GeoSwath 4



AI-Enabled Wide Swath Bathymetry and Side Scan System



OVERVIEW

GeoSwath 4 is an industry-leading system for high-performance simultaneous swath bathymetry and side scan sonar mapping in shallow waters.

The GeoSwath 4 dual transducer head delivers data that exceeds the accuracy required by IHO hydrographic survey standards, with a 240° field of view from port to starboard waterline, enabling bottom coverage of up to 12 x water depth. There is a versatile range of transducer mounting options with frequencies of 125, 250, or 500 kHz available, each varying in depth and data resolution.

The included* GS4 software is a complete project-based solution for the acquisition, storage, and editing of sonar and ancillary data, as well as processing, advanced gridding capabilities, side scan mosaicing, and 3D visualisation.



GS4 v1.0.25 introduces a unique handsfree AI data processing system for live streaming of the seafloor and improved quality control.

KEY FEATURES

- Ultra high resolution wide swath bathymetry
- 240° field of view to water line
- Bottom coverage up to 12 x depth
- Powerful GS4 software included
- Available in 125, 250 and 500 kHz

APPLICATIONS

- Hydrographic Surveys
- Dredging surveys
- Environmental surveys
- Rapid environmental assessment
- Inland waterway/seabed mapping
- Infrastructure inspection



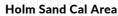
GeoSwath 4 Transducer	125 kHz	250 kHz	500 kHz
Max Water Depth Below Transducers	200 m	100 m	50 m
Max Swath Width	780 m	390 m	190 m
Max Coverage	Up to 12 x depth	Up to 12 x depth	Up to 12 x depth
Range Resolution	6 mm	3 mm	1.5 mm
Angular Resolution	0.04°	0.04°	0.04°
Two-Way Beam Width (Horizontal)	0.85°	0.75°	0.5°
Max Swath Update Rate	30 per second (simultaneous port and starboard)	30 per second (simultaneous port and starboard)	30 per second (simultaneous port and starboard)
Transducer Head Dimensions	550 mm (L) x 250 mm (W) x 476 mm (H)	468 mm (L) x 165 mm (W) x 411 mm (H)	362 mm (L) x 150 mm (W) x 361 mm (H)
Transducer Head Weight, including peripherals (approx)	35 kg	20 kg	14 kg

GeoSwath 4 Deck Unit

Physical	Depth: 495 mm including handles, 700 mm including transducer cables Width: 427 mm, 490.5 mm including 19" rack support Height: 137 mm with feet, 131 mm rack mount (3U) Weight: 11.5 kg
Power	100 VAC to 240 VAC, 50/60 Hz, 250 W; DC outlet 24 VDC for peripheral sensors max. 55 W
Environment	0 °C to 40 °C, -20 °C to 70 °C (storage) < 95 % RH non-condensing (operation), < 55 % RH non-condensing (storage)

Specifications subject to change without notice. E&OE







125 kHz, 250 kHz and 500 kHz transducers



^{*}GeoSwath 4 can also be interfaced to third-party software for acquisition and processing.