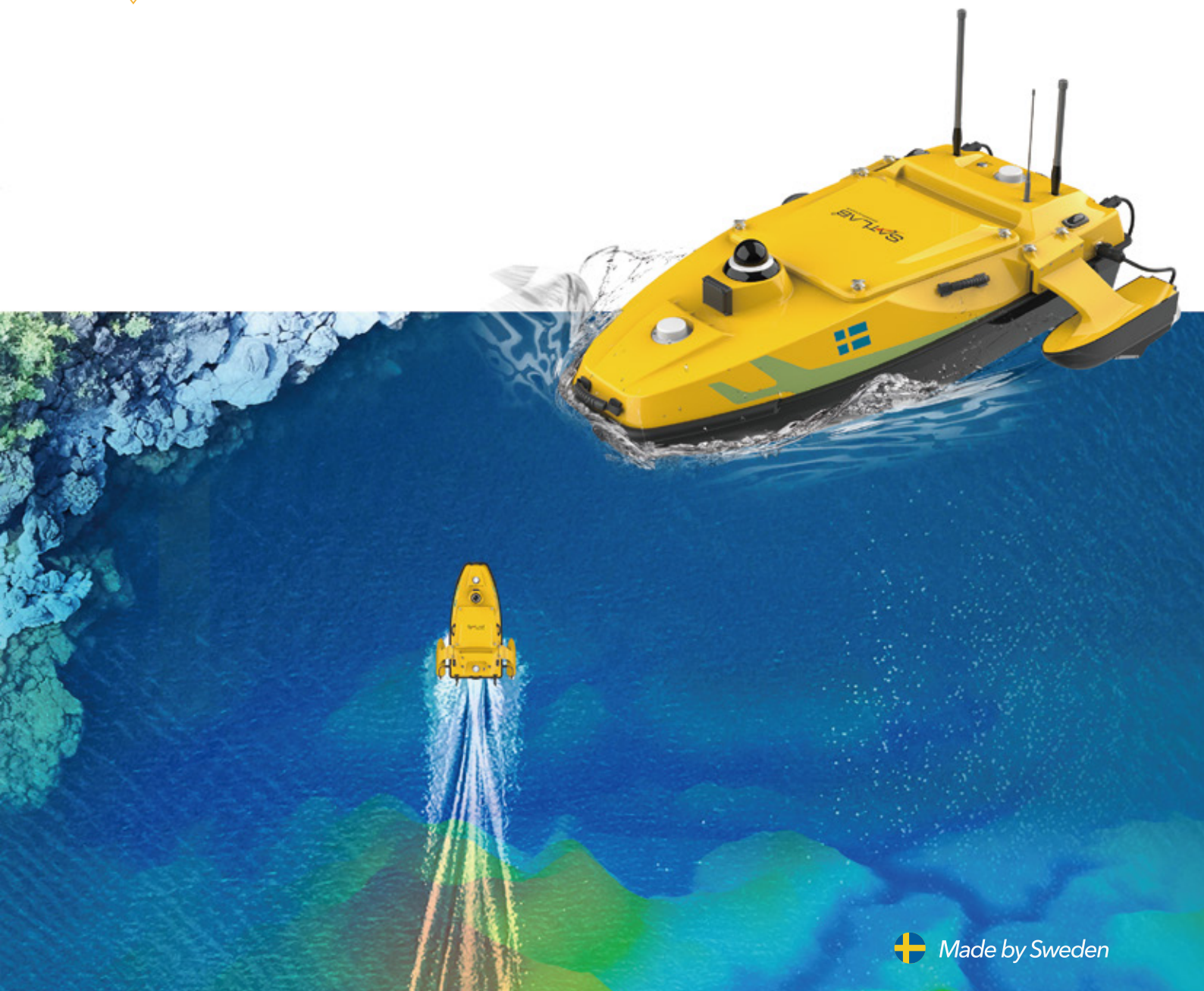


# HydroBoat 1500

Multibeam USV



The HydroBoat 1500 is a versatile, intelligent USV that can perform underwater topographic surveys of lakes, rivers, and reservoirs by carrying the HydroBeam M4 Portable Multibeam Echo Sounder system. Equipped with a high-precision GNSS receiver and IMU for position and orientation, the HydroBoat 1500 ensures sub-meter accuracy even when satellite signals are blocked. It features a light-weight and robust hull with IP67-waterproof, as well as four powerful thrusters on the sides that enhance mobility and flexibility, allowing it to easily adapt to diverse aquatic environments and efficiently complete underwater terrain surveys.



