

4600

SWATH BATHYMETRY & SIDE SCAN SONAR

FEATURES & BENEFITS

- Wide swath bathymetry, up to 12 times water depth
- Co-registered high resolution side scan imagery
- IHO SP-44, special order compliant
- Over 200° view angle, dual array configuration
- · No nadir gap & multipath suppression
- Better spatial resolution than multibeam echosounders
- · Complete turnkey system
- · Versatile mounting options

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, swath bathymetry and side scan sonar system. The 4600 produces real-time high resolution three dimensional (3D) maps of the seafloor while providing co-registered simultaneous side scan and bathymetric data.

The 4600 uses eight receive element transducers and one discrete transmit element. The high number of channels enables superior rejection of multi-path effects, reverberation and acoustic noise.

Utilizing EdgeTech's Full Spectrum® technology, the 4600 meets the IHO SP-44, NOAA and USACE specifications for feature detection. The Full Spectrum Technology® processing techniques also provide a denser data set in the nadir region compared to other interferometric systems. Near shore and shallow water hydrographic surveys are completed faster and safer utilizing the 4600 due to the wide swath, which is typically more than two times that of existing sonars that rely solely on beam forming techniques.

The sonar electronics and arrays for the 4600 are mounted onto a streamlined tow body that is deployed over the bow or over the side of the survey vessel via a pole. Sonar data is transferred from the transceiver to the processing unit on board via an Ethernet network interface. The system is available with two frequency opetions; either 230 kHz or 540 kHz.

The standard configuration for the 4600 includes an integrated sound velocity sensor and interfaces with standard GPS, MRU, SVP, CTD, Altimeters and Gyros. The 4600 interfaces to most 3rd party acquisition and processing software as well.

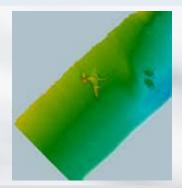
For more information please visit EdgeTech.com

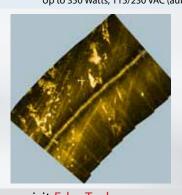


4600 SWATH BATHYMETRY & SIDE SCAN SONAR

KEY SPECIFICATIONS

SYSTEM			
Sonar Frequency (choice of one or the other)		230 kHz	540 kHz
Side Scan Sonar Swath Coverage		450 m	250 m
Bathymetric Swath Coverage		10-12 times altitude, 350 m swath	10-12 times altitude, 150 m swath
Side Scan Sonar Range Resolution	Ť	3 cm	2 cm
Bathymetric Range Resolution		6 cm	3 cm
Side Scan Sonar Horizontal Beamwidth		0.64 degrees	0.5 degrees
Bathymetric Vertical Resolution		5 cm	3 cm
Pulse Bandwidth		24 kHz	54 kHz
Max Depth Below Transducers		120 m	50m
Pulse Modulation		CW & CHIRP	
Array Elements		1 Transmit and 8 Receive per side	
Ping Repetition Rate		Both channels simultaneously, up to 50 Hz	
Pulse Length		15 μs (CW) to 1.1 ms (CHIRP)	
Port/Starboard Crosstalk		< 60 dB	
TOWFISH			
Construction		Aluminum	
Length		48 inches (120 cm)	
Width		10 inches (26 cm)	
Diameter		9.2 inches (23 cm)	
Weight		98 lbs. (44 kg)	
Power Requirements		100 Watts, 48 VDC	
TOPSIDE PROCESSOR			
Operating System		Windows 7	
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Interface		100 baser Etile	They send no 252
Display			CD Monitors
		Dual 21" L	





For more information please visit <a>EdgeTech.com