ORTEC

Shallow Hole Probe

HPGe gamma detector

HPGe probe for gamma spectrometry in shallow boreholes when surveying waste sites, landfills and former nuclear facilities.



Detector type	Weight	LN_2 holding time
Configured with GEM, GMX, GL , PROFILE or Safeguards HPGe [1]	**Approximately 12 lb** [1]	**Approximately 16 hours with 70 mm endcap** [1]

Specifications

DETECTOR

Detector type	Configured with GEM, GMX, GLP, PROFILE or Safeguards HPGe	[1]

COOLING

LN_2 holding time	Approximately 16 hours with 70 mm endcap	[1]
Cooling	Liquid nitrogen	[1]

MECHANICAL

Maximum outer diameter	2.95 inches with 70 mm endcap	[1]
Weight	Approximately 12 lb	[1]

ENVIRONMENT & RATINGS

perating depth	100 ft	[1]
Humidity	Up to 100%, non-condensing	[1]

ORDERING & ACCESSORIES

Cryostat configurations	PopTop or Streamline	[1]

GENERAL

Cable rigging	Eye hook or cable attachment included	[1]

Models

Model	Cooling technology	Detector configuration	Cryostat type	Measurement geometry
CFG-PSHP4	Liquid nitrogen (LN_2) [2]	PopTop; detector capsule has its own vacuum [3]	Downlooking Shallow-Hole Probe cryostat [4]	Downlooking shallow-hole probe [4]

Model	Dewar capacity	Detector families
CFG-PSHP4	0.7 L; dewar included [4]	GEM, PROFILE, GMX, GLP, SGD planar, SGD GEM in compatible PopTop configuration [4]

Sources

[1] Shallow Hole Probe
RTEC (AMETEK) · product-page · More Information · checked 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/radiation-detectors/high-pu...

[2] Shallow Hole Probe
RTEC (AMETEK) · brochure · p. 1, body text · checked 2026-10-16
https://web.archive.org/web/20231020172752/https://www.ortec-online.com/-/media/ametekortec/brochures/s/shp....

[3] GEM Series Coaxial HPGe Detector – Product Configuration Guide
ORTEC (AMETEK) · datasheet · p. 1, 'PopTop or Streamline (non-PopTop) Configuration' · checked 2026-10-16
https://edge.sitecorecloud.io/ametekinc1236b-ametekb19a-productiondcfa-1d17/media/Project/Ametek/ortec-onlin...

[4] ORTEC Product Guide
ORTEC (AMETEK) · catalog · PDF p. 14 (printed p. 11), table 'GEM PopTop Cryostats and Dewars'; PDF pp. 14, 17, 20, 24, 26, 28 – PopTop cryostat tables for GEM, PROFILE, GMX, GLP, SGD Planar, SGD GEM · checked 2026-10-16
https://web.archive.org/web/20230405035438/https://www.ortec-online.com/-/media/ametekortec/product-guide/pr...

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.