PORTAL MONITORS

peo DETECTION

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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

Poligate Light G1 RPM

PoliGate™ Vehicle G4 RPM

PoliGate™ Pedestrian G1 RPM

PoliGate™ Pedestrian GN2 RPM

Poligate Light G2 RPM

Poligate Light G4 RPM

Poligate Pedestrian GN1 RPM

Poligate Deployable RPM

Poligate Pedestrian G2 RPM

Poligate Vehicle G4N4 RPM

Poligate Vehicle G2 RPM

Poligate Light G1 RPM

Lightweight one-sided model equipped with one gamma detector.

The **PoliGate™ Light G1** is a one-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with one detector and is a **high-sensitive fixed system** designed for permanent installation and providing continuous radiation detection and monitoring of vehicles, people, or packages.

The **PoliGate™ Light series** is a simplified series of Polimaster RPMs that is available in a **more compact and lightweight design** and its detection blocks can be mounted on a frame or wall.

Features

- Lightweight design
- Control zone up to 1.5 m x 2 m (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP55
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

PoliGate™ Vehicle G4 RPM

Double-sided gamma model equipped with four gamma detectors.

The **PoliGate™ Vehicle G4** is a double-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with four 11L-gamma detectors and is a **high-sensitive fixed system** designed for permanent installation and providing continuous radiation detection and monitoring of moving objects.

The **PoliGate™ Vehicle series** is an essential tool for safeguarding against the potential threat of nuclear materials entering secure areas and can be used for screening **trains, trucks, vehicles, cargo containers, luggage, and people**.

Features

- IEC 62244:2019 compliance
- Control zone up to 6 x 4.5 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

PoliGate™ Pedestrian G1 RPM

One-sided gamma model equipped with one (11L) gamma detector.

The **PoliGate™ Pedestrian G1** is a one-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with one 11L-gamma detector and one neutron detector and is a **high-sensitive fixed system** designed for permanent installation and monitoring of people or packages for the presence of radioactive materials.

The **PoliGate™ Pedestrian series** is an essential component of any facility that requires strict security measures, including government buildings, research facilities, and nuclear power plants. The compact and ergonomic design of the RPM makes it a convenient solution for use in various applications for screening **people, luggage, and cargo**.

Features

- IEC 62244:2019 compliance
- Control zone up to 1.5 x 2 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

PoliGate™ Pedestrian GN2 RPM

Double-sided gamma-neutron model equipped with two gamma (6.6L each) and two neutron detectors.

The **PoliGate™ Pedestrian GN2** is a double-sided **gamma-neutron** Radiation Portal Monitor (RPM) equipped with two 6.6L-gamma and one neutron detector and is a **high-sensitive fixed system** designed for permanent installation and monitoring of people or packages for the presence of radioactive materials.

The **PoliGate™ Pedestrian series** is an essential component of any facility that requires strict security measures, including government buildings, research facilities, and nuclear power plants. The compact and ergonomic design of the RPM makes it a convenient solution for use in various applications for screening **people, luggage, and cargo**.

Features

- IEC 62244:2019 compliance
- Control zone up to 1.5 x 2 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Poligate Light G2 RPM

Lightweight double-sided model equipped with two gamma detectors.

The **PoliGate™ Light G2** is a double-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with two detectors and is a high-sensitive fixed system designed for permanent installation and providing continuous radiation detection and monitoring of vehicles, cargo containers, people, or packages.

The **PoliGate™ Light series** is a simplified series of Polimaster RPMs that is available in a **more compact and lightweight design** and its detection blocks can be mounted on a frame or wall.

Features

- Lightweight design
- Control zone up to 6 m x 2 m (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP55
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Poligate Light G4 RPM

Lightweight double-sided model equipped with four gamma detectors.

The **PoliGate™ Light G4** is a double-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with four detectors and is a high-sensitive fixed system designed for permanent installation and providing continuous radiation detection and monitoring of vehicles, cargo containers, people, or packages.

The **PoliGate™ Light series** is a simplified series of Polimaster RPMs that is available in a **more compact and lightweight design** and its detection blocks can be mounted on a frame or wall.

