LUDLUM

Ludlum 3014 with Model 42-41L

ortable neutron meter

Ludlum 3014 with Model 42-41L – portable neutron meter from Ludlum Measurements. Enclosure rating and conditions: IP53.



Measurement range
Neutron: 1 µSv/h to 10 mSv/h (0.1 mrem/hr to 1 rem/hr); gamma: 1 µSv/h to 50 mSv/h (.1 mR/hr to 5 R/hr) [1]

Enclosure rating and conditions
IP53 [1]

Weight as specified
With Model 42-41L: 3.5 kg; without Model 42-41L: 1.4 kg [1]

Specifications

DETECTOR

Internal detector	Energy-compensated GM detector; sensitivity (^{137}Cs): 100 cpm per µSv/h (1000 cpm per mR/hr)	[1]

PERFORMANCE

Linearity	±10 %	[1]

MEASURING RANGE

Measurement range	Neutron: 1 µSv/h to 10 mSv/h (0.1 mrem/hr to 1 rem/hr); gamma: 1 µSv/h to 50 mSv/h (0.1 mR/hr to 5 R/hr)	[1]
Response time	User-selectable from 1 to 60 seconds, auto SLOW, auto FAST, fixed SLOW (22 s), fixed FAST (4 s)	[1]
Neutron sensitivity	35 cpm per µSv/h (350 cpm per mrem/h) for ^{241}AmBe; external Model 42-41L PRESCILA detector	[1]

ELECTRONICS & SIGNAL

Detector bias	Neutron: typically 500 to 700 Vdc; gamma: 550 Vdc	[1]

POWER & BATTERY

Power supply	Four "AA" batteries	[1]
Battery life and conditions	Approximately 175 hours of operation	[1]

MECHANICAL

Weight as specified	With Model 42-41L: 3.5 kg; without Model 42-41L: 1.4 kg	[1]
Overall dimensions (H × W × L)	31.1 × 12.5 × 33.2 cm	[1]

ENVIRONMENT & RATINGS

Operating temperature	-20 to 50 °C	[1]
Enclosure rating and conditions	IP53	[1]

Sources

[1] **odel 3014 with Model 42-41L – Neutron Dose Survey Meter**
Ludlum Measurements · product-page · Specifications tab, 'Internal Detector'; Specifications tab, 'Measurement Range'; Specifications tab, 'High Voltage' · checked 2026-10-16
https://ludlums.com/products/all-products/product/model-3014-with-model-42-41l

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.