

ECHO 81

YOUR SUBSEA SOLUTIONS SPECIALIST



2050

COMBINED SIDE SCAN SONAR
& SUB-BOTTOM PROFILER

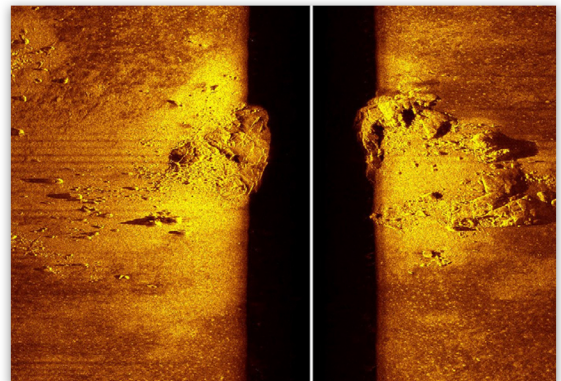
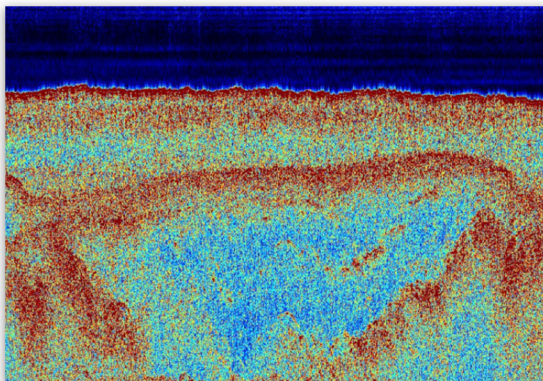
The EdgeTech 2050-DSS is the latest product to combine EdgeTech's highly successful line of side scan sonars and sub-bottom profilers into one fully integrated system. This is especially useful where high resolution sub-bottom profiler data, that requires the system to be towed near the seabed, is required.



The 2050-DSS is a tri-frequency side scan sonar system, where any two, operator selectable, frequencies can be operated simultaneously. The system can be provided with either a 120, 410 & 850 kHz towfish, or a 230, 540 & 850 kHz towfish. Both towfish options are equipped with a 2-16 kHz sub-bottom profiler, that utilizes a PVDF panel receive hydrophone. Use of an area based receive hydrophone panel provides improved beam patterns and therefore improved signal to noise ratio's, which in turn means cleaner data.

A standard System comes complete with a combined towfish, digital telemetry that runs over a single coaxial cable, a 19 inch rack mount topside interface, and EdgeTech's DISCOVER acquisition software. The 2000 Series System can be integrated with a number of auxiliary sensors such as magnetometer, depth, altitude and USBL responder. Additionally, an interface is fitted to the electronics so that the electronics and sensors can be mounted onto an ROV.

For requirements that call for combined side scan sonar and sub-bottom profiling incorporating lower frequency sub-bottom transducers and optional bathymetry EdgeTech offers the 2300 and 2300 with Bathymetry Combined systems.



KEY SPECIFICATIONS

| SIDE SCAN SONAR | | |
|-----------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------|
| Available Frequency (dual simultaneous CHIRP) | 120/410/850 kHz | 230/540/850 kHz |
| Operating Range | 120 kHz: 600 meters/side | 230 kHz: 350 meters/side |
| | 410 kHz: 200 meters/side | 540 kHz: 150 meters/side |
| | 850 kHz: 90 meters/side | 850 kHz: 90 meters/side |
| Beam Width (2-way) & Along Track Resolution | 120 kHz 0.70 deg or 1.20 m @ 100 m | 230 kHz: 0.44 deg or 0.80 m @ 100 m |
| | 410 Khz 0.28 deg or 0.50 m @ 100 m | 540 kHz: 0.26 deg 0.45 m @ 100 m |
| | 850 kHz 0.23 deg or 0.20 m @ 50 M | 850 kHz: 0.23 deg 0.20 m @ 50 m |
| Across Track Resolution | 120 kHz: 8 cm | 230 kHz: 3 cm |
| | 410 kHz: 2 cm | 540 kHz: 1.5 cm |
| | 850 kHz: 1 cm | 850 kHz: 1 cm |
| Vertical Beam Width | 50" | |
| | | |
| SUB-BOTTOM PROFILER | | |
| Frequency Band | 2-16 kHz | |
| Resolution | 6-10 cm | |
| Receiver | PVDF | |
| Penetration in coarse sand | 6m | |
| Penetration in clay | 80m | |
| TOWFISH | | |
| Length X Width X Height | 149 cm (58.7") X 78.7 cm (31") X 83.8 cm (33") | |
| Weight in Air | 151 kg (332 lbs.) | |
| Weight in saltwater | 71 kg (156 lbs.) | |
| Maximum Water Depth | 3,000 m | |
| | | |
| TOPSIDE PROCESSOR | | |
| Hardware | Standard 19" rack | |
| File Format | Native JSF or XTF for side scan, Native JSF, XTF, and/or SEG-Y for sub-bottom | |
| Power Input | 100-264 VAC, 50/60 Hz, auto-switching | |
| Tow Cable | | |
| | Double-armored coaxial, customer specified length | |

FEATURES

- Fully integrated turnkey system
- Tri-Frequency Side Scan Sonar & Sub-Bottom Profiler
- Digital telemetry over single coaxial tow cable
- Choice of side scan frequencies
- Built-in Pressure (Depth) Heading, Heave, Pitch and Roll sensors

APPLICATIONS

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



Visit our website for more info:
www.echo81.com



+1 706-522-3022 • info@echo81.com
481 S. Jackson Street, Hartwell, GA 30643

