LUDLUM

Ludlum 3007Bi/1

Portable neutron meter

Ludlum 3007Bi/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 m rem/hr)** [1]	**.5 kg, with batteries** [1]

Specifications

DETECTOR

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

PERFORMANCE

Linearity	±10 %	[1]

MEASURING RANGE

Measurement range	0 - 100 mSv/h (0 - 10,000 mrem/hr)	[1]
Response time	User-selectable from 1 to 60 seconds, auto SLOW, auto FAST, fixed SLOW (2 2 s), or fixed FAST (4 s)	[1]
Internal gamma range	Background–500 µSv/h	[1]
Neutron sensitivity (bare ^{241}AmBe)	Typically 4.5 cpm per µSv/h (45 cpm per mrem/hr)	[2]
Dose response condition	Not energy compensated; 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	[1]

MECHANICAL

Dimensions (H × W × L)	37.1 x 19.5 x 24.4 cm	[1]
Weight as specified	5.5 kg, with batteries	[1]

ENVIRONMENT & RATINGS

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

Sources

[1] **Model 3007 Series – Neutron Dose Survey Meter With Optional Internal Gamma Detector**
Ludlum Measurements · product-page · Specifications tab, 'Detector'; Specifications tab, 'Measurement Range'; Specifications tab, 'High Voltage' · checked 2026-10-16
https://ludlums.com/products/all-products/product/model-3007-series

[2] **Model 3007i and 3007Bi Series (instruction manual)**
Ludlum Measurements · manual · p. 33 (PDF p. 41), Chapter 3 'Specifications' · checked 2026-10-16
https://ludlums.com/images/product_manuals/M3007i_&_M3007Bi.pdf

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.