

4600

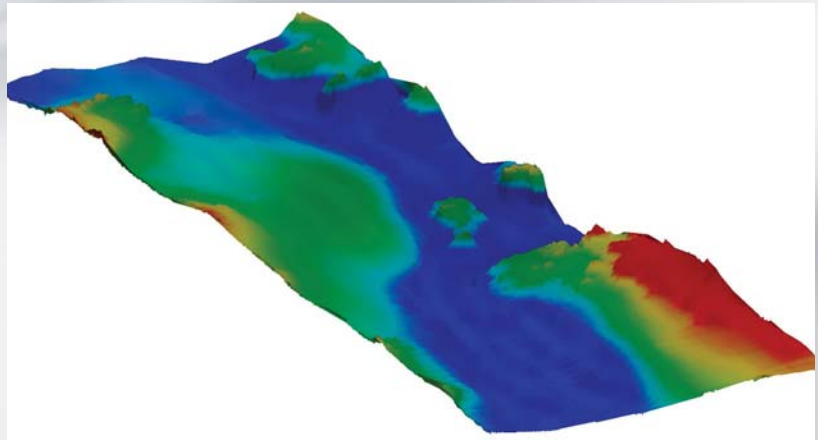
HIGH SPEED SWATH BATHYMETRY & SIDE SCAN SONAR

FEATURES

- Swath 12 times water depth
- Co-registered simultaneous side scan & bathymetric data
- Built-in bathymetry gap filler
- Multi-Pulse for high speed surveys
- Over the side mounting convertible to towed configuration
- Integrated sound velocity sensor
- Long arrays

APPLICATIONS

- Shallow Water Hydrographic Surveys
- Benthic Habitat Mapping
- Nautical Charting
- Military Rapid Environmental Assessments (REA)
- Route Surveys
- Dredging Operations
- Marine Debris Search
- Port & Harbor Security



EdgeTech's 4600 is a combined, fully integrated high speed swath bathymetry & side scan sonar system. The 4600 produces real-time high resolution 3D maps of the seafloor while providing co-registered simultaneous side scan & bathymetric data.

The 4600 utilizes EdgeTech's Multi-Pulse technology which places multiple, coded pulses into the water at the same time compared to just one pulse for conventional sonar systems. This means an area can be covered at twice the speed while still maintaining 100% bottom coverage, or one can get double the bathymetric data density along track.

The sonar electronics and arrays for the 4600 are mounted onto a streamlined tow body that is deployed over-the-side of the survey vessel via a pole. Alternatively, the sonar can be used as a towed system. Sonar data is transferred from the transceiver to the processing unit on board via an Ethernet network interface.

Default configuration for the 4600 includes an integrated sound velocity sensor and build-in bottom tracker. The system interfaces with standard GPS, MRU, SVP, CTD, Altimeters and Gyros. Simple to use acquisition software is provided by Hypack and Eiva.



For more information please visit EdgeTech.com

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KEY SPECIFICATIONS

SYSTEM SPECIFICATIONS

Frequency	230 kHz
Pulse Modulation	Full Spectrum® CHIRP frequency modulated pulse
Depression Angle	30 degrees
Deployment Method	Over-the-side, Hull mounted or Towed
Pulse Length	2-8 ms (CHIRP)
Pulse Bandwidth	12-24 kHz
Power	100 Watts, 48VDC
Dimensions	173 x 26 x 21 cm
Auxiliary Sensors	DGPS, SVP or CTD, Heading, Motion and Pressure

SWATH BATHYMETRY SPECIFICATIONS

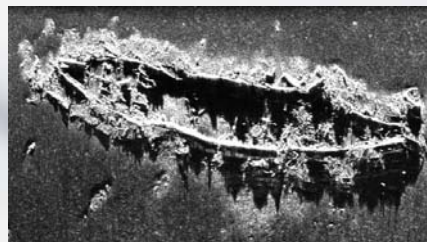
Maximum Swath for Bathymetry	10-12 times water depth
Range Resolution	6 cm
Vertical Resolution	5 cm
Ping Repetition Rate	25 m = 60 Hz, 50 m = 30 Hz, 100 m = 15 Hz
Bathymetric Data Output	Range/Angle/Amplitude/Quality Factor (compatible with most 3 rd party topside processors)

SIDE SCAN SONAR SPECIFICATIONS

Swath Range	500 m
Range Resolution	3 cm
Beam Width Along Track (2-way)	0.5°

TOPSIDE PROCESSOR

Operating System	Windows XP Pro or 7
Interface	100 baseT Ethernet, Serial RS-232
Display	Dual 21" LCD Monitors
Storage	1 TB min hard drive & RW DVD
Power Supply	110/220 VAC Auto sensing



230 KHZ SIDE SCAN SONAR IMAGE

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