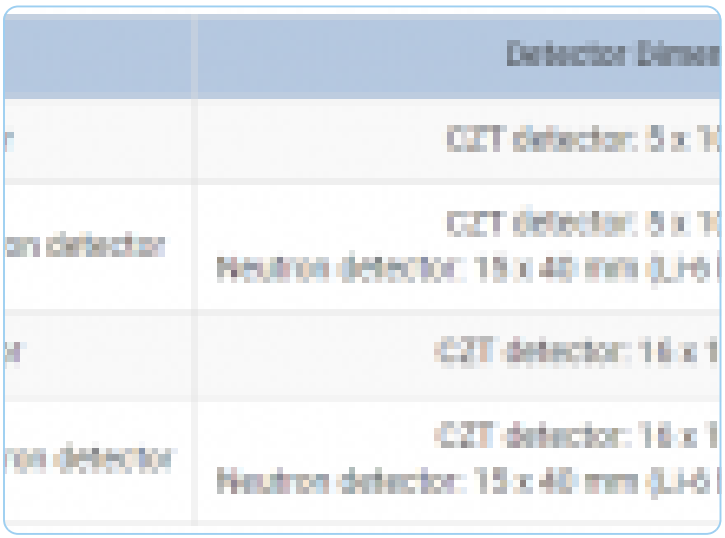
The Ludlum Model 70 Series are high resolution CZT-type detectors that deliver unparalleled performance in express radionuclide identification and radiation dose assessment from low to moderate-high levels.

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



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 3019 Digital Background Survey Meter – Ludlum

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

Model 3019 Digital Background Survey Meter features:

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

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

Model 133-6 GM Detector – Ludlum

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

Model 133-6 GM Detector features:

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

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

Model 133-4 GM Detector – Ludlum

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

Model 133-4 GM Detector features:

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

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

Model 133-2 GM Detector – Ludlum

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

Model 133-2 GM Detector features:

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

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

Model 44-3 NAL Low Energy Gamma Scintillator – Ludlum

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

Model 44-3 NAL Low Energy Gamma Scintillator features:

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

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

Model 44-2 NAL Gamma Scintillator – Ludlum

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

Model 44-2 NAL Gamma Scintillator features:

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

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

Model 44-1 Beta Scintillator – Ludlum

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

Model 44-1 Beta Scintillator features:

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

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

Model 44-38 Energy Compensated GM Detector – Ludlum

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

Model 44-38 Energy Compensated GM Detector features:

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

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

Model 44-9 Ambient Dose Equivalent Filter – Ludlum

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

Model 44-9 Ambient Dose Equivalent Filter features:

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

Dose Equivalent Filter Response (green line):

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

Model 44-9 Exposure Filter Kit – Ludlum

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

Model 44-9 Exposure Filter Kit features:

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

Exposure Filter Response (blue line):

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

Model 44-7 Alpha Beta Gamma Detector – Ludlum

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

Model 44-7 Alpha Beta Gamma Detector features:

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

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

Model 43-92 Alpha Scintillator – Ludlum

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

Model 43-92 Alpha Scintillator features:

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

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

Model 43-65 Alpha Scintillator – Ludlum

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

Model 43-65 Alpha Scintillator features:

- 63 cm^2 active; 50 cm^2 open (window area)
- ZnS(Ag) scintillator
- 0.8 mg/cm^2 metalized polyester window
- 3.8 cm (1.5 in.) diameter photomultiplier tube
- efficiency (4π): 17% for ^{239}Pu; 17% for ^{230}Th

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

Model 43-5 Alpha Scintillator – Ludlum

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

Model 43-5 Alpha Scintillator features:

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

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

Radiation Detection › Handheld Monitors

Model 9DP Ambient Dose Ion Chamber Survey Meter – Ludlum

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

AMBIENT DOSE EQUIVALENT

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

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

FEATURES

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

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

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

BENEFITS

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

- 4-button control

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

Model 9DP* overview

SCAN TO VIEW VIDEO

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

Model 9DP Control Panel Overview

SCAN TO VIEW VIDEO

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

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

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Radiation Detection › Handheld Monitors

Model 9DP-1 Ion Chamber Survey Meter – Ludlum

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

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

FEATURES

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

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

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

BENEFITS

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

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

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

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9DP instrument overview

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

SCAN TO VIEW VIDEO

9DP control panel overview

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

SCAN TO VIEW VIDEO

Decompressing the Ion Chamber

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Partner Tracerco

Tracerco is a global leader in radiation detection and measurement, offering a comprehensive range of handheld monitors and personal electronic dosimeters. Their instruments are designed to provide accurate, real-time monitoring of radiation levels, ensuring safety and compliance in various industries.

