LUDLUM

Model 702i radioisotopidentifierare

Handheld isotope identifier

A portable RIID system that detects and identifies multiple nuclides with quantified results.



Detector type	Energy range	Spectrum channels
NaI, 5.1 × 3.8 cm (2 × 1.5 in) [1]	**18 keV–3 MeV** [1]	**Standalone: 256/512 QCC; with Quantum: also 256/512/1024 linear** [2]

Specifications

DETECTOR		
Detector type	NaI, 5.1 × 3.8 cm (2 × 1.5 in)	[1]
PERFORMANCE		
Energy resolution	7%	[1]
MEASURING RANGE		
Energy range	18 keV–3 MeV	[1]
Gamma sensitivity (^{137}Cs)	775 cpm per µR/hr	[1]
ELECTRONICS & SIGNAL		
Spectrum channels	Standalone: 256/512 QCC; with Quantum: also 256/512/1024 linear	[2]
SOFTWARE & DATA		
Identification and analysis	Multiple nuclides; time-slice analysis	[2]
Nuclide library	Selectable trigger lists for different applications, including standard ANSI isotopes, medical, industrial or SNM	[1]
CONNECTIVITY & INTERFACE		
Communication	Ethernet; CompactFlash	[1]
Display	8.9 cm (3.5 in) transflective colour LCD, 320 × 240	[1]
POWER & BATTERY		
Batteries	8 rechargeable AA NiMH, 2450 mAh	[1]
Battery life, generally	6–8 h with recommended batteries	[2]
MECHANICAL		

Dimensions with handle (H × W × D)	25.1 × 11.4 × 22.1 cm	[1]
Weight	2.4 kg	[1]

ENVIRONMENT & RATINGS

perating temperature	−20 to +50 °C	[1]
IP rating	IP56	[1]
Humidity	<95%	[1]

ORDERING & ACCESSORIES

Part number	48-3800	[1]

GENERAL

Spectrum format	ANSI N42.42	[1]
Measurement functions	Nuclide identification, spectrum analysis, dose rate calculation (rem/h or Sv/h), total dose and audible search tool	[1]
Calibration	Automatic (temperature) stabilisation with a low-level ^{40}K source; energy and dose-rate calibration done at the factory but available to expert users	[1]

Sources

[1] **Model 702i Isotope Identifier with Internal Detector**
Ludlum Measurements · datasheet · p. 2, Specifications; p. 1, Additional Features; p. 2, Specifications (I/O); p. 1, Introduction · checked 2026-10-16
https://ludlums.com/images/data_sheets/M702i.pdf

[2] **Ludlum Models 702i and 711i Isotope Identifiers – Technical Manual (September 2021)**
Ludlum Measurements · manual · Section 1, p. 1-1 (About Your Model 702i/711i Unit); Section 4, p. 4-1 (Spectrum Conversion); Section 3, p. 3-2 (Batteries) · checked 2026-10-16
https://ludlums.com/images/product_manuals/M702i_&_M711i.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.