LUDLUM

Model 43-37 Series

Gas proportional detector for floor surveying

Large-area gas proportional detectors for alpha and beta survey. They were originally designed for the Model 239-1 Floor Monitor but can be used with a number of counting instruments.



Detector type

Large-area gas proportional [1]

Specifications

Detector type	Large-area gas proportional	[1]
Counting gas	P-10 (10% methane, 90% argon); other counting gases are also acceptable	[1]
Window	Alpha only 0.8 mg/cm²; beta-gamma 3.4 mg/cm²; gamma 11.8 mg/cm²	[1]
Detection efficiency (4π)	Alpha-beta counting: Pu-239 17.5%, Tc-99 16%, Sr-90/Y-90 20%	[1]
Typical operating voltage	Alpha 1100–1400 V; beta-gamma 1700–1800 V	[1]

Models

Model	Part number	Window area	Typical background	Dimensions
43-37	47-1143 [1]	Active 584 cm², open 434 cm² [1]	Alpha less than 10 cpm; beta-gamma 800–1300 cpm in a 10 µR/hr field [1]	2.5 x 15.9 x 46.4 cm (H x W x L), not including fittings [1]
43-37-1	47-2243 [1]	Active 821 cm², open 609 cm² [1]	Alpha less than 10 cpm; beta-gamma 1000–1800 cpm in a 10 µR/hr field [1]	2.5 x 15.9 x 64.1 cm (H x W x L), not including fittings [1]

Model	Weight
43-37	1.9 kg [1]
43-37-1	2.4 kg [1]

Sources

[1] **Model 43-37 Series Alpha-Beta Gas Proportional Detector**
Ludlum Measurements · product-page · Specifications – Detector Type; Specifications – Recommended Counting Gas; Specifications – Window · checked 2026-11-17
https://ludlums.com/products/all-products/product/model-43-37-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.