

# EchoBoat™

Unmanned Surface Vehicle

# Seafloor™



The **EchoBoat™** is an unmanned surface vehicle developed for hydrographic survey applications.

This highly portable survey platform features multipayload capacity, swappable sensor suites, and both manual and autonomous control.

## TRANSPORTATION AND DEPLOYMENT

EchoBoat™ is lightweight and two-person portable, allowing access to remote areas and dangerous environments.

## AUTONOMOUS AND REMOTE CONTROL

Switching from autonomous operation to remote control on EchoBoat™ is easy using a long-range, remote control unit (RCU) that offers up to 2km range with a survey endurance of over eight hours on a single battery bank. EchoBoat™ is easily maneuvered with powerful differential thrusters and can be monitored within line-of-sight range. Over the horizon monitoring is possible when running additional hardware.

## DATA COLLECTION

All data is stored via an on-board PC with a direct cable connection. Full equipment and data control is accomplished using a remote data link.

## SOFTWARE COMPATIBILITY

EchoBoat™ is compatible with hydrographic data acquisition software such as Hypack, PDS2000, EIVA and QINSY.

## CUSTOMIZATION

For professional hydrographic survey requirements, EchoBoat™ may be tailored for individual customer requirements.

- The boat may be purchased with the desired depth sounder pre-installed, or supplied ready to accept existing equipment from the user's survey pool.
- Customized cabling can be included to accept existing GPS, GNSS, and RTK positioning systems.
- EchoBoat™ can be outfitted with singlebeam, multibeam, and sidescan sonar systems.
- Additional features are available, please contact your Seafloor representative to discuss vessel requirements.

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2-Man Portable



Differential Thrusters



AutoNav™ Control System



Preplanned survey using Mission Planner



Survey data overlay using Mission Planner



R2 Sonic MultiBeam, Applanix POS MV Surfmaster



EchoBoat in BC, Canada



EchoBoat Crane Lift Into Sea



Launch & Recovery System

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## Specifications

Typical Survey Speed	2 -3 kn
Top Speed	6 kn
Hull Length	1.68 m
Hull Width	0.8 m
Battery Endurance	Up to 8 hours
Payload	29 kg / 65 lbs
Power	12-24 VAC
Motor	2x Brushless DC Outdrive
Hull Material	UV Resistant HDPE
Empty Hull Weight & Batteries	23 kg / 36 lbs
Hardware	Stainless Steel
R/C	2.4 GHz/900MHz Long Range RCU (US) 2.4 GHz/868MHz Long Range RCU(EU)
Remote Range	Up to 2 km Optional or Direct Connection
GPS	Customer Specified
Communications	2.4 GHz UHF Telemetry

## Instrumentation Options

Sonar Modules	Multibeam Echosounder Singlebeam Echosounder ADCP Side Scan Sonar Subbottom Profiler Magnetometer
GPS/GNSS	RTK/GNSS DGPS INS
Auxiliary Sensors	Sound Velocimeter Velocity Profiler or CTD Wi-Fi Remote Desktop HD Thermal Camera Remote Controlled Profiling Winch LiDAR

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