

## Shark-S100D Ultra High Resolution Dual-Frequency SSS

www.lcsonar.com



# **High Resolution Image Long Range Coverage** Highly reliable, and durable Suitable for various applications

Shark-S100D side scan sonar is versatile sonar which can be applied to shallow and deep water. It features dual simultaneous frequency operation at both 100kHz and 450 kHz. Being able to switch between CHIRP and CW modes provides flexibility, allowing you to optimize the sonar for different survey conditions.

The sonar system features a robust stainless steel towfish, high-strength Kevlar cable, splashproof deck unit, and intuitive OTech software. Built for reliability and durability, the towfish is easy to operate by a single person. It offers versatile mounting options, including towing, bottom mounting, and side-hull fixation. We've designed an underwater towing overload protection structure to effectively guard against impacts. The system can be powered by either AC or a battery-powered inverter, with extremely low power consumption.

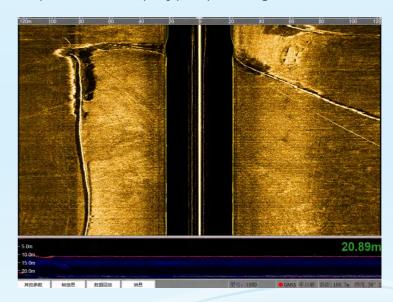
The proprietary OTech software combines ease of use with powerful functionality, offering features such as real-time image mosaic stitching, sonar image waterfall display, survey line planning and navigation, track tracking and coverage display, data recording and playback, target management and export,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

#### **Features**

- Dual Frequency, Simultaneous Operation
- Long Range Coverage and High Resolution Images
- CHIRP and CW Sonar Transmission Modes
- Standard Heading, Pitch, Roll and Pressure Sensors
- Build-in Echosounder, Accurately Tracks Towfish Height
- 316 Stainless Steel Towfish, Depth Rated up to 2000m
- OTech Acquisition Software, Free Update

### **Applications**

- Hydrographic Surveys
- Geophysical Surveys
- Cable and Pipeline Surveys
- Wide Area Search and Recovery
- Pier/Harbor Wall Inspections
- Archaeological Surveys
- Wreck Hunting





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Sonar Specifications	Shark-S100D
Frequency	100kHz & 450kHz , Dual Simultaneous
Pulse Type	CW & LFM CHIRP
Maximum Range	500m @ 100kHz; 150m @ 450kHz
Beam Width	Horizontal: 0.6°@ 100kHz; 0.2° @ 450kHz; Vertical: 50°
Resolution (h-range)	Along Track: 0.01h @100kHz, 0.003h @450kHz; Across Track: 2.5cm @100kHz, 1.25cm @450kHz
Depression Angle	Tilted Down 10°,15°,20°,Default 20°
Maximum Depth Rating	customizable for depths of up to 1000m
Standard Towfish Sensors	Attitude Sensor (Roll, Pitch, and Heading), SBEC, Pressure Sensor
Towfish Size / Weight	1264mm*105mm (Length*Diameter ) / 33kg (316L)
Deck Unit Size / Weight	227mm*192mm*50mm / 1.9kg
Power Consumption	110/220VAC , 40W
Software OTech	Windows,NMEA 0183 Navigation Data Input; OTSS、XTF Output Data Format
Tow Cable	Kevlar, Standard Length: 50m (Customizable); Winches Available