Features

- Lightweight design
- Control zone up to 6 m x 4.5 m (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP55
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Poligate Pedestrian GN1 RPM

One-sided gamma-neutron model equipped with one gamma (6.6L) and one neutron detector.

The **PoliGate™ Pedestrian GN1** is a one-sided **gamma-neutron** Radiation Portal Monitor (RPM) equipped with one 6.6L-gamma and one neutron detector and is a **high-sensitive fixed system** designed for permanent installation and monitoring of people or packages for the presence of radioactive materials.

The **PoliGate™ Pedestrian series** is an essential component of any facility that requires strict security measures, including government buildings, research facilities, and nuclear power plants. The compact and ergonomic design of the RPM makes it a convenient solution for use in various applications for screening **people, luggage, and cargo**.

Features

- IEC 62244:2019 compliance
- Control zone up to 1.5 x 2 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Poligate Deployable RPM

Gamma-only model transported in plastic protective cases and designed for fast deployment.

The **PoliGate™ Deployable** is a **gamma-only** Radiation Portal Monitor (RPM) highly sensitive **deployable radiation monitor** designed to detect radioactive and nuclear materials transported through a controlled area.

This fast deployable RPM is designed to provide high mobility and flexibility, allowing it to be used in various settings to **screen individuals, vehicles, or cargo at the scene of an incident or in temporary screening situations** such as at major public mass events.

Features

- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Wide gamma energy range from 30 keV to 3 MeV
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system
- Optional Ethernet / Wi-Fi connection

Poligate Pedestrian G2 RPM

Double-sided gamma model equipped with two (11L each) gamma detectors.

The **PoliGate™ Pedestrian G2** is a double-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with two 11L-gamma detectors and is a **high-sensitive fixed system** designed for permanent installation and monitoring of people or packages for the presence of radioactive materials.

The **PoliGate™ Pedestrian series** is an essential component of any facility that requires strict security measures, including government buildings, research facilities, and nuclear power plants. The compact and ergonomic design of the RPM makes it a convenient solution for use in various applications for screening **people, luggage, and cargo**.

Features

- IEC 62244:2019 compliance
- Control zone up to 1.5 x 2 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Poligate Vehicle G4N4 RPM

Double-sided gamma-neutron model equipped with four gamma and four neutron detectors.

The **PoliGate™ Vehicle G4N4** is a double-sided **gamma-neutron** Radiation Portal Monitor (RPM) equipped with four 11L-gamma and four neutron detectors and is a **high-sensitive fixed system** designed for permanent installation and providing continuous radiation detection and monitoring of moving objects.

The **PoliGate™ Vehicle series** is an essential tool for safeguarding against the potential threat of nuclear materials entering secure areas and can be used for screening **trains, trucks, vehicles, cargo containers, luggage, and people**.

Features

- IEC 62244:2019 compliance
- Control zone up to 6 x 4.5 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Poligate Vehicle G2 RPM

Double-sided gamma model equipped with two gamma detectors.

The **PoliGate™ Vehicle G2** is a double-sided **gamma-only** Radiation Portal Monitor (RPM) equipped with two 11L-gamma detectors and is a **high-sensitive fixed system** designed for permanent installation and providing continuous radiation detection and monitoring of moving objects.

The **PoliGate™ Vehicle series** is an essential tool for safeguarding against the potential threat of nuclear materials entering secure areas and can be used for screening**trucks, vehicles, cargo containers, luggage, and people**.

Features

- IEC 62244:2019 compliance
- Control zone up to 6 x 2 (W x H)
- Wide gamma energy range from 20 keV to 3 MeV
- No stop of an object is required for the inspection
- Lead shielding for natural background rejection
- Ingress protection IP65
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system

Partner Radiation Solutions Inc.

