LUDLUM

Model 334AB-G

Alpha/beta air monitor

A battery-powered air monitor for alpha and beta particulates in the workplace or during emergency response.



Detector type	Spectrum channels	Weight
Ion-implanted silicon [1]	**256 in the alpha spectrum** [1]	**.8 kg** [1]

Specifications

DETECTOR

Detector type	Ion-implanted silicon	[1]
Active detector area	450 mm²	[1]
Depletion depth	300 µm	[1]

PERFORMANCE

Beta efficiency	7–18%, energy dependent	[2]

MEASURING RANGE

Energy range	Alpha: 1.0–9.0 MeV	[2]

ELECTRONICS & SIGNAL

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

POWER & BATTERY

Battery life	8 h with 8.4 V, 6.6 Ah Li-ion battery	[1]
Charge time	4 h for 8.4 V, 6.6 Ah Li-ion battery	[1]

MECHANICAL

Dimensions (W × H × D)	25 × 30 × 13 cm	[1]
Weight	3.8 kg	[1]

ENVIRONMENT & RATINGS

IP rating	IP53	[1]
perating temperature	−20 to +50 °C	[1]

GENERAL

Measurement functions	Airborne alpha/beta; dose, concentration and flow	[1]
Maximum internal pump flow	7.0 L/min	[1]
Filter	37 mm PTFE or glass fibre; collection diameter 25 mm	[1]

Sources

[1] **Model 334AB-G Alpha/Beta Particulate Monitor**
Ludlum Measurements · datasheet · p. 1, Features and Introduction; p. 2, Sampling Head and Flow; p. 2, Alpha Data Analysis · checked 2026-10-16
https://ludlums.com/images/data_sheets/M334AB-G.pdf

[2] **Model 334AB-G**
Ludlum Measurements · product-page · Product page – Specifications · checked 2026-10-16
https://ludlums.com/products/all-products/product/model-334ab-g

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.