Shark-S75T Deep-Water Triple-Frequency Side Scan Sonar

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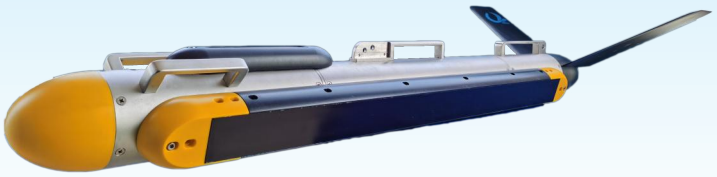


Ultra Deep Water Survey
Multi-Frequency Combination
Wide Survey Range
High-Resolution Imaging

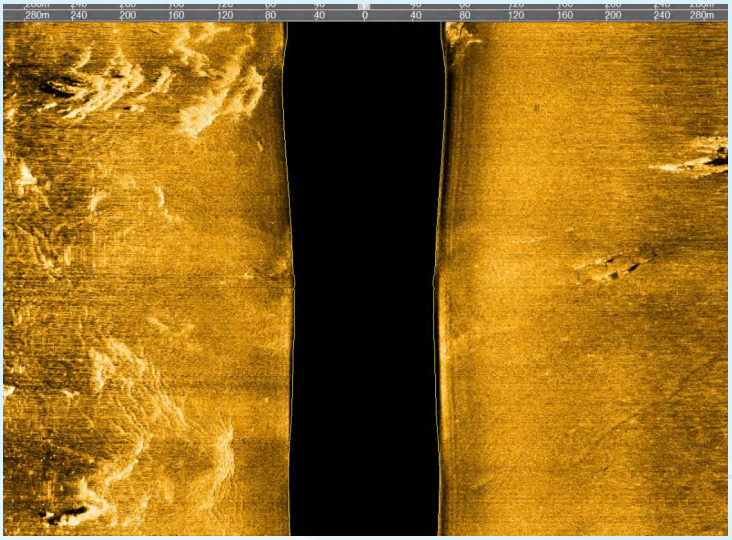
The Shark-S75T Tri-Frequency Side Scan Sonar is a versatile multi-frequency sonar designed for deep-water surveying. It operates at three frequencies: 75 kHz, 225 kHz, and 750 kHz, allowing for both low-frequency and high-frequency combinations. Equipped with standard Chirp signal processing technology, it enables wide swath coverage while ensuring ultra-high-resolution imaging.

The system consists of a high-pressure resistant stainless steel towfish, a high-strength armored coaxial cable, a waterproof deck unit, and proprietary OTech sonar software. The towfish is engineered for reliability and durability, with optional magnetometer interface and underwater positioning mounting structure. It supports multiple deployment methods, including towing, hull mounting, and side-mount installation. The underwater overload protection design provides effective impact protection, enhancing the towfish's safety during underwater operations.

The proprietary OTech software combines ease of use with powerful functionality, offering features such as real-time image mosaic stitching, sonar image waterfall display, survey line planning and navigation, track tracking and coverage display, data recording and playback, target management and export, and multi-window sensor information display. The software utilizes adaptive equalization processing technology to ensure consistent image quality across both near and far ranges. With minimal parameter settings and a user-friendly UI design, it is straightforward to operate. It supports output in the standard XTF format, compatible with third-party post-processing software. The software can be customized to meet specific requirements. The enhanced version provides real-time output of multiple raw data formats, enabling the development of AI-based automatic target recognition features.

Features

- Triple-frequency support for broader survey applications
- Built-in attitude sensor for real-time tracking of pitch, roll,
- Integrated single-beam echosounder for accurate bottom -tracking
- Supports real-time mosaicking, raw data output, and SDK development
- 316L stainless steel towfish rated for 2000 m depth, ideal for deep-water operations



Applications

- Military applications, mine countermeasure detection, and target scanning
- Maritime channel management, scanning of wrecks and sunken containers
- Marine geological and geophysical surveys
- Archaeological investigations, such as underwater ancient city and shipwreck searches
- Route surveys for cable and pipeline installation and maintenance
- Seabed topographic surveys for offshore wind farms and other renewable energy sites

