Shark-S150TE Embedded Triple-Frequency Side Scan Sonar

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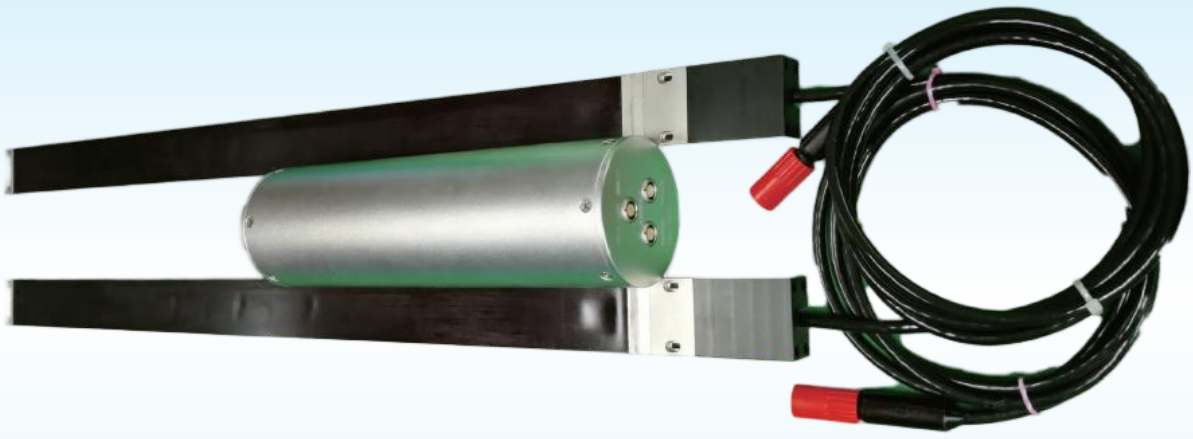


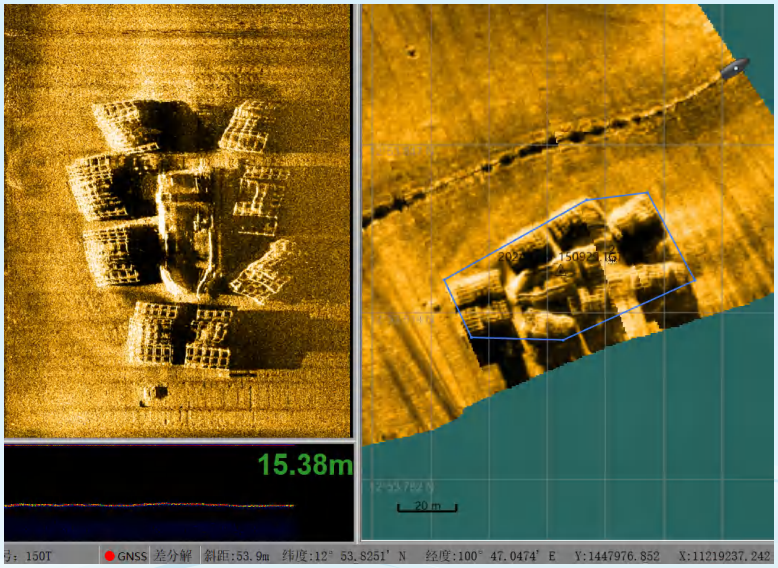
The Shark-S150T embedded tri-frequency side scan sonar is designed for both shallow and deep-water surveys. It is tailored for integration with unmanned surface vessels (USVs), remotely operated vehicles (ROVs), autonomous underwater vehicles (AUVs), unmanned underwater vehicles (UUVs), and other embedded platformsdelivering ultra-high-resolution imaging. The system supports flexible configurations of 150 kHz / 450 kHz and 450 kHz / 900 kHz.

The system includes two pressure-resistant transducer arrays, an electronic unit (sealed or unsealed), a communication and power cable, and proprietary OTech sonar software. It features a low-power design and operates on a wide DC input range of 18 – 36 V.

The proprietary OTech software includes features such as real-time image mosaicking, sonar image 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 sonar image adaptive equalization technology ensures consistent display quality for both near and far images. The system supports remote control of operations and parameter settings, and output in standard XTF format to enable processing in third-party software.

Features

- Triple-frequency capability adapts to a wide range of survey environments
- Command-based remote control of operations and parameter settings
- Real-time raw data logging and output for auto target recognition development
- OTech's multifunctional software offers free periodic upgrades and updates.
- Full-coverage real-time mosaicking and imaging with SDK support.



Applications

- Military applications
- Maritime channel management
- Marine geology and geophysical surveys
- Archaeological surveys
- Route surveys for cable and pipeline laying and maintenance
- Seabed mapping and surveys for offshore wind and other renewable energy projects

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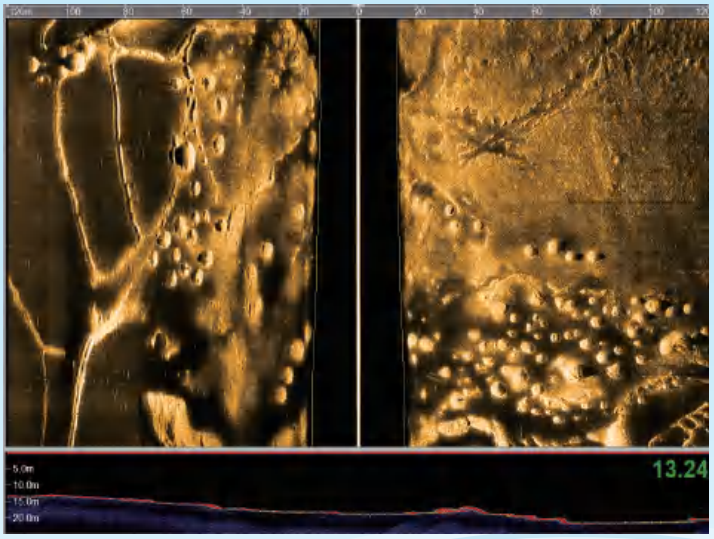
Sonar Specifications	Shark-S150T
Operating Frequency	150kHz / 450kHz; 450kHz / 900kHz
Pulse Type	LFM (Chirp) / CW
Maximum Range	450m @ 150kHz; 150m @ 450kHz; 75m @ 900kHz
Beamwidth	Horizontal: 0.6° @ 150kHz; 0.2° @ 450kHz ; 0.2° @ 900kHz Vertical: 50°
Resolution	Along-track resolution: 0.01h (range) @ 150kHz; 0.003h @ 450kHz & 900kHz; Across-track resolution: 1cm
Transducer Mounting Angle	Adjustable downward angles of 10°, 15°, or 20° (factory set to 20°)
Maximum Operating Depth	2000m（Customizable up to 6000 meters）
Transducer Dimensions / Weight	995mm(L)×54mm(W)×30mm(H) / 6.2kg
Unsealed Electronic Unit Dimensions / Weight	460mm(L)×105mm(Dia.) / 3.7kg
Sealed Electronic Unit Dimensions / Weight	474mm(L)×105mm(Dia.) / 4.5kg
Power Supply / Consumption	18~36VDC, 45W
OTech Software	Real-time mosaicking; live online mapping; OTSS and XTF formats recording; SDK development support; continuous raw data output.
Interface	High-speed Ethernet communication supporting real-time input of control commands



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