LUDLUM

Ludlum 3004i/1

Portable neutron meter

Ludlum 3004i/1 – portable neutron meter from Ludlum Measurements. Detector: ^{3}He proportional detector. Measurement range: 0-100 mSv/h (0-10,000 mrem/hr).



Detector	Measurement range	Weight as specified
^{3}He proportional detector [1]	**0-100 mSv/h (0-10,000 mrem/hr)** [1]	**8.3 kg, with batteries** [1]

Specifications

DETECTOR

Detector	^{3}He proportional detector	[1]
Internal detector	CsI scintillator, 18 x 18 mm	[1]

PERFORMANCE

Linearity	±10 %	[1]

MEASURING RANGE

Measurement range	0-100 mSv/h (0-10,000 mrem/hr)	[1]
Sensitivity and reference	Typically 10 cpm per µSv/h (100 cpm per mrem/hr) [bare AmBe neutrons]	[1]
Response time	User-selectable from 1 to 60 seconds, auto SLOW, auto FAST, fixed SLOW (22 s), fixed FAST (4 s)	[1]
Internal detector range	Background to 500 µSv/h (50 mR/hr)	[1]
Dose response condition	Not energy compensated; nonlinear energy response can over/underreport dose	[1]

ELECTRONICS & SIGNAL

Detector bias	Adjustable from 300 to 2400 Vdc	[1]

POWER & BATTERY

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

MECHANICAL

Dimensions (H × W × L)	41.1 x 23.1 x 25.1 cm	[1]
Weight as specified	8.3 kg, with batteries	[1]

ENVIRONMENT & RATINGS

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

ORDERING & ACCESSORIES

Part number	48-4442-1	[1]

Sources

[1] **Model 3004 Series – Neutron Dose Survey Meter with Optional Internal Gamma Detector**
Ludlum Measurements · product-page · Specifications tab, 'Detector'; Specifications tab, 'Measurement Range'; Specifications tab, 'Sensitivity' · checked 2026-10-16
https://ludlums.com/products/all-products/product/model-3004-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.