

Model 4525 Series Generation IV Vehicle Monitors



Ludlum Measurements, Inc.

Features

- Large Size, High Sensitivity Industrial Duty Detectors
- Modular and Upgradable Systems
- Reliable Operation with Very Low False Positives
- Flexible Configurations Accommodate Up to Four Lanes, Each Arranged with 2 to 6 Detectors
- Bi-Directional Entry
- Real-time Central Data Logging, Reporting, and Alarm Notification
- Optional Camera Captures & Logs Vehicle Images
- User-Friendly Operation
- Bi-Directional Entry
- Superior Service and Support



Introduction

The Ludlum 4525-Generation IV Series of Vehicle Monitors represents state-of-the-art technology for detecting orphan radiation sources and NORM. Ludlum has sold hundreds of these types of systems throughout the world to scrap yards, recycling companies, landfills, and foundries.

The Gen IV series of systems are ruggedized, large plastic scintillation systems that can be optimally arranged to monitor moving vehicles entering into the system. Each monitoring system can be configured with two to six large detectors. 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 the central PC where vehicles entering from either direction can be monitored in real time. Each detector system additionally includes a remote control/annunciator panel 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, multi-layered manner before declaring any load as clean. Any abnormality is immediately alarmed and annunciated both locally and remotely. An optional camera system can capture the image of the offending vehicle. The image is included in the logged data for permanent record keeping. Alarms can also be configured to automatically directly notify shift supervisors by e-mail if desired.

Gate Monitoring Software Package

Ludlum's System Computer comes equipped with a gate monitoring software program accommodating up to four separate 4525 configured systems (lanes) via Ethernet or wirelessly. This monitoring software automatically collects and archives data from all available lanes, displays alarms, and generates reports. When equipped with optional cameras, the system can both automatically capture images of each vehicle passing through the system or only those causing an alarm, and include it in the database. See the website for more information about the included software.

Available Detector Configurations

Ludlum offers several different vehicle monitoring systems. The 4525-Series model number suffix reflects the total cubic inches of scintillation material used by the system.

A Remote Annunciator Panel (PN: 4511-207) is included with each system.

Model	Number of Detectors	Part Number
4525-5000	2	48-4018
4525-7500	3	48-4020
4525-10000	4	48-4019
4525-12500	5	48-4021
4525-15000	6	48-4022

Model 4525 Series-Included Accessories

Remote Annunciator Display: with audible and visible annunciation upon alarm, pushbutton to silence and reset alarm, and 30.5 m (100 ft) cable (PN: 4511-207)

LED Indicators for:

- power OK
- checking
- gamma alarm
- overspeed
- instrument fail
- using battery power



Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

Web: <http://www.ludlums.com> **Tel:** 800-622-0828 / 325-235-5494 / **Fax:** 325-235-4672 / **Email:** sales@ludlums.com

Note: specifications subject to change without notification. We are not responsible for errors or omissions.

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Specifications

Detectors

- EJ-200 plastic scintillator
- Detector volume: 41 L (2500 in³) each
- Dual 5.1 cm (2 in.) photomultiplier tube (PMT) design, delivers over 30% more efficiency than single PMT designs
- Hi gain, low-noise PMTs
- Thermally protected to avoid temperature shock, includes embedded temperature sensors to present operators the actual temperatures inside the detector enclosure
- 0.635 cm (0.25 in.) lead background reduction shielding on 5 sides
- NEMA 4X rated, stainless steel enclosure for environmental protection
- Low density, aluminum front door for enhanced low-energy measurement

SYSTEM COMPUTER SPECIFICATIONS

- USB Keyboard with Touchpad
- Inkjet Printer
- Monitor 43.2 cm (17 inch) Black
- Computer: Fanless Industrial
- UPS (Uninterruptable Power Supply)
- Intel® Atom Processor
- 2 GB RAM
- 80 GB Hard Drive Integrated SSD
- Microsoft Windows® 7 Professional OS
- Integrated Intel® Video
- Integrated Intel® PRO Network
- Integrated Realtek Sound
- Wall Mount Bracket
- Weight: 18.1 kg (40 lb)
- Dimensions: 97.3 x 55.9 x 47.5 cm (39.8 x 22 x 18.7 in.) (H x W x D)



Options: Various options are available for Model 4525-Series systems, including enclosures, remote displays, alarm annunciators, signal output, and networking options. Visit our website to view the current list of available options.

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