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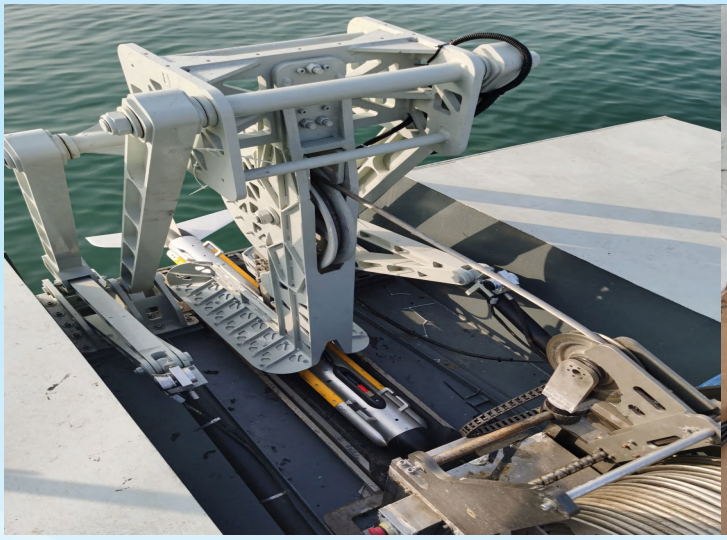
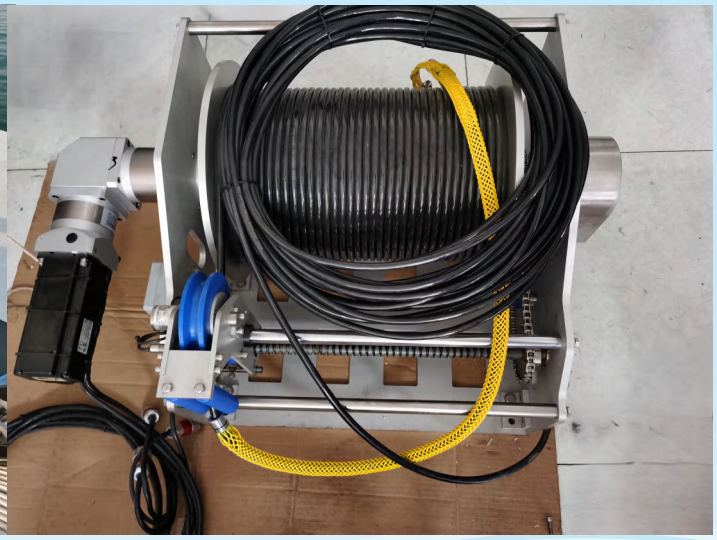
Sonar Specifications	Shark-S75T
Operating Frequency	75kHz / 225kHz; 225kHz / 750kHz
Pulse Type	LFM (Chirp) / CW
Maximum Range	600m @75kHz; 300m @225kHz; 90m @750kHz
Beamwidth	Horizontal: 1° @75kHz; 0.3° @225kHz; 0.2° @750kHz; Vertical: 50°
Resolution (h-range)	Along-track resolution: 0.18h @75kHz; 0.005h @225kHz; 0.003h @750kHz; Across-track resolution: 5cm @75kHz; 2.5cm @225kHz; 1.25cm @750kHz
Depression Angle	Tilted Down 10°, 15°, 20°, Default 20°
Maximum Depth Rating	2000m (Customizable up to 6000 meters)
Standard Towfish Sensors	SBES, attitude sensor (pitch, roll, heading), pressure sensor
Towfish Size / Weight (air)	1464mm(L)*105mm(Dia.) / 45kg (316 stainless steel)
Deck Unit Size / Weight	248mm(L)*192mm(W)*70mm(H) / 1.9kg
Power Consumption	220/110VAC, 60W
Software OTech	Real-time mosaicking; live online mapping; OTSS and XTF formats recording; SDK development support; continuous raw data output.
Tow Cable	100m armored coaxial cable (customizable); optional winch available





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