

SL20

Hydrographic Survey USV



8 KN
Max. Speed

6h @ 3KN
Endurance

10 KG
Payload



SBES



ADCP



RTK

The SL20 USV is a portable platform developed for hydrographic survey applications. It is compact and lightweight for one-man operation, ready to integrate survey payloads such as single beam echo sounder, RTK GNSS receiver, ADCP, etc. Remote manual control and autonomous navigation are available, with user-friendly USV control software, which makes the hydrographic survey never easier.

Application Scenario

Lakes and rivers survey, Mine tailing dam survey, Water discharge measurement

Key Features

- 1 Carbon fiber hull, rugged and durable
- 2 Compact size and lightweight, easy for mobilization, launch, and recovery
- 3 Universal through-hull moon pool flexibly adapts to transducer payloads
- 4 Collision avoidance and realtime video stream
- 5 Differential control thrusters, highly maneuverable
- 6 Easily swappable battery pack, plug and play

SPECIFICATIONS

Physical

Dimension	1.05m(L)*0.55m(W)
Weight	17kg(with battery)
Payload	10kg
Draught	0.15m
Hull Material	Carbon fiber composite

Power

Propulsion	Duct-type thruster x 2
Power	33.6V/40Ah Lithium battery x 1

Performance

Survey Speed	3kn
Maximum Speed	8kn
Endurance	6h @ 3kn
Real-time Video	Yes
Collