

2300

COMBINED SIDE SCAN SONAR, BATHYMETRY & SUB-BOTTOM PROFILING SYSTEM

FEATURES

- Fully integrated turnkey system
- Tri-frequency side scan sonar
- MPES Bathymetry option
- Enhanced sub-bottom profiling capabilities with multiple low frequency transducers and PVDF receiver
- Digital telemetry over single coaxial tow cable up to 6,000m
- Fiber optic cable supported for high bandwidth configurations
- Built-in heading, pitch and roll sensors

APPLICATIONS

- Archeological Surveys
- Geological/Geophysical Surveys
- Sediment Classification
- Cable and Pipeline Surveys
- Pre/Post Dredging Surveys
- Scour/Erosion Investigation







The new 2300 combines EdgeTech's highly successful line of side scan sonars, subbottom profilers and MPES bathymetry into one fully integrated system.

The new system builds on EdgeTech's proven sonar technology in a number of ways. The system is ideal for deep water combined sonar operations and provides enhancements to traditional systems. Utilizing EdgeTech's proven Full Spectrum® CHIRP technology to provide crisp, high resolution imagery, surveyors can choose to operate any two frequencies simultaneously from the tri-frequency system.

Sub-bottom profiler capabilities have been expanded on the new 2300 to include the ability to incorporate up to four low frequency transducers as part of EdgeTech's DW-106 (1-10kHz) deep penetration system. Coupled with that is the ability to utilize a large PVDF hydrophone array providing better sub-bottom receive sensitivity and directivity.

EdgeTech's MPES bathymetry is also available on the platform. The Multi Phase Echo Sounder (MPES) produces real-time, high resolution, three dimensional (3D) maps of the seafloor while providing co-registered simultaneous dual frequency side scan imagery.

Additional features include a remote head USBL beacon, optional Nexus Multiplexer, a rear magnetometer shackle mount, and adjustable trim panels.

For more information please visit EdgeTech.com

info@EdgeTech.com | USA 1.508.291.0057



2300

COMBINED SIDE SCAN SONAR, BATHYMETRY & SUB-BOTTOM PROFILING SYSTEM

KEY SPECIFICATIONS

SONAR SPECIFICATIONS		STANDARD				
Frequency		Choice of either 120/410/900 kHz or 230/550/900 kHz tri-frequency side scan sonar				
		* Note: Tri-frequency configurations operate any 2 frequencies simultaneously on command				
Operating Range (meters/side)		120 kHz: 500m, 230 kHz: 230m, 410 kHz: 150m, 550 kHz: 120m, 900 kHz: 75m				
Horizontal Beam Width:		120 kHz: 1.5°, 230 kHz: 0.5°, 410 kHz: 0.4°, 550 kHz: 0.26°, 900 kHz: 0.2°				
Resolution Along Track		120 kHz: 5 m @ 200 m				
		410 kHz: 0.6 m @ 100 m				
			550 kHz: 0.45 m @ 100 m 900 kHz: 18 cm @ 50 m			
Resolution Across Track		120 kHz: 8 cm, 230 kHz: 3 cm, 410 kHz: 2 cm, 550 kHz: 1.5 cm, 900 kHz: 1 cm				
Vertical Beam Width		50°				
Depression Angle		Tilted down 20°				
MPES BATHYMETRY						
Sonar Frequency	120 kHz	230 k	Hz	550 k	Hz	
Beamwidths	1.5° x 1°	1° x 0	.7°	1° x 0.5°		
Max Sounding Depth below towfish	450 m	225	m	120 m		
Max Swath Width	550 m	400	m 📱	200	m	
Sounding Patterns		Equidistant and Equiangular				
SUB-BOTTOM PROFILER	4 X DW	216	2 X DW 106		4 X DW 106	
Frequency Band	2-16 k	Hz	1-10 kHz		1-10 kHz	
Resolution	6 - 18 c	:m*	10 – 30 cm*		10 – 30 cm*	
Penetration in coarse sand	7 m	ı 📳	15 m		18 m	
Penetration in clay	95 m	n	150 m		180 m	
TOWFISH						
Length			203 cm (80″)			
Width			84 cm (33")			
Height		70 cm (27.5″)				
Weight in Air		Up to 385 kg - Depending on SBP array				
Maximum Water Depth		2000 meters standard (3000 meters optional)				







For more information please visit EdgeTech.com

info@EdgeTech.com | USA 1.508.291.0057