ELSE NUCLEAR

HERMES UW

Submersible gamma spectrometer and dose-rate meter for pools

System for underwater radiological characterisation, for example in fuel storage and segmentation pools. A $LaBr_3$ spectrometer and a wide-range GM tube sit in an IP68 stainless-steel probe lowered by hand or by crane, and the system gives accurate spectrometry even at very high count rates. The control unit is in a case on a stainless-steel frame with wheels.



Detector type
$LaBr_3(Ce^{3+})$ scintillator with SiPM for spectrometry; wide-range GM tube for dose rate [1]

Energy range
30 keV–2 MeV [1]

Weight
Support frame <40 kg; probe <5 kg [1]

Specifications

DETECTOR

Detector type	$LaBr_3(Ce^{3+})$ scintillator with SiPM for spectrometry; wide-range GM tube for dose rate	[1]

PERFORMANCE

Energy resolution at 662 keV	3.3% FWHM	[1]

MEASURING RANGE

Energy range	30 keV–2 MeV	[1]
Spectrometry range	100 nSv/h–20 mSv/h	[1]
Dose-rate range	0.1 µSv/h–1 Sv/h; up to 100 Sv/h on request	[1]

CONNECTIVITY & INTERFACE

Communication	RS-232, USB and Ethernet	[1]

POWER & BATTERY

Battery life	Up to 10 hours continuous operation (internal rechargeable battery)	[1]
Power supply	Rechargeable battery, >10 h	[1]

MECHANICAL

Dimensions	Support frame 68 × 50 × 115 cm (W × D × H); probe Ø8 × 35 cm	[1]
Weight	Support frame <40 kg; probe <5 kg	[1]

ENVIRONMENT & RATINGS

IP rating	IP68, decontaminable stainless-steel probe	[1]

perating temperature	0–40 °C	[1]

ORDERING & ACCESSORIES

Accessories	Radiation-tolerant camera for visual inspection, adjustable inspection pole, disposable protective sleeve against contaminated water and warranty extension (24 months) on request	[1]

GENERAL

Use	Underwater radiological surveys, hot-spot mapping in nuclear pools, decommissioning and segmentation in reactor basins, and radiological control of waste handling and storage	[1]

Sources

[1] **HERMES UW Submersible High-Range Gamma Spectrometer and Dose Rate Meter (datasheet)**
ELSE NUCLEAR · datasheet · p. 2, Technical Specifications; p. 2, Technical Specifications; Options; p. 2, Main Applications · checked 2026-10-16
https://www.elsenuclear.com/wp-content/uploads/2026/01/DAT_HERMES-UW_EN_1.00.pdf

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.