Product offering

Contamination Monitor T401 – Tracerco

Dose Rate Monitor T402 & T402HR – Tracerco

Contamination Monitor T403 – Tracerco

T406 X-ray Monitor

Intrinsically Safe Radiation Dose Rate Monitor (T202) Tracerco™

NORM Monitor-IS – Tracerco

Contamination Monitor T401 – Tracerco

The Tracerco™ T401 contamination monitors are suitable for those working in oil and gas, medical and life sciences, nuclear, CBRNe and emergency services, NDT, manufacturing, and environmental and waste management industries.

These monitor benefit from high-level functionality with added environmental tolerance, and they are a highly cost-effective monitor where intrinsic safety is not a concern.

Tracerco™ T401 contamination monitor is particularly suited to the detection of radioactive contamination, and this typically arises where man-made or naturally occurring isotopes are processed. This includes nuclear power, land remediation, research and development and medicine applications.

They also offer a number of additional key features, such as operational reliability, a direct surface ability mode and peak reading to make life easier for the worker.

The Tracerco™ T401 provides excellent sensitivity for the detection of alpha and beta radiation.

Other benefits include:

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

Dose Rate Monitor T402 & T402HR – Tracerco

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

Specifications Dose Rate Monitor T402 & T402HR Tracerco

Contamination Dose Rate Monitor T402 & T402HR

Contamination Monitor T403 – Tracerco

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

Specifications Contamination Monitor T403 from Tracerco

Contamination Monitor T403 – Tracerco

T406 X-ray Monitor

The Tracerco™ T406 X-ray radiation monitor is an advanced radiation monitoring device designed for professionals in oil and gas, medical and life sciences, nuclear, CBRNe and emergency services, NDT, manufacturing and industrial, and/collections/monitors/products/tracerco-t406-x-ray-monitor environmental and waste management industries.

Unlike other radiation survey meters on the market, the Tracerco™ T406 enables rapid radiation level detection, helping users identify peak radiation measurements and minimise exposure to potential radiation leaks during operations.

Benefits of the Tracerco™ T406 X-ray monitor:

- Hygienic design – smooth lines and an easy-to-clean finish make it ideal for environments with a risk of disease transmission through hand contact, such as food processing, airport security, and hospital settings.
- Easy and safe to use – designed to be lightweight and easy to carry, with the ability to be operated remotely in demanding environments.
- Audible response – with alarm set thresholds for enhanced radiation safety.

Intrinsically Safe Radiation Dose Rate Monitor (T202) Tracerco™

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

The monitor is suitable for all kinds of markets like:

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

TRACERCO DOSE RATE MONITOR BENEFITS

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

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

Need advice or do you have a question?

Contact PEO!

NORM Monitor-IS – Tracerco

Overview:

The Tracerco™ NORM Monitor-IS is a groundbreaking, ATEX-approved radiation monitoring device with dual probe capabilities. Using either a Geiger Muller (GM) detector or a scintillator probe, it enables users to monitor naturally occurring radioactive material (NORM) in all conditions for the first time.

It is lightweight and easy to use, yet also robust and reliable. It comes complete with a practical and secure carrying holster for ease of use.

The Tracerco™ NORM Monitor-IS is available with different combinations of handset and probes depending on your requirements.

Benefits of the Scintillation Probe:

- Robust and suitable for use in challenging conditions
- Enables radiation surveys of external walls for internal NORM deposits
- 360° detection capability for comprehensive radiation monitoring
- µR/h option available for USA

Benefits of the GM Probe:

- Detects alpha and beta radiation
- High sensitivity to lead-210 NORM
- Provides Bq/cm² output for typical NORM isotopes
- Measurement modes: CPS, µSv/h (Scintillator), CPS, Bq/cm² (GM)
- All modes have background subtraction option CPM

Additional Key Features:

- One-touch integrate function for detecting very low radiation levels with increased accuracy.
- Live background subtraction and multiple measurement modes, including counts per second (CPS), counts per minute (CPM), dose rate, and surface activity.
- Easy recalibration – recalibration can be performed without the handset (spare probes can be supplied to eliminate downtime).
- Adjustable alarm thresholds for enhanced radiation safety.
- Easy to clean and decontaminate – Scintillator: IP67, GM: IP34, Handset: IP65.
- Large, easy-to-read LCD screen with bar graph and backlight for improved usability in low-light environments.

