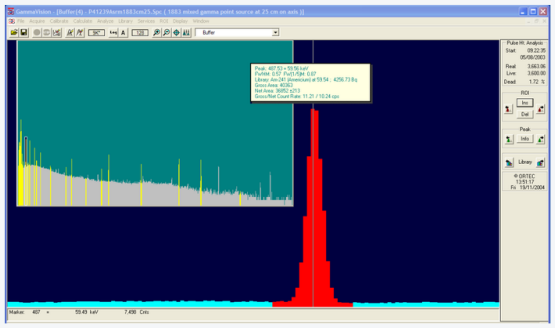
ORTEC

ACTINIDE-85 lungdetektor

HPGe gamma detector

High-resolution HPGe detector for lung and whole-body measurement of actinides and other radionuclides.



Energy range
Photon energies above 3 keV [-2]

Active front area
Over 54 cm² [1]

Energy resolution at 122 keV
≤700 eV FWHM (warranted), at optimal shaping time with an ORTEC DSPEC-50A; consult factory for performance with ICS cooling [2]

Specifications

DETECTOR		
Detector type	HPGe, based on PROFILE S8530	[1]
Crystal thickness	30 mm (minimum)	[2]
Active front area	Over 54 cm²	[1]
PERFORMANCE		
Energy resolution at 5.9 keV	≤500 eV FWHM (warranted), at optimal shaping time with an ORTEC DSPEC-50A; consult factory for performance with ICS cooling	[2]
Energy resolution at 122 keV	≤700 eV FWHM (warranted), at optimal shaping time with an ORTEC DSPEC-50A; consult factory for performance with ICS cooling	[2]
Energy resolution at 1.33 MeV	≤1.9 keV FWHM at 1,332 keV (warranted), at optimal shaping time with an ORTEC DSPEC-50A; consult factory for performance with ICS cooling	[2]
MEASURING RANGE		
Energy range	Photon energies above 3 keV	[2]
COOLING		
Cooling	LN_2 or optional ICS	[1]
MECHANICAL		
Crystal diameter	85 mm (nominal)	[2]
Endcap	Ultra-low-background carbon fibre	[1]
ORDERING & ACCESSORIES		
Bias control	SMART-1 (-SMP), optional	[1]

Sources

[1] **Actinide-85 High Purity Germanium (HPGe) Lung Monitor Detector**
ORTEC (AMETEK) · product-page · Product page intro; More Information; Mechanical Cooling Options · checked 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/radiation-detectors/high-pu...

[2] **Actinide-85 HPGe Lung Monitor Detector**
ORTEC (AMETEK) · datasheet · p. 1, feature list; p. 2, Specifications; p. 1 feature list; p. 2 Specifications and note 2 · checked 2026-10-16
https://web.archive.org/web/20251016025551/https://www.ortec-online.com/-/media/ametekortec/brochures/a/acti...

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.