LUDLUM

Ludlum Model 334A

Air monitoring with alpha spectra

Ludlum Model 334A — Alpha CAM for workplaces and emergency response.



Detector type	Active area	Alpha spectrum
Ion-implanted silicon [1]	**450 mm²** [1]	**256 channels** [1]

Specifications

DETECTOR

Detector type	Ion-implanted silicon	[1]
Active area	450 mm²	[1]

PERFORMANCE

Typical detection efficiency	28 % for ^{239}Pu	[1]

ELECTRONICS & SIGNAL

ADC channels	1024; binned to 256 channels in the alpha spectrum	[1]
Alpha spectrum	256 channels	[1]

SOFTWARE & DATA

Analysis modes	Acute and Chronic; factory-configurable radon mode	[1]

CONNECTIVITY & INTERFACE

Data storage	CSV in internal memory or on SD card	[1]

MECHANICAL

Filter diameter	37 mm	[2]
Weight	3.8 kg	[1]

ENVIRONMENT & RATINGS

perating temperature	−17 to 50 °C	[1]

GENERAL

Measurement purpose	Alpha CAM for workplaces and emergency response	[1]
Pump flow without load	7.0 L/min	[2]

Sources

[1] Model 334A Alpha Air Monitor (data sheet)
Ludlum Measurements · datasheet · p. 1, Introduction; p. 1, Specifications (Sampling Head and Flow); p. 1, Specifications (Data Analysis) · checked 2026-10-16
https://ludlums.com/images/data_sheets/M334A.pdf

[2] Model 334A Alpha Air Monitor
Ludlum Measurements · product-page · Specifications tab (Sampling Head and Flow) · checked 2026-10-16
https://ludlums.com/products/all-products/product/model-334a

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.