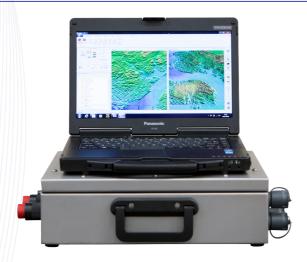
## GeoSwath 4R



AI-Enabled Ruggedised Wide Swath Bathymetry and Side Scan System



## **OVERVIEW**

GeoSwath 4R offers industry-leading simultaneous swath bathymetry and side scan sonar mapping for shallow waters and is ideal for use in challenging conditions and on small vessels of opportunity.

With data accuracies exceeding IHO hydrographic survey standards, GeoSwath 4R's transducer head provides a 240° field of view from port to starboard waterline and bottom coverage up to 12 x water depth. With flexible mounting options, the transducers are available in 125, 250, or 500 kHz frequencies, so any survey task can be optimised.

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



GS4 v1.0.25 introduces hands-free AI data processing system for streaming 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
- Available in 125, 250 and 500 kHz
- IP66-rated splash proof deck unit
- Ruggedsed laptop

## **APPLICATIONS**

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



GeoSwath 4R 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 4R Deck Unit			
Physical	Dimensions: 440 mm (D) with connectors x 342 mm (W) x 136 mm (H)   Weight: 12.5 kg		
Power	18-26 VDC, 60 W peak power		
Environment	0 °C to 40 °C, -20 °C to 70 °C (storage)   < 95 % RH non-condensing (operation), < 55 % RH non-condensing (storage)   IP66 rated ingress protection		
Interface	Laptop via ethernet		
Min. spec.	Panasonic Toughbook 55, 14", 8th gen. Intel Core i5, 8 GB DDR4-SDRAM, 1TB SSD, Windows 10 Pro		

Specifications subject to change without notice. E&OE



**Lowestoft Stanford Channel Sandwaves** 



125 kHz, 250 kHz and 500 kHz transducers

<sup>\*</sup>GeoSwath 4 can also be interfaced to third-party software for acquisition and processing.