LUDLUM

Model 4525 Series

Radiation portal monitor for vehicles

Radiation portal monitor for trucks, rail cars and personal vehicles that detects low levels of radiation such as orphan sources and naturally occurring radioactive material at scrap yards, recycling companies, landfills and foundries. Each lane is built with two to six large plastic scintillation detectors, and up to four lanes can be networked to one central computer.



Detectors

Two to six plastic scintillation detectors with two photomultiplier tubes each [1]

Detector volume

.8 L, 41 L or 57 L per detector [1]

Lead shielding

.4 mm lead on five sides of the detector [1]

Specifications

Detectors	Two to six plastic scintillation detectors with two photomultiplier tubes each	[1]
Detector volume	9.8 L, 41 L or 57 L per detector	[1]
Lead shielding	6.4 mm lead on five sides of the detector	[1]
Lanes	Up to four lanes to one central PC, over Ethernet or wirelessly	[1]
Alarm	Radiation, overspeed and detector fail	[1]
Battery backup	8-hour battery backup in the event of power loss	[1]
Temperature range	-40 to 65 °C	[1]
Power supply	120–240 Vac, 2 A	[1]

Models

Model	Part number	Number of detectors	Total detector volume
Model 4525-2400	48-3908 [1]	4 detectors of 9.8 L each [1]	39 L [1]
Model 4525-5000	48-4018 [1]	2 detectors of 41 L each [1]	82 L [1]
Model 4525-7500	48-4020 [1]	3 detectors of 41 L each [1]	123 L [1]
Model 4525-10000	48-4019 [1]	4 detectors of 41 L each [1]	164 L [1]
Model 4525-12500	48-4021 [1]	5 detectors of 41 L each [1]	205 L [1]
Model 4525-15000	48-4022 [1]	6 detectors of 41 L each [1]	246 L [1]
Model 4525-7000	48-3605 [1]	2 detectors of 57 L each [1]	115 L [1]
Model 4525-10500	48-3606 [1]	3 detectors of 57 L each [1]	172 L [1]
Model 4525-14000	48-3607 [1]	4 detectors of 57 L each [1]	229 L [1]
Model 4525-17500	48-3608 [1]	5 detectors of 57 L each [1]	287 L [1]
Model 4525-21000	48-3609 [1]	6 detectors of 57 L each [1]	344 L [1]

Sources

[1] **Model 4525 Series Radiation Portal Monitors**
Ludlum Measurements · product-page · Specifications – Base System; Introduction; Features · checked 2026-11-17
https://ludlumgmbh.com/en-us/products/vehicle-monitors/product/model-4525-series

Every value is taken from the manufacturer's own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer's published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.