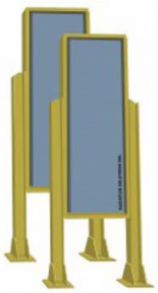
Radiation Solutions Inc. (RSI) is a Canadian-based company specializing in advanced radiation detection and monitoring systems, with a focus on portal monitors for diverse applications. Their technologies are designed to ensure safety and compliance in industries such as steel, scrap, recycling, and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

Product offering

RS-200 / 3000 Radiation Portal Monitoring Systems (Radiation Solutions)

RS-200 / 6000 Radiation Portal Monitoring Systems (Radiation Solutions)

RS-200 / 10000 Radiation Portal Monitoring Systems (Radiation Solutions)



RS-300 Radiation Portal Monitoring Systems (Radiation Solutions)

RS-400 Radiation Portal Monitoring Systems (Radiation Solutions)

RS-200 / 3000 Radiation Portal Monitoring Systems (Radiation Solutions)

The RS-200 systems (Radiation Solutions) are 2 PMT based fully digital systems specially designed for the difficult operating conditions of scrap and aluminum processing plants. These systems combine exceptional performance with minimum false and nuisance alarms through advanced digital design and spectral analysis.

The system is fully modular which makes it easily configurable to suit local logistics and permits fast, easy maintenance. The system operates independently and has direct Ethernet connectivity to plant networks. This connectivity allows for a fully integrated plant design with the ability for RSO overview on all installed systems.

RS-200 / 3000 Radiation Portal Monitoring Systems features:

- detector volume: 1512 in3 (23.5L) – maximum 16 detectors
- fully digital system design – no user adjustments
- 2 PMT technology for high sensitivity + high noise rejection 10/sec data sampling rate for optimum data analysis
- advanced 4096/128 channel spectrometer system for improved analysis
- spectral analysis permits rejection of the majority of false, rain and void alarms prevalent in most systems without reducing system sensitivity
- alarm classification to sort alarms into scrap and non-scrap categories for better control
- minimum nuisance alarms due to advanced signal screening and pattern recognition
- system sensitivity analysis and auto correction to minimize signal loss with NO radioactive sources required to test system performance
- 15″ color touch screen display for easy user interfacing
- local printer for alarm printout
- GPS connection for accurate location and timing
- direct connection to the plant network enabling RSO overview of all alarms on all systems
- real-time (1/sec) error reporting to RSI service via the Internet for fast support and system overview
- 48V operation to minimize voltage drops on long cables
- modular system design for easy on site service by local staff for “instant” service support
- 24/7 tech support for fast responsive support from technical people if required

RS-200 / 6000 Radiation Portal Monitoring Systems (Radiation Solutions)

The RS-200 systems are 2 PMT based fully digital systems specially designed for the difficult operating conditions of scrap and aluminum processing plants. These systems combine exceptional performance with minimum false and nuisance alarms through advanced digital design and spectral analysis.

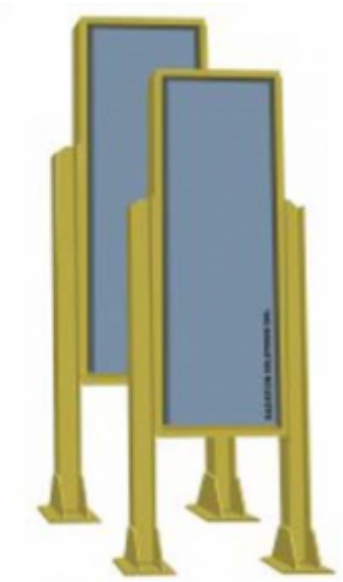
The system is fully modular which makes it easily configurable to suit local logistics and permits fast, easy maintenance. The system operates independently and has direct Ethernet connectivity to plant networks. This connectivity allows for a fully integrated plant design with the ability for RSO overview on all installed systems.