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Partner Polimaster

Polimaster is a global leader in radiation detection and monitoring solutions, offering a comprehensive suite of instruments designed to detect, identify, and measure ionizing radiation across various environments. Their product range includes handheld monitors, personal electronic dosimeters, portable isotope identifiers, portal monitors, and mobile detection systems, all engineered to meet the rigorous demands of security, emergency response, and industrial applications.

Product offering

PM1401K-3M Multipurpose Hand-Held Radiation Monitor/Identifier

PM1401K-3P Multipurpose Hand-Held Radiation Monitor/Identifier

PoliPack® G-S Backpack Radiation Detector

PoliPack® GN Backpack Radiation Detector

PoliPack® G Backpack Radiation Detector

PoliPack® GN-S Backpack Radiation Detector

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PM1401K-3M Multipurpose Hand-Held Radiation Monitor/Identifier

PM1401K-3M model is a gamma-only radiation monitor without a neutron detector which is designed for quick and reliable measurement of gamma dose rate, detection of alpha, beta, and gamma sources, measurement of alpha and beta radiation flux density, acquisition of gamma spectra, identification of radioisotopes, and measurement of food/soil contamination with 137Cs

Features

- Storage of up to 10000 events and 1000 spectra
- Audible, visual and external vibration alarm
- Categorization of identified radionuclides
- Shock and water resistant IP65 case
- Adjustable radionuclide libraries
- USB communication with PC
- Built-in GPS module

Applications

- Customs and border control
- HAZMAT and CBRNe teams
- Emergency services
- Police and security
- Industrial facilities
- First responders

PM1401K-3P Multipurpose Hand-Held Radiation Monitor/Identifier

Gamma-neutron model suitable for various radiation control tasks.

The **PM1401K-3 series** of radiation monitors compromises a wide range of all-in-one devices for radiation detection, dose rate, contamination measurements, spectrometry, and radionuclide identification.

The **PM1401K-3P model** is the **gamma-neutron model** suitable for various radiation control tasks, including measurement of ambient dose equivalent rate, detection of alpha, beta, gamma, and neutron sources, measurement of alpha and beta radiation flux density, acquisition of gamma spectra, identification of radioisotopes, and measurement of food/soil contamination with ^{137}Cs.

Features

- Storage of up to 10000 events and 1000 spectra
- Audible, visual, and external vibration alarm
- Categorization of identified radionuclides
- Shock and water-resistant IP65 case
- Adjustable radionuclide libraries
- USB communication with PC
- Built-in GPS module

Operation principle

The PM1401K-3P continuously measures ambient dose equivalent rate $\dot{H}^*(10)$ of photon radiation in the wide energy range, detects alpha, beta, gamma, and neutron radiation, measures alpha and beta radiation flux density, operates as a gamma radiation spectrometer and radioisotope identifier, and measures food/soil contamination with ^{137}Cs radionuclide.

PoliPack® G-S Backpack Radiation Detector

Spectroscopic Gamma-only Backpack Radiation Detector.

The **PoliPack® G-S** is a **gamma-only** Backpack-Based Radiation Detection System (BRD) equipped with spectroscopic gamma detectors for identifying radionuclides. It is carried in a compact backpack and controlled remotely via the wired control unit or a smartphone with the free Polismart® iOS and Android App.

The **PoliPack® BRDs** are rugged, lightweight, and fast-deploying devices that provide prompt and reliable detection, location, and identification of multiple and masked isotopes. The device is ideal for undercover radiation surveys in crowded areas, addressing the problems of orphaned and maliciously introduced sources and ensuring security before and during mass events. Radionuclides libraries are uploaded in the BRD and can be customized by users.

PoliPack® GN Backpack Radiation Detector

Gamma-Neutron Backpack Radiation Detector.

The **PoliPack® GN** is a **gamma-neutron** Backpack-Based Radiation Detection System (BRD) equipped with a highly sensitive portable radiation monitor carried in a compact backpack and controlled remotely via the wired control unit or a smartphone with the free Polismart® iOS and Android App.

The **PoliPack® BRDs** are rugged, lightweight, and fast deployable devices that provide prompt and reliable detection, location, and identification of multiple and masked isotopes. The device is ideal for undercover radiation surveys in crowded areas, addressing the problems of orphaned and maliciously introduced sources and ensuring security before and during mass events.

