

# HydroBeam S2

Dual-Channel Echo Sounder



The HydroBeam S2, SatLab's latest dual-channel echo sounder, is designed to simplify your bathymetric surveys. Powered by Windows 10 and featuring the advanced SmartEcho 2.0 algorithm and full-featured SLHydro Sounder software, it offers a complete, out-of-the-box solution. With its built-in temperature sensor and durable IP66 housing, the HydroBeam S2 is the ultimate tool for efficient and reliable data collection.



## New Generation, More Powerful



### **Reliable Acquisition Unit**

The S2 not only integrates a more powerful IPC with 2.0GHz quad-core processor for efficient data processing, but also passes rigorous salt spray, water immersion, and shock resistance tests for superior durability and reliability, meeting IHO standards.



### **High Precision Transducer**

New transducer has integrated temperature sensor to calculate real-time velocity of sound and correct the bathymetric data.



### **New SmartEcho 2.0 Algorithm**

SmartEcho 2.0 algorithms not only enhance auto-tracking in rugged terrain, but also improve substrate identification for sediment and high sand content applications.

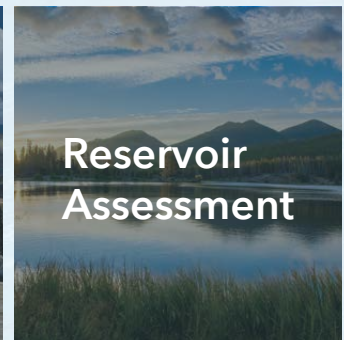
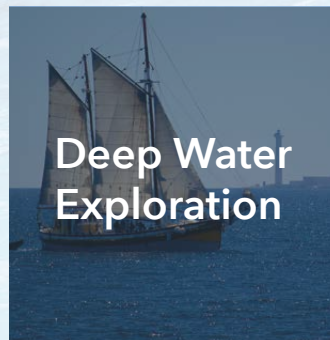
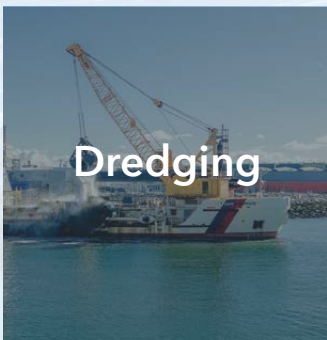


### **Enhanced SLHydro Sounder Software**

SLHydro Sounder not only provides a complete workflow for connection, acquisition, processing, and export, but also offers a wide range of correction for attitude, PPK, delay etc.



## Applications



# Specification

## Echo Sounder

Dimension	441mm*105mm*324mm
Weight	8.1kg
Housing Material	Magnesium alloy
Waterproof Rate	IP66
Ping Rate	50Hz
Screen	15 inches; Resolution: 1280 x 1024@60Hz
CPU	2.0GHz, Quad-core
Input Power	DC 10~30V, DC 110~240V
Power Consumption	50W
Operating Temperature	-5°C to +55°C
Storage Temperature	-20°C to +60°C
Interfaces	PPS*1, Trigger*1, RJ45*1, RS232*3, USB*3, HDMI*1, Transducer*1, Power*1
Raw Data Output Format	Standard NMEA 0183, DESO 25, ODOM, Knudsen, Bathy, Echotrac

## Transducer

Transducer Type	High Channel	Low Channel
Operation Frequency	200kHz	24kHz
Depth Range	0.15 ~ 300m @200kHz	1~ 2000m @24kHz
Accuracy	±0.01m ± 0.1% of depth @200kHz	±0.1m ± 0.1% of depth @24kHz
Resolution	1cm@200kHz	10cm@24kHz
Temperature Sensor	-55°C to +125°C; Resolution 0.5°C	

## Software

SLHydro Sounder	Project Management, Coordinate Systems, Navigation and Basemap, Multiple External Sensors, Data Acquisition, Planned Deployment, Data Processing, Multi-sensor Calibration, Multi-format Data Export
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\* All parameters listed are theoretical or based on laboratory test.

\* Specifications and accessories are subject to change. We reserve the right to the final interpretation.



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