RS-200 / 6000 Radiation Portal Monitoring Systems features:

- detector volume: 3000 in3 (24L) – maximum 16 detectors
- fully digital system design – no user adjustments
- 2 PMT technology for high sensitivity + high noise rejection 10/sec data sampling rate for optimum data analysis
- advanced 4096/128 channel spectrometer system for improved analysis
- spectral analysis permits rejection of the majority of false, rain and void alarms prevalent in most systems without reducing system sensitivity
- alarm classification to sort alarms into scrap and non-scrap categories for better control
- minimum nuisance alarms due to advanced signal screening and pattern recognition
- system sensitivity analysis and auto correction to minimize signal loss with NO radioactive sources required to test system performance
- 15″ color touch screen display for easy user interfacing
- local printer for alarm printout
- GPS connection for accurate location and timing
- direct connection to the plant network enabling RSO overview of all alarms on all systems
- real-time (1/sec) error reporting to RSI service via the Internet for fast support and system overview
- 48V operation to minimize voltage drops on long cables
- modular system design for easy on site service by local staff for “instant” service support
- 24/7 tech support for fast responsive support from technical people if required

RS-200 / 10000 Radiation Portal Monitoring Systems (Radiation Solutions)

The RS-200 systems are 2 PMT based fully digital systems specially designed for the difficult operating conditions of scrap and aluminum processing plants. These systems combine exceptional performance with minimum false and nuisance alarms through advanced digital design and spectral analysis.



The system is fully modular which makes it easily configurable to suit local logistics and permits fast, easy maintenance. The system operates independently and has direct Ethernet connectivity to plant networks. This connectivity allows for a fully integrated plant design with the ability for RSO overview on all installed systems.

RS-200 / 10000 Radiation Portal Monitoring Systems features:

- detector volume: 5000 in3 (73L) – maximum 16 detectors
- fully digital system design – no user adjustments
- 2 PMT technology for high sensitivity + high noise rejection 10/sec data sampling rate for optimum data analysis
- advanced 4096/128 channel spectrometer system for improved analysis
- spectral analysis permits rejection of the majority of false, rain and void alarms prevalent in most systems without reducing system sensitivity
- alarm classification to sort alarms into scrap and non-scrap categories for better control
- minimum nuisance alarms due to advanced signal screening and pattern recognition
- system sensitivity analysis and auto correction to minimize signal loss with NO radioactive sources required to test system performance
- 15″ color touch screen display for easy user interfacing
- local printer for alarm printout
- GPS connection for accurate location and timing
- direct connection to the plant network enabling RSO overview of all alarms on all systems
- real-time (1/sec) error reporting to RSI service via the Internet for fast support and system overview
- 48V operation to minimize voltage drops on long cables
- modular system design for easy on site service by local staff for “instant” service support
- 24/7 tech support for fast responsive support from technical people if required

RS-300 Radiation Portal Monitoring Systems (Radiation Solutions)

The RS-300 system is a 3PMT based super-Coincidence fully digital system specially designed for the difficult operating conditions of many Steel and Scrap processing plants. This system uses medium volume detectors for good vehicle coverage. Also, in order to permit easy replacement and upgrades, the detectors are identical is size to most commonly used detectors in the field today.

The system is fully MODULAR to make it easily configurable to suit local logistics. The system operates independently but has direct Ethernet connectivity to Plant networks that permit a fully integrated Plant design with RSO overview on all installed systems. USB/Serial connectivity also enables system configuration to suit user needs for local displays, local or Network printers, scale computer integration etc.

RS-300 Radiation Portal Monitoring Systems features:

- 3000 cu ins (3024 cu ins actual) detector assemblies – max 16 detectors
- fully digital system design – no complicated user adjustments
- 3 PMT technology for high sensitivity + high noise rejection
- 10/sec data sampling rate for optimum data analysis
- advanced 128 channel spectrometer system
- full spectral NASVD analysis for high sensitivity with essentially zero false alarms
- essentially zero void and rain alarms due to advanced spectral analysis
- fully integrated networking for integration into the plant network
- quad optical sensors with 500Hz data sampling for accurate vehicle sensing
- 12″ or 15″ color touch screen display for easy user interfacing
- alarm classification if required to sort alarms into scrap and non-scrap
- 48V operation to minimize voltage drops on long cables
- auto connection to RSI service centre via the Internet for fast service support
- RSO software supplied for alarm analysis direct from RSO office
- real-time (1/sec) error reporting to RSI service via the Internet for fast support
- automatic system sensitivity monitoring with auto gain correction
- modular system design for easy servicing

Models available:

- RS-300/6000 = 2 detector system
- RS-300/9000 = 3 detector system
- RS-300/12000 = 4 detector system
- RS-300/15000 = 5 detector system
- RS-300/18000 = 6 detector system
- RS-300/21000 = 7 detector system
- RS-300/24000 = 8 detector system

RS-400 Radiation Portal Monitoring Systems (Radiation Solutions)

The RS-400 system is a 4PMT based super-Coincidence fully digital system specially designed for the difficult operating conditions of many Steel and Scrap processing plants. This system uses large volume detectors for optimum vehicle coverage. These long detectors suffer substantially from signal loss using conventional technology so RSI has developed a 4PMT technology utilizing PMTs at BOTH ends of the detector for greatly improved signal collection and spectral shape.

The system is fully MODULAR to make it easily configurable to suit local logistics. The system operates independently but has direct Ethernet connectivity to Plant networks that permit a fully integrated Plant design with RSO overview on all installed systems. USB/Serial connectivity also enables system configuration to suit user needs for local displays, local or Network printers, scale computer integration etc.

RS-400 Radiation Portal Monitoring Systems features:

- 5000 cu ins (4698 cu ins actual) detector assemblies – max 16 detectors
- fully digital system design – no complicated user adjustments
- 4 PMT technology for high sensitivity + high noise rejection on long detectors
- 10/sec data sampling rate for optimum data analysis
- advanced 128 channel spectrometer system
- full spectral NASVD analysis for high sensitivity with essentially zero false alarms
- essentially zero void and rain alarms due to advanced spectral analysis
- fully integrated networking for integration into the plant network
- quad optical sensors with 500Hz data sampling for accurate vehicle sensing
- 12″ or 15″ color touch screen display for easy user interfacing
- alarm classification if required to sort alarms into scrap and non-scrap
- 48V operation to minimize voltage drops on long cables
- auto connection to RSI service centre via the Internet for fast service support
- RSO software supplied for alarm analysis direct from RSO office
- real-time (1/sec) error reporting to RSI service via the Internet for fast support
- automatic system sensitivity monitoring with auto gain correction
- modular system design for easy servicing

Models available:

- RS-400/10000 = 2 detector system
- RS-400/15000 = 3 detector system
- RS-400/20000 = 4 detector system
- RS-400/25000 = 5 detector system
- RS-400/30000 = 6 detector system

- RS-400/35000 = 7 detector system
- RS-400/40000 = 8 detector system

Partner Ludlum Measurements Inc.

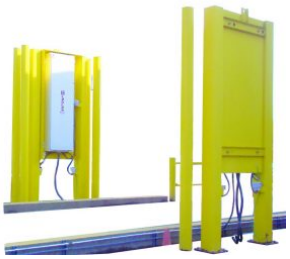
Ludlum Measurements, Inc. is a trusted global provider of radiation detection and monitoring instruments, offering rugged, accurate solutions for personnel safety, environmental protection, and security screening. Since 1962, their equipment has been used worldwide in applications ranging from nuclear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

Product offering

Model 4525 Series Radiation Portal Monitor

Model 4525-5000 Radiation Portal Monitor – Ludlum

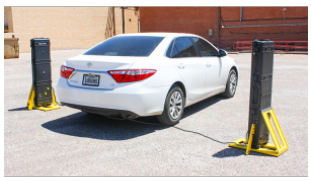
Model 4525-7000 Radiation Portal Monitor – Ludlum



Model 4530 Series Radiation Portal Monitor

Model 375P-3500 Conveyor Monitor – Ludlum

Model 52-8 Series Outdoor Portal Monitor



Model 4525 Series Radiation Portal Monitor

All Model 4525 systems with 57 L (3500 in^3) detectors now come with new 5th generation NEMA 4 enclosures.

The new enclosures are manufactured with a 14-gauge carbon steel body and a 2 mm (0.080 in.) aluminum door for increased sensitivity. Using stainless steel concealed hinges and quarter turn latches for easy accessibility, they are 70 mm (2.75 in.) slimmer than the previous generation, reducing waste and cost.