PoliPack® G Backpack Radiation Detector

Gamma-only Backpack Radiation Detector.

The **PoliPack® G** is a **gamma-only** Backpack-Based Radiation Detection System (BRD) equipped with a highly sensitive portable radiation monitor carried in a compact backpack and controlled remotely via the wired control unit or a smartphone with the free Polismart® iOS and Android App.

The **PoliPack® BRDs** are rugged, lightweight, and fast-deploying devices that provide prompt and reliable detection, location, and identification of multiple and masked isotopes. The device is ideal for undercover radiation surveys in crowded areas, addressing the problems of orphaned and maliciously introduced sources and ensuring security before and during mass events.

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PoliPack® GN-S Backpack Radiation Detector

Spectroscopic Gamma-Neutron Backpack Radiation Detector.

The **PoliPack® GN-S** is a **gamma-neutron** Backpack-Based Radiation Detection System (BRD) equipped with **spectroscopic** gamma detectors for identifying radionuclides. It is carried in a compact backpack and controlled remotely via the wired control unit or a smartphone with the free Polismart® iOS and Android App.

The **PoliPack® BRDs** are rugged, lightweight, and fast deployable devices that provide prompt and reliable detection, location, and identification of multiple and masked isotopes. The device is ideal for undercover radiation surveys in crowded areas, addressing the problems of orphaned and maliciously introduced sources and ensuring security before and during mass events. Radionuclides libraries are uploaded in the BRD and can be customized by users.

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Partner Bertin Instruments

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

Product offering

MINITRACE CSDF – Bertin Instruments

MiniTRACE S5 – Saphymo

MiniTRACE γ

SaphyRAD S

SaphyRAD C

SaphyRAD E Multiprobe – Bertin Instruments

AlphaE – Bertin Instruments

SaphyRAD MS Dom-420 – Bertin Instruments

MINITRACE CSDF – Bertin Instruments

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

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

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

Datasheet

Radiation type
• Alpha, beta and gamma

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

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

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

Gamma sensitivity
• 4.3 cps/µSv/h

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

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

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

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

Integration time
• Automatic, with count up mode adjustable

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

Battery autonomy
• Up to 2,000 h

Built-in sensors
• IR-interface for software communication

Benefits

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

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

Designed for harsh environments

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

Technologies

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

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

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

Accessories

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

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

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

MiniTRACE S5 – Saphymo

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

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

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

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

BENEFITS OF THE MINITRACE S5

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

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

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

Read this!

MiniTRACE γ

Light & sturdy, the MiniTRACE γ survey meter measures personal exposure, along with X & Gamma radiations, to improve workers' safety in hazardous environments.
The MiniTRACE γ is available in 2 versions – S10S & S100S – each with its own energy & measurement range.

In accordance with the ALARA principle (As Low As Reasonably Achievable), the MiniTRACE γ allows for the assessment of personal exposure hazard faced by workers in controlled zones of nuclear power plants, reprocessing facilities, treatment centers & hospitals, etc. to help them better adapt their daily work according to the risk.

Ergonomic & easy to use, it also meets the operational needs of public service's units, such as firefighters, first responders, HAZardous MATerial teams, early warning & rapid response cells, radiation protection specialists (PCR), etc.
Fitted with fast response time (≈1 second), the MiniTRACE γ survey meter measures instantaneously the ambient dose equivalent rate H*(10) or the gamma radiation exposure levels, with a high level of autonomy (approximately 2,000 hours).
The MiniTRACE γ is also equipped with a built-in memory able to save up to 650 measured values of instant & accumulated radiation dose.
Both MiniTRACE γ S10S & S100S are available in radio version (S10R & S100R), allowing for survey meters to be integrated into a ShortLINK/SkyLINK communication network, with a maximum reach of 20 kilometers.

SaphyRAD S

The SaphyRAD S is a multiprobe survey meter developed to cover the needs of the nuclear and security market. This rugged, sensitive, and functional survey meter includes a wide and bright LCD display monitors and measures dose and Gamma dose rates in harsh environments even by non-specialists. Equipped with a full range of external probes, this versatile survey meter can discriminate Alpha/Beta radiation, monitor surface contamination, with reliability and accuracy, it can also measure dose rate in hard-to-reach areas and be used to research radioactive sources. In addition, the SaphyRAD S has an integrated simulator that is perfectly suited for training purposes. By utilizing a simulation probe, the user can recreate an Alpha/Beta contamination, enabling training in authentic conditions without the need for radioactive sources.

