

## Shark-S900S High Resolution Single-Frequency SSS

[www.lcsonar.com](http://www.lcsonar.com)



**Clear Imaging**  
**Portable and Easy to Use**  
**Exceptional Value**  
**Ultra-Low Power Consumption**

Shark-S900S Single-Frequency Side Scan Sonar is a compact, lightweight, and portable sonar with ultra-low power consumption. It features 900kHz CHIRP signal processing technology, providing a range of 75 meters per side to ensure wide coverage. With a 0.2° horizontal beamwidth, it delivers high-resolution imaging.

The system's core components include a pressure-resistant towfish, a Kevlar cable, a waterproof deck unit, and proprietary OTech sonar software. The towfish is engineered with a robust and durable structure while maintaining compact and lightweight. It supports single-operator deployment and retrieval and can be towed, hull-mounted, or side-mounted operation. The optimized hydrodynamic profile ensures stable towing performance under varying conditions. The system is designed for ultra-low power consumption and can operate on AC power or via an inverter connected to a battery supply. The system has an ultra-low power consumption design and supports both AC power supply and battery inverter power.

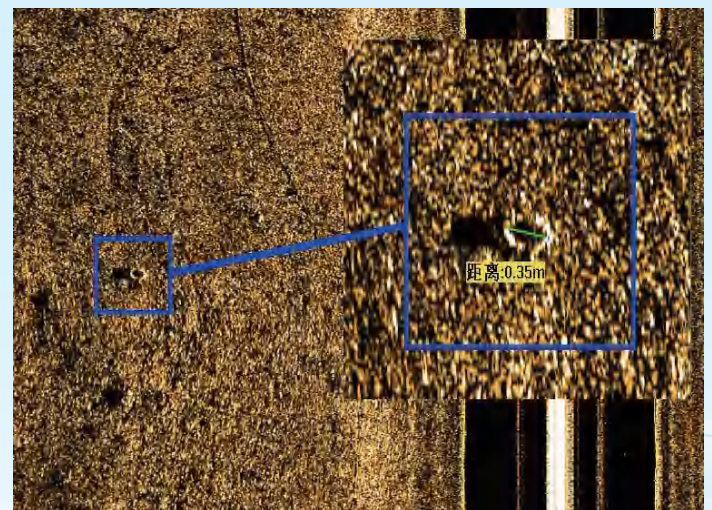
The proprietary OTech software combines ease of use with powerful functionality, offering features such as real-time image mosaic stitching, sonar image waterfall display, survey line planning and navigation, track tracking and coverage display, data recording and playback, target management and export, 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

- Lightweight, one-man portable, user-friendly, and reliable
- Supports real-time switching between LFM Chirp signals and Continuous Wave pulses during operation
- Real-time map loading and mosaicking
- OTech's multifunctional software offers free periodic upgrades and updates.

### Applications

- Emergency support, police investigation, and firefighting rescue
- Underwater security and hazardous target detection
- Waterway management and obstruction survey
- Marine geology and geophysical survey
- Cable and pipeline route survey and maintenance
- Monitoring of underwater aquaculture



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Sonar Specifications	Shark-S900S
Operating Frequency	900kHz
Pulse Type	LFM (Chirp) / CW
Maximum Range	75m
Beamwidth	Horizontal: 0.2°; Vertical: 50°
Resolution	Along-track resolution: 0.003h (range); Across-track resolution: 1cm
Transducer Mounting Angle	Adjustable downward angles of 10°, 15°, or 20° (factory set to 20°)
Maximum Operating Depth	500m
Towfish Dimensions / Weight	767mm(L)×105 mm(Dia.) / 15kg
Deck Unit Dimensions / Weight	190mm(L)×150mm(W)×50mm(H) / 1.2kg
Power Supply / Consumption	220/110VAC, 15W
Tow Cable	Kevlar coaxial cable, 20 m (customizable); optional winch available
OTech Software	Real-time mosaicking; live online mapping; OTSS and XTF formats recording; SDK development support; continuous raw data output.

