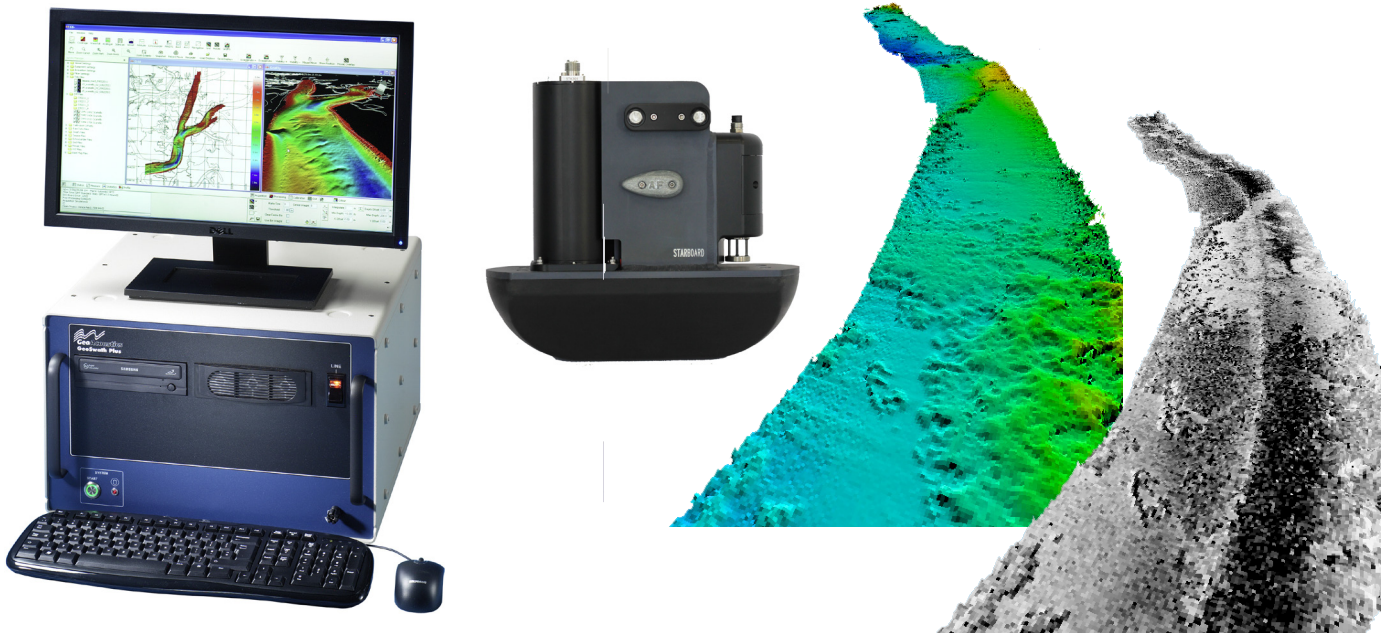


GEOSWATH PLUS



KONGSBERG



Jan 16

SHALLOW WATER MULTIBEAM AND SIDE SCAN

GeoSwath Plus offers very efficient simultaneous swath bathymetry and side scan seabed mapping with accuracies that have been shown to exceed the IHO Standards for Hydrographic Surveys. The applied phase measuring bathymetric sonar technology provides data coverage of up to 12 times the water depth, giving unsurpassed survey efficiency in shallow water environments.

System Components

The GeoSwath Plus turn-key solution comprises a dual transducer head with versatile mounting options as well as a deck unit containing the complete sonar electronics together with a high spec PC, running GS4 software. The software provides full acquisition, calibration and data processing capabilities for producing the final bathymetry map and side scan mosaic data products. All customary ancillary sensors can be directly interfaced.

Dual Transducer wet end

The rugged port and starboard transducers, available in three frequency options (125, 250, 500 kHz), can be attached to a supplied sonar head assembly for boat over-the side or bow-mount options, which also can accommodate a range of ancil-

lary sensors. Alternatively they can be deployed on bespoke boat hull mount, as well as bespoke ROV and AUV assemblies.

Deck Unit

The compact workstation contains the complete system electronics as well as a high spec PC. All peripheral sensors (position, motion, heading, transducer face sound velocity, sound velocity profiler and tide) are interfaced directly.

Software

GS4 replaced the GS+ software in 2015. The newly developed package provides a complete project based solution, including acquisition, storing and editing of sonar and ancillary data, grid-based patch test calibration, data processing with audit trail, advanced bathymetry data gridding and side scan mosaicing, data visualisation including 3D fly-through capability.

FEATURES

- Ultra high resolution swath bathymetry
- IHO SP-44, special order
- Co-registered geo-referenced side scan
- Frequency versions: 125, 250, 500 kHz
- Up to 12 times water depth coverage
- 240° view angle
- Dual transducer set-up with versatile mounting options
- Full software solution included: data acquisition, processing, presentation
- Interfaces to all customary peripheral sensors

OPTIONS

- AUV and ROV versions
- Cost effective frequency upgrades
- Range of transducer mounts including underwater housing for peripheral sensors
- GeoTexture Side Scan Sediment Classification software
- Range of cable options
- Special rates on third party software

TECHNICAL SPECIFICATIONS

GeoSwath Plus	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 depths		
Depth Resolution	6 mm	3 mm	1.5 mm
Two Way Beam Width (Horizontal)	0.85°	0.75°	0.5°
Transmit Pulse Length	128 µs to 896 µs	64 µs to 448 µs	32 µs to 224 µs
max Swath Update Rate	30 per second (range dependant)		
Transducer Type	Standard Dual Head	Compact Dual Head	Compact Dual Head
Transducer Head Dimensions	661 x 411 x 325 mm	360 x 352 x 150 mm	330 x 109 x 75 mm
Transducer Head Weight, appr. including peripherals	44 kg	20 kg	16.8 kg

Specifications subject to change without any further notice.