Benefits

- Robust: designed for use in harsh environments
- Large, high-resolution colour display
- Integrated simulation mode for training
- Designed for use with CBRN personal protective clothing
- Integrated GPS
- Specific algorithm for fast and reactive detection
- Large dose rate range: from 0.05 µSv/h to 10 Sv/h
- Complete range of external probes for source tracking and measuring multiple contamination, specially designed for use by non-radiation specialists.

SaphyRAD C

The SaphyRAD C is a versatile multiprobe contamination meter used for monitoring Alpha and Beta contamination in harsh environments. It has been developed to meet all needs of contamination control for multiple markets such as the nuclear and NORM industries, medical structures & first responders, thanks to its integrated nuclide library.

It is equipped with a powerful algorithm to allow very fast and reliable detection of ionising radiation in a variety of civil applications. The SaphyRAD C has been designed ergonomically to be held with gloves on. Its large colour display makes the results perfectly easy to read. The SaphyRAD C possesses a wide range of contamination probe and it is compatible with all analogue probes on the market.

Ruggedized for harsh environment

The SaphyRAD C has a robust housing with 6 large buttons designed for use with gloves. This device is adapted to meet the needs of the Nuclear industry, but also of the NORM industry, first responders & medical structures.

Versatility

SaphyRAD C is designed for the detection & measurement of Alpha and/or Beta radiation sources with the use of external connected measuring probes. It has a wide dose rate range from 0.05 µGy/h to 10Gy/h.
It is also compatible with external analog probes of other systems.

Ease of use

SaphyRAD C is an ergonomic handheld device with a high image quality color screen. Some probes also include an embedded alarm & a distance control indicator.

Efficiency

SaphyRAD C works with a specific algorithm which was developed for a very fast and reactive detection of radiation sources.

SaphyRAD E Multiprobe – Bertin Instruments

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

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

SaphyRAD E advantages

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

SaphyRAD E

AlphaE – Bertin Instruments

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

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

Advantages AlphaE

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

Download the datasheet or contact our product specialist.

SaphyRAD MS Dom-420 – Bertin Instruments

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

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

SaphyRAD MS features

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

SaphyRAD MS
SaphyRAD MS probes

Contact our PEO product specialist.

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Partner SE International

S.E. International, Inc. is a trusted U.S.-based manufacturer of radiation detection instruments under the Radiation Alert® brand. Their product range includes area monitors, handheld survey meters, and personal electronic dosimeters—each designed to deliver accurate, real-time radiation monitoring across a wide range of applications.

Product offering

Radiation Alert Monitor 200

Radiation Alert MC1K

Radiation Alert Frisker

Radiation Alert Ranger

Radiation Alert Monitor 4EC

Radiation Alert® Ranger EXP

Radiation Alert Monitor 1000EC

Radiation Alert® GammaView

Radiation Alert Monitor 4

Radiation Alert Monitor 200

The Monitor 200, your go-to solution for precise and versatile radiation detection. This state-of -the-art device measures alpha, beta, gamma, and x-rays providing accurate readings displayed in your preferred unit of measurement. Choose from CPM, CPS, µSv/hr, mR/hr, or in accumulated counts.

Featuring a digital backlit display, the Monitor 200 ensures easy readability in any environment. The addition of a red count light and an audible beeper accompanying each count detected enhances your awareness during radiation monitoring. With an adjustable timer and customizable loud alert, this radiation detector is tailored to meet you specific needs, offering both accuracy and user-friendly functionality.

The Monitor 200 doesn’t just stop at on-the-spot readings- it’s equipped with internal memory and Included with your purchase is the Free Observer USB Software(compatible with Windows only), enabling you to effortlessly download and manage your data while setting up computer alarms for added convenience.

For an enhanced experience, the optional Bluetooth module opens up a world of possibilities. The Radiation Alert® Monitor 200 seamlessly integrates with the free Radiation Alert® Observer BLE app available for download from the Google App Store. This app empowers you to display real-time readings with descriptions, conduct timed counts, append GPS data, and send your saved survey files. What’s more, any alarms set on the instrument will be mirrored on you android device, ensuring you stay informed and in control.

