ORTEC

ISO-CART-III LN2

Mobile in-situ assay systems with LN_2-cooled HPGe detectors

Complete in-situ gamma assay systems with the ISO-CART-III cart and an ORTEC LN_2-cooled HPGe detector, typically a large GEM (p-type) or GMX (n-type). The detector and collimator sit on a carrier that can be lifted off and carried where the cart cannot go. Supplied integrated, tested and factory calibrated with digiDART, ISOTOPIC software and laptop.



Detector type

ORTEC LN_2-cooled HPGe detectors, typically large-volume GEM (p-type) or GMX (n-type); relative efficiencies over 200% available [1]

Specifications

Detector type	ORTEC LN_2-cooled HPGe detectors, typically large-volume GEM (p-type) or GMX (n-type); relative efficiencies over 200% available	[1]
Models	With GEM25, GEM40, GEM60, GEM80, GEM100, GEM120, GMX25, GMX40, GMX60 or GMX80 (ISOCART-...-DDD; DDD = 3.0 for 3.0 L Gamma Gage or M7L for 7.0 L MOD)	[1]
Cooling	Liquid nitrogen; all-attitude 3.0 L Gamma Gage dewar or 7.0 L multi-orientation dewar (MOD)	[1]
Collimator	SHD-1: lead 1.6 cm thick, 20.3 cm long with 2 mm copper liner, 16.82 kg; SHD-3: lead 4.6 cm thick, 20.3 cm long, for high radiation areas, 68 kg	[1]
Electronics	digiDART: acquires data stand-alone in the field or performs a complete analysis with a notebook computer	[1]
Contents	ISO-CART-III cart, SHD-1 lead shield/collimator, ISO-DCC detector/collimator carrier, HPGe detector with SMART-1 and bayonet pressure fill adaptor, digiDART, ISOTOPIC software and laptop; integrated, tested and factory calibrated	[1]
Options	Laser range finder (accuracy 3 mm), platform scale, transport case and airworthy roll-in box for the complete system	[1]

Sources

[1] **ORTEC – ISO CART**
ORTEC (AMETEK) · datasheet · p. 4; p. 6; p. 5 · checked 2026-11-16
https://edge.sitecorecloud.io/ametekinc1236b-ametekb19a-productiondcfa-1d17/media/Project/Ametek/ortec-onlin...

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.