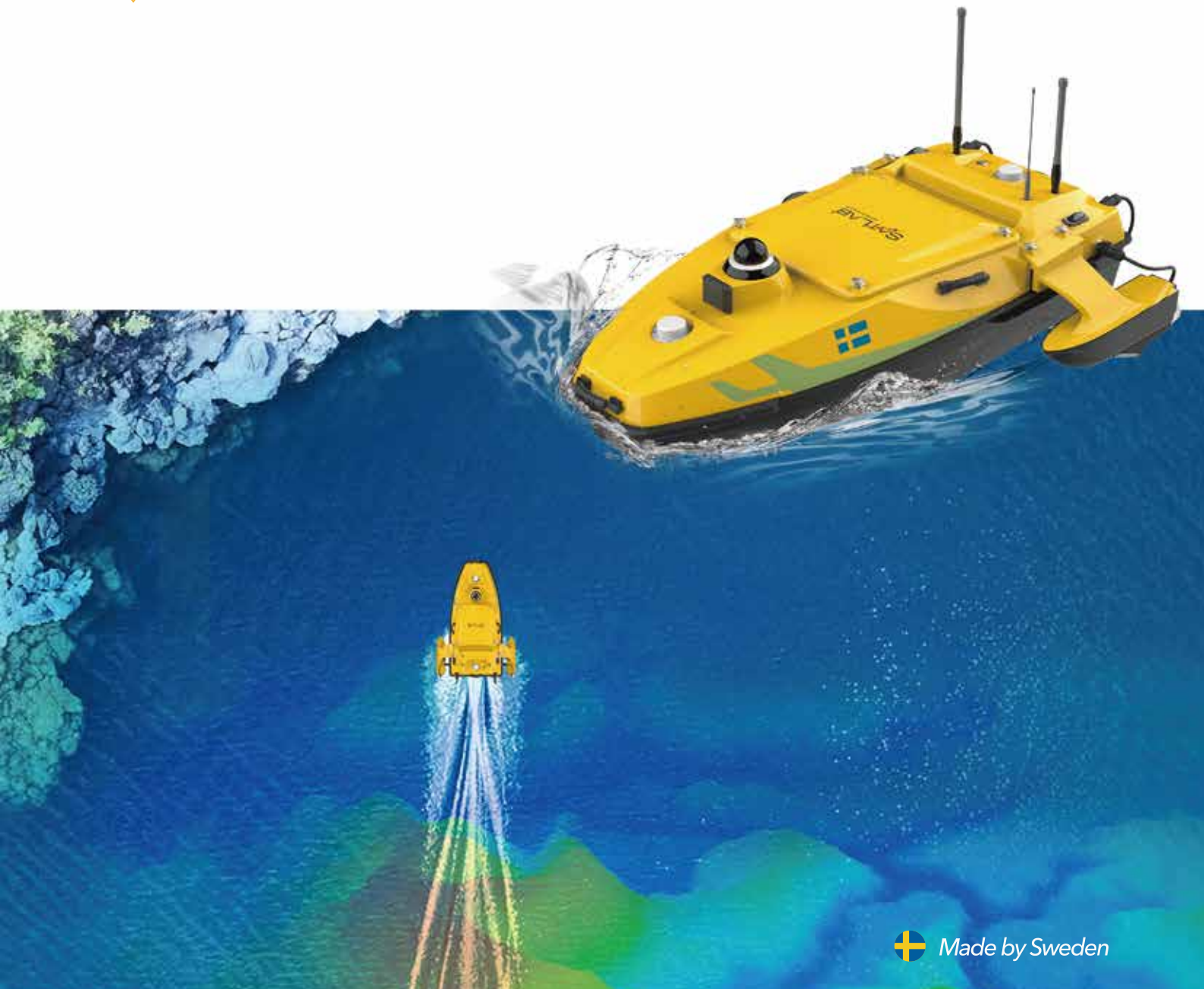


HydroBoat 1500

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 lightweight 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 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.



Dual-Frequency Echo Sounder



Multibeam Echo Sounder



Side Scan Sonar

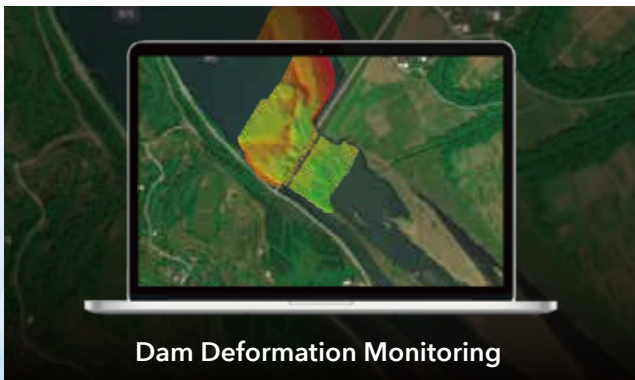
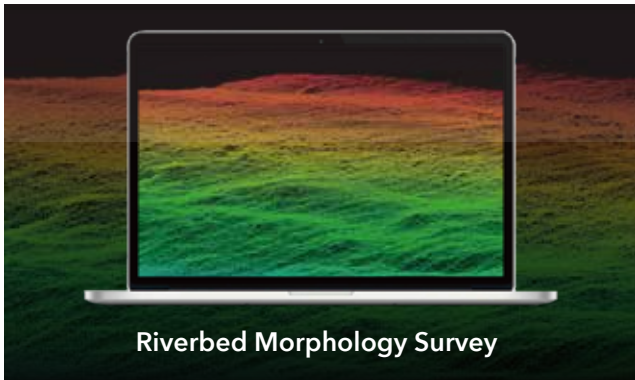


PingDSP



ADCP

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	40kg(No Battery)
Max Load	60kg
Material	Carbon ber, 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	Mission planning, Vessel Monitoring
	Coordinate conversion
	Bathymetric data acquisition
	Bathymetric data download

Expandable Sensors

Multi Beam Echo Sounder
Acoustic Doppler Current Profiler
Single Beam Echo Sounder
Side-scan Sonar
Multi-parameter Water Quality Meter



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