Radiation Detection › Handheld Monitors

Radiation Alert MC1K

The MC1K is an ergonomic handheld survey meter using a built-in energy compensated GM detector. It detects gamma and x-rays up to 1000 mR/hr over 4 selectable ranges. The energy compensated Geiger counter affords the detector a more linear response to gammas and x-rays over the full range. A beep sounds and a count light flashes with each event detected.

Applications & Uses: Expanded Range up to 1000 mR/hr, Linear Response needs with Energy Compensation, Checking accelerator & x-ray shielding for leakage, Checking industrial gauges; such as moisture, density, or level gauges containing Cesium-137, Locating lost sources, Personal protection, General surveying

Radiation Alert Frisker

Tired of dealing with cumbersome cables? Need a free hand? Frustrated with carrying around bulky meters? Introducing The Radiation Alert® Frisker. This compact device detects alpha, beta, gamma, and X-ray radiation. It features multiple units of measure, customizable alarm levels, and a backlit display for easy reading.

The Frisker is a lightweight, single-handed radiation contamination instrument designed to meet the needs of today’s radiation professionals. Perfect for leak testing, surface monitoring, sample screening, and personnel screening, it integrates the latest electronics with a reliable Geiger-Mueller detector. S.E. International has crafted a durable, ergonomic Geiger counter that excels in various radiological applications.

Applications & Uses: Screening personnel and objects, such as packages, surfaces, and clothing, Surveying for NORM (Naturally Occurring Radioactive Material) contamination, Gross wipe counting, Contamination surveys of packages, equipment, people, etc., Regulatory inspections, Low energy radionuclide detection.

Radiation Alert Ranger

Introducing the Radiation Alert Ranger®, the pinnacle of nuclear radiation detection technology that seamlessly combines performance with unparalleled portability. Whether you're surveying facility or venturing into the field, the Radiation Alert Ranger® stands as a reliable companion, designed with industrial environments in mind while retaining all the features cherished in laboratory settings.

Compact and lightweight, the Radiation Alert Ranger® is a handheld digital survey meter that sets the bar for sensitivity across alpha, beta, gamma, and x-rays ensuring comprehensive coverage for your radiation detection needs. Equipped with built-in efficiencies for common isotopes, this model goes the extra mile by calculating activity in Becquerels (Bq) and Disintegrations Per Minute (DPM).

The Radiation Alert Ranger® boasts a user-friendly interface featuring a backlit digital display, a red count light, and a distinctive beeper that signals each count detected, enhancing your ability to respond promptly to radiation levels. Selectable alert levels, an adjustable timer, and an optional wipe test plate for swipes provide further flexibility. allowing you to tailor the device to you specific requirements.

- Free Observer USB Software
- Free Observer BLE Software
- For Use With The Optional Bluetooth Module

But the Radiation Alert Ranger® doesn't stop there. Included with your purchase is the Free Observer USB Software(compatible with Windows only), enabling you to effortlessly download and manage your data while setting up computer alarms for added convenience.

For an enhanced experience, the optional Bluetooth module opens up a world of possibilities. The Radiation Alert Ranger® seamlessly integrates with the free Radiation Alert® Observer BLE app available for download from the Google App Store. This app empowers you to display real-time readings with descriptions, conduct timed counts, append GPS data, and send your saved survey files. What's more, any alarms set on the instrument will be mirrored on you android device, ensuring you stay informed and in control.

Elevate your radiation detection capabilities with the Radiation Alert Ranger®- where cutting-edge technology

meets user-friendly design, providing peace of mind whether in the lab, facility, or in the field.

Applications & Uses: Surveying for NORM (Naturally Occurring Radioactive Material) contamination, Gross wipe counting, Contamination surveys of packages, equipment, people, etc., Regulatory inspections, Scrap Metal Screening, Low energy radionuclide detection

Radiation Detection › Handheld Monitors

Radiation Alert Monitor 4EC

The Monitor 4EC is an energy compensated, ergonomic radiation survey meter capable of detecting alpha, beta, gamma, and x-rays over 3 selectable ranges. A red count light flashes and a beep sounds with each event detected. The Monitor 4EC offers a linear response for gamma and x-rays (above 40 keV).

Applications & Uses: Checking accelerator & x-ray shielding for leakage, Checking industrial gauges, such as moisture, density, or level gauges containing Cesium-137, Locating sources, Personal protection, General surveying

Radiation Alert® Ranger EXP

The Radiation Alert Ranger® EXP, seamlessly combines performance with unparalleled portability. Whether you're surveying facility or venturing into the field, the Radiation Alert Ranger® EXP stands as a reliable companion, designed with industrial environments in mind while retaining all the features cherished in laboratory settings.