Ask about our NEMA 4X stainless steel upgrade option for increased corrosion protection!

The Model 4525 Series of Radiation Portal Monitors (RPMs) represents state-of-the-art technology for detecting low levels of radiation, such as orphan radiation sources and NORM (naturally occurring radioactive materials), at facilities including scrap yards, recycling companies, landfills, and foundries. These systems are composed of ruggedized, large plastic scintillation detectors optimally arranged to monitor items passing through. Each system can be configured with two to six large detectors, with individual detector volumes of 9.8 L (600 in^3), 41 L (2500 in^3), or 57 L (3500 in^3).

Real-time data acquisition and analysis is performed directly at each detector system and then reported to a central PC for logging, reporting, and alarm notification. Up to four detector systems (lanes) can be networked together via Ethernet or wirelessly to a central PC so that vehicles entering from either direction can be monitored in real time. An optional remote control/annunciator panel is available to support operator awareness, alarm acknowledgement, and if necessary, backup operation in the event the central PC is unavailable.

Data from all the system sensors are acquired and checked by powerful, field-tested, and time-proven algorithms designed to check each load vigorously in a multi-dimensional and multi-layered manner before declaring any load as clean. Any abnormality is immediately indicated via both local and remote alarms. An optional camera system can capture an image of the offending vehicle and store the image with the logged data for permanent record keeping. Alarms can also be configured to automatically notify shift supervisors directly by e-mail if desired.

The system is designed for ease of use and can be customized to accommodate a wide variety of site and application specific

criteria. Intuitive menus and controls combined with pre-defined automatic event handlers ensure each situation is handled properly and consistently.

Features

- Use to Monitor Trucks, Rail Cars, Personal Vehicles, etc.
- Large, Highly Sensitive, Industrial Duty Plastic Scintillation Detectors
- Reliable Operation with Very Low False Positives
- Flexible Configurations Accommodate Up to Four Lanes, Each with Two to Six Detectors
- Real-time Central Data Logging, Reporting, and Alarm Notification
- Bi-Directional Entry
- User-Friendly Operation
- Excellent Service and 24-Hour Tech Support
- 8-hour Battery Backup in Event of Power Loss
- Modular and Upgradeable
- Variety of Options to Customize the System to Meet Your Needs
- Made in USA

Model 4525-5000 Radiation Portal Monitor – Ludlum

The newly reconfigured Ludlum 4525-Generation IV Series of Radiation Portal Monitors (RPMs) represents state-of-the-art technology for detecting orphan radiation sources and NORM. The revised systems are upgradable, with a lower cost of ownership, and represent a lower initial purchase price.

The Gen IV series of RPM systems are ruggedized, large plastic scintillation systems that can be optimally arranged to monitor moving vehicles entering into the system. Each detector system can be configured with two to six large detectors.

Model 4525-5000 Radiation Portal Monitor features:

- real-time central data logging, alarm notification and reporting
- user-friendly operation
- large size, high sensitivity Industrial Duty Detectors
- upgradable and modular system
- 2 detector systems
- bi-directional entry
- logs vehicle images and camera captures (optional)
- EJ-200 plastic scintillator

Read more about the Model 4525-5000 Radiation Portal Monitor on the Ludlum website

Model 4525-7000 Radiation Portal Monitor – Ludlum

The Ludlum 4525-7000 Radiation Portal Monitor (RPM) represents state-of-the-art technology at detecting orphan radiation sources. Ludlum has sold over 800 of these types of systems throughout the world to scrap yards, recycling companies, landfills, and foundries. The Model 4525 series detectors are ruggedized large plastic scintillation systems that can be optimally arranged to monitor moving vehicles entering into the system.