### Exceptional Payload Capacity

Accommodates up to 60 kg of payloads with a through-hull design to adapt to various surveying tasks.



### Intuitive Android Control

Simplify operations with the user-friendly SLHydro USV software, featuring route planning, boat control, and status monitoring features.



### Unlimited Range Transmission

Experiences 4G and 2.4G dual-channel control and communication for limitless reach and real-time data collection, even from the office.



### Uncompromising Safety

Navigate with confidence thanks to a 360° omnidirectional camera, millimeter wave radar, double-layer anti-sink hull, and shallow water hovering capabilities.



SBES



HydroBeam M4 MBES



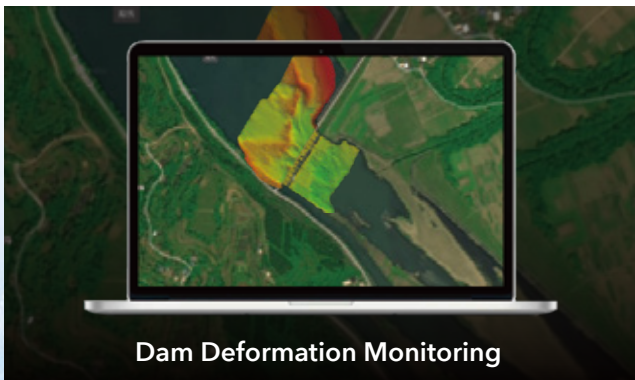
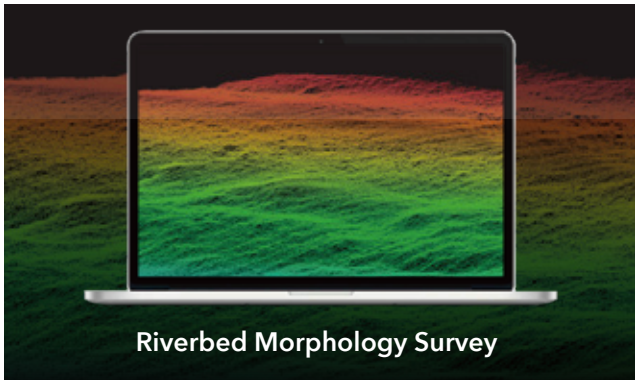
Norbit iWBMS



Ping DSP

## Payload Options

# Applications with Multibeam Echosounder



# Specification

## Vehicle Specifications

Hull dimension (L x W x H)	Monohull: 1528*694*494 mm, Trimaran: 1528*1034*494 mm
Weight	40 kg (without battery)
Max Load	60kg
Material	Carbon fiber, rubber bumper
Anti-wave & Wind	4th wind level & 3rd wave level
Waterproof	IP67
Indicator light	Two-color light
Camera	360° omnidirectional video
Anticollision sensor	Detection distance 10-30 meters
Propeller	4*Brushless Propeller
Direction control	Veering without steering engine
Maximum speed	5.7m/s
Battery endurance	Two batteries 4.5h with 1.5m/s, total 6 batteries

## Controller

System	Android System
Software	SLHydro USV
Control range	1.3km on 2.4GHz; Unlimited on 4G

## GNSS Performance

Satellite system	GPS, BDS, GLONASS, Galileo
RTK Positioning accuracy	H: ±8mm + 1 ppm RMS V: ±15mm + 1 ppm RMS
Heading accuracy	0.2° @1 m baseline
INS accuracy	2.1°/h, <1m/20s
Refresh Rate	200Hz

## Software

SLHydro USV (Android controller)	Mission planning, Vessel Monitoring
	Coordinate conversion
	Bathymetric data acquisition
	Bathymetric data download

## Expandable Sensors

Multi Beam Echo Sounder
Single Beam Echo Sounder
PING DSP



**Headquarters:**  
Geosolution i Göteborg AB  
Stora Ävägen 21, 436 34 ASKIM,  
Sweden

**Regional Offices:**  
Warsaw, Poland  
Jičín, Czech Republic  
Ankara, Turkey  
Scottsdale, USA  
Singapore  
Hong Kong, China  
Dubai, UAE

[www.satlab.com.se](http://www.satlab.com.se)