Compact and lightweight, the Radiation Alert Ranger® EXP is a handheld digital survey meter that sets the bar for sensitivity to NORM and low levels of alpha, beta, gamma, and x-rays ensuring comprehensive coverage for your radiation detection needs. Equipped with built-in efficiencies for common isotopes, this model goes the extra mile by calculating activity in Becquerels (Bq) and Disintegrations Per Minute (DPM).

The Radiation Alert Ranger® EXP has a user-friendly interface featuring a backlit digital display, a red count light, and a beeper that signals each count detected, enhancing your ability to respond promptly to radiation levels. Selectable alert levels, an adjustable timer further flexibility. allowing you to tailor the device to you specific requirements.

- Free Observer USB Software
- Free Observer BLE Software
- For Use With The Optional Bluetooth Module

But the Radiation Alert Ranger® EXP doesn't stop there. Included with your purchase is the Free Observer USB Software(compatible with Windows only), enabling you to effortlessly download and manage your data while setting up computer alarms for added convenience.

For an enhanced experience, the optional Bluetooth module opens up a world of possibilities. The Radiation Alert Ranger® EXP seamlessly integrates with the free Radiation Alert® Observer BLE app available for download from the Google App Store. This app empowers you to display real-time readings with descriptions, conduct timed counts, append GPS data, and send your saved survey files. What's more, any alarms set on the instrument will be mirrored on you android device, ensuring you stay informed and in control.

Applications & Uses: Surveying for NORM (Naturally Occurring Radioactive Material) contamination, Gross wipe counting, Contamination surveys of packages, equipment, people, etc.,

Regulatory inspections, Scrap Metal Screening, Low energy radionuclide detection

Radiation Alert Monitor 1000EC

The Monitor 1000EC is an energy compensated radiation detector that measures gamma, and x-rays. Perfect for most applications requiring an energy compensated detector. Users can choose from readings of CPM, CPS, µSv/hr, mR/hr, or in accumulated counts. It has a red count light, a beeper that sounds with each count detected, and includes an adjustable timer, and selectable alert.

- Free Observer USB Software
- Free Observer BLE Software For Use With The
- Optional Bluetooth Module

The Radiation Alert® Monitor 1000EC doesn't stop there. Included with your purchase is the Free Observer USB Software(compatible with Windows only), reads in Total Counts, CPM, µR/hr, mR/hr, CPS, µSv/hr, and has the ability to collect and log data, set alarms, set timed counts, set the calibration date and settings, and generate reports, enabling you to effortlessly download and manage your data while setting up computer alarms for added convenience.

For an enhanced experience, the optional Bluetooth module opens up a world of possibilities. The Radiation Alert® seamlessly integrates with the free Radiation Alert® Observer BLE app available for download from the Google App Store. This app empowers you to display real-time readings with descriptions, conduct timed counts, append GPS data, and send your saved survey files. What's more, any alarms set on the instrument will be mirrored on you android device, ensuring you stay informed and in control.

Free Radiation Alert® Observer BLE app from the Google App Store, where you can display the readings from your detector, label sample readings and descriptions, take timed counts, append GPS data and send your saved survey file. This radiation detector helps you to set alarms which will also activate if you sync it with your android device. .

This radiation detector device include Free Observer USB software (Windows® only) reads in Total Counts, CPM, µR/hr, mR/hr, CPS, µSv/hr, and has the ability to collect and log data, set alarms, set timed counts, set the calibration date and settings, and generate reports.

Applications & Uses: X-ray chamber inspection, Expanded Range up to 1000 mR/hr, Linear Response needs with Energy

Compensation, Checking accelerator & x-ray shielding for leakage, Checking industrial gauges, such as moisture, density, or level gauges containing Cesium-137, Locating lost sources, Personal protection, Linear response detection applications, General surveying

Radiation Alert® GammaView

The compact GammaView is light, easy to carry and operate with a 1×1 Nal scintillation detector that accurately measures gamma contamination and exposure. Perfect for use in the lab, facility, and in the field.

The GammaView boasts a user-friendly interface featuring a backlit digital display, a red count light, and a distinctive beeper that signals each count detected, enhancing your ability to respond promptly to radiation levels. Selectable alert levels, an adjustable timer, allowing you to tailor the device to you specific requirements.

The GammaView can also be used as a single-channel analyzer (SCA). This function allows a “window” to be set to focus on a specific energy region of the gamma spectrum, effectively reducing the background count.

Specific Applications Include: Compliance monitoring, environmental monitoring, remote monitoring, health physics, homeland defense.

Radiation Alert Monitor 4

The Radiation Alert® Monitor 4 is a compact, analog radiation detector designed for versatility and reliability. This general-purpose survey meter can detect alpha, beta, gamma, and X-ray radiation across three selectable ranges. With decades of proven performance in the industry, the Monitor 4 has become one of the leading analog radiation detectors available today. Its simple, ergonomic design features a red count light that flashes and an audible beep for each detected count. A quick flick of your thumb allows for an easy battery check and silent operation.

Applications & Uses: Checking industrial gauges, such as moisture, density, or level gauges containing Cesium-137, Locating Sources, Personal protection, General surveying

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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-20 Compact handheld Radiation Detector – Georadis

RT-21 Handheld Radiation Detector – Georadis

RT-22 Handheld Radiation Detector with GeoView Software – Georadis

RT-30 Mk II – Georadis

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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

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-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.

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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

D5 RIID

D3S ID

RayMon

D5 RIID

The D5 RIID provides a unique high performance and versatile radiation detection device in a wearable package for military, homeland security, and industrial personnel.

The D5 RIID is a small, light, 3.5% resolution, wearable Radioisotope Identification Device (RIID) with an expansive radioisotope library and an ultra low false alarm rate. It continuously scans and accurately identifies radiological threats in real time, even in mixed source environments.

The D5 RIID combines small form factor with powerful radiometric performance and enhanced sensitivity at a medium resolution of 3.5%. The D5 RIID has an area efficiency which is 62% higher when compared with conventional RIIDs.

D5 RIID Overview https://youtu.be/yi-uvoO5nFg

SCAN TO VIEW VIDEO

D5 RIID is the smallest, lightest with the ultimate detection performance. It has a 3.5% resolution, with an expansive radioisotope library and an ultra low false alarm rate. It continuously scans and accurately identifies radiological threats in real time, even in mixed source environments.

D3S ID

A wearable, concealable Gamma and Neutron detector which puts the power of a RIID into a package the size of a Personal Radiation Detector (PRD). D3S ID is the new standard in portable radiation detectors.

The D3S ID is a powerful, wearable, unobtrusive and hands-free device which is continuously scanning for Gamma and Neutron radiation threats.

Kromek's D3S meets the data security expectations of governments, intelligence services, and safety authorities. The D3S comes standard with a secure smartphone (Android control), which contains the exclusive and secured Kromek detector software. The D3S is already frequently used in the United States, for example on fire trucks and ambulances or as an area mapping system with 1,000 detectors during a 'scavenger hunt'. In Europe, the D3S has been deployed during state visits and NATO consultations in recent years, to detect early radioactive threats that may be present in cargo, vehicles, buildings, other objects, and in the environment.

Features:

- Identifies 37 isotopes (17 more than the current ANSI standard)
- Identifies faster than a RIID
- Budget-friendly compared to other products in the market
- Small size, wearable, fits on belt
- Networkable

RayMon

RayMon

A powerful and rugged handheld gamma detector for high-resolution radioactive isotope identification. The RayMon10 is one of the most powerful and rugged handheld radiation monitors in the world. It can be used to detect, measure, and accurately identify gamma-ray emitting radionuclides, providing high-resolution isotope identification using the latest CZT solid-state detector technology. It is an all in one solution to your gamma radionuclide identification needs

It can output a variety of reports including date/time, user handheld ID, photo and audio note, GPS positioning, radiation spectra, and isotope identification.

Variations in normal operating conditions can often affect the performance of radio-isotope identification, the RayMon10’s advanced one cubic centimeter CZT coplanar grid detector provides more stable performance than scintillation-type detectors

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Partner Radiation Solutions Inc.

Radiation Solutions Inc. (RSI) is a Canadian-based company specializing in advanced radiation detection and monitoring systems, with a focus on portal monitors for diverse applications. Their technologies are designed to ensure safety and compliance in industries such as steel, scrap, recycling, and border security.

Product offering

RS-230 BGO Handheld Spectrometer – Radiation Solutions

RS-125 Handheld Spectrometer – Radiation Solutions

RS-125 Handheld Spectrometer – Radiation Solutions

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

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