Model 4525-7000 Radiation Portal Monitor features:

- real-time central data logging and reporting
- 76.2 m (250 ft) CAT 5e cable
- dual presence/speed sensors
- remote annunciator panel
- bi-directional entry
- camera image capturing and dB storage (optional)
- rail car mode
- two weather protected plastic scintillator detectors

Read more about the Model 4525-7000 Radiation Portal Monitor on the Ludlum website

Model 4530 Series Radiation Portal Monitor

The Model 4530 Series of Radiation Portal Monitors (RPMs) represents state-of-the-art technology for detecting low levels of radiation, such as orphan radiation sources and NORM (naturally occurring radioactive materials), at facilities including scrap yards, recycling companies, landfills, and foundries. These systems are composed of ruggedized, large plastic scintillation detectors optimally arranged to monitor items passing through. Each system can be configured with one to six large detectors, with individual detector volumes of 39.7 L (2117 in^3) or 57 L (3500 in^3).

Real-time data acquisition and analysis is performed directly at each detector system and then reported to the internal PC for logging, reporting, and alarm notification. Up to four detector systems (lanes) can be networked together via Ethernet or wirelessly to a central PC so that vehicles entering from either direction can be monitored in real time. An optional remote control/annunciator panel is available to support operator awareness, alarm acknowledgement, and if necessary, backup operation in the event the internal PC is unavailable.

Data from all the system sensors are acquired and checked by powerful, field-tested, and time-proven algorithms designed to check each load vigorously in a multi-dimensional and multi-layered manner before declaring any load as clean. Any abnormality is immediately indicated via both local and remote alarms. An optional camera system can capture an image of the offending vehicle and store the image with the logged data for permanent record keeping. Alarms can also be configured to automatically notify shift supervisors directly by e-mail if desired.

The system is designed for ease of use and can be customized to accommodate a wide variety of site and application specific criteria. Intuitive menus and controls combined with pre-defined automatic event handlers ensure each situation is handled properly and consistently.

All of the main components of these systems are manufactured in-house in the USA.

Features

- Made in USA
- Monitor Trucks, Rail Cars, Personal Vehicles, etc.
- Large, Highly Sensitive, Industrial Duty Plastic Scintillation Detectors

- Reliable Operation with Very Low False Positives
- Flexible Configurations Accommodate Up to Four Lanes, Each with One to Six Detectors
- Real-time Central Data Logging, Reporting, and Alarm Notification
- Bi-Directional Entry
- User-Friendly Operation
- Excellent Factory Service and 24-Hour Tech Support
- Modular and Upgradeable
- Variety of Options to Customize the System to Meet Your Needs

Retrofit Option

Ludlum Measurements offers the option to retrofit existing portal monitor systems with the electronics and software used in our Model 4530 Series Radiation Portal Monitors, including systems manufactured by our competitors. Retrofitting allows you to upgrade an aging system without having to purchase new detector housings and stands. Besides our own systems, Ludlum has experience retrofitting systems manufactured by Exploranium, RadComm, SAIC, Mirion/Canberra, and Thermo. Retrofits are customized to your needs, and can also include replacing the plastic scintillator detectors if necessary.

Model 375P-3500 Conveyor Monitor – Ludlum

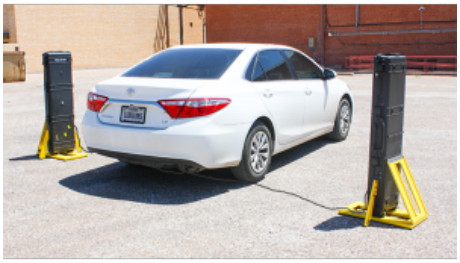
The Model 375P-3500 Conveyor Monitor (Ludlum) is a radiation detector system to inspect materials at contamination on a conveyor.

Model 375P-3500 Conveyor Monitor features:

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

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

Model 52-8 Series Outdoor Portal Monitor



The Model 52-8 is a weather-resistant portable scintillation portal monitor used for beta-gamma radiation monitoring of vehicles, as well as monitoring of personnel. Two plastic scintillation detectors, one per side, are housed in weatherproof, dust-tight, impact-resistant cases with wheels and tow handles. Microprocessor-based electronics are housed in a third case with matching characteristics, plus a mounted On/Off toggle switch and an optional red/green strobe light. The system provides high sensitivity for detecting very low levels of radiation coming from personnel or vehicles that move through the portal.

Ease of setup, adjustable audio signals, and user-friendly LCD display that provides detector counts, background levels, and system parameters, and the ability to operate via vehicle cigarette lighter plug or batteries, keep the Model 52-8 applicable to a variety of different situations. This instrument meets the Federal Emergency Management Agency (FEMA) standard for Emergency Management Response Portal Monitoring (FEMA-REP-21).

Features

- Portable Weatherproof Monitor
- Deploys in 5 Minutes
- Vehicle or Personnel Screen Compatibility
- Audible & Visual Alert Signals
- Two Sizes: 15.7 L (960 in^3) or 32.7 L (2000 in^3)

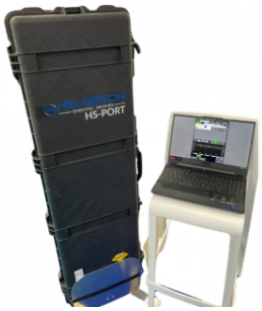
Partner Helgeson Scientific Services (HSS)

Helgeson Scientific Services (HSS) designs and manufactures advanced radiation monitoring systems focused on personnel safety, facility protection, and waste control. Their portfolio includes whole-body monitors, portal detection systems, and waste management solutions—each developed to support the safe handling of radiological materials in critical environments.

Product offering

HS-VGAM – Portal vehicle for scrap yards

HS-PORT – Portable Gamma Portal monitor for personnel and vehicles



HS-PoNal

HS-VGAM – Portal vehicle for scrap yards

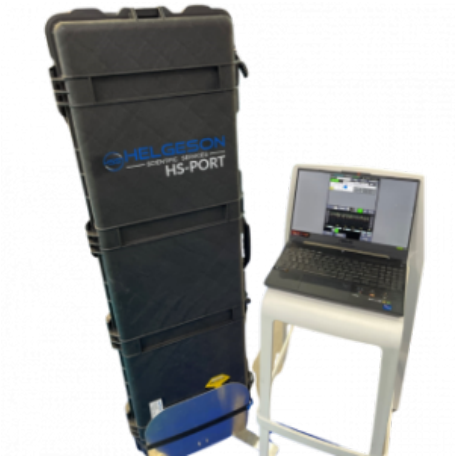
The HS-VGAM unit is an automated multitasking device, designed for the detection and measurement of gamma radiation on potentially exposed material, transported in vehicles.

It is particularly suitable fort he detection of radioactive sources in loads of raw materials, scrap and waste materials.

HS-PORT – Portable Gamma Portal monitor for personnel and vehicles

The HS-PORT has been designed for the detection and measurement of gamma radiation on potentially contaminated personnel, vehicles, etc.

It has a very fast deployment (one person in 2 minutes) and can be used in several applications like emergency response, monitoring of critical facilities, monitoring of events like concerts, sport events, etc. The system is operated remotely with a mobile phone or laptop without any additional cable connection.



HS-PoNaI

- Detectors:
  - NaI scintillation detector (can be customized: CsI, LaBr, CeBr, etc.)
  - Number of detectors: 1 detector (can be upgraded to 2 detectors)
  - Detector size: 4x4x16 inches (3x5x16” also available)
  - Energy range: 40 keV – 3 MeV
- Electronics:
  - Plug-in MCA with 2048 channels
  - Automatic gain stabilization
- Other features:
  - PC with Windows 11
  - Software for isotope identification and quantification
  - Spectrums displayed in real time, can be saved to be analyzed later
  - GPS
  - Hard disk memory up to 125 Gb
  - Remote connection with tablets, PCs, etc.
  - Dimensions: 730 x 160 x 170 mm approx.
  - Weight: 25 kg
  - Power: 220 – 115 V , 10 – 36 VDC
  - Battery bank to work autonomously
  - IP67

HS-PoNaI is a fantastic solution for a quick and efficient **in-situ isotope identification** in different applications. It is a strong and customizable equipment with a very simple and intuitive operation thanks to its automatic isotope identification and quantification software. It is equipped with a 4 liters NaI detector (4x4x16”), and all electronics are installed inside a PeliCase providing IP67 protection. Communication can be done remotely via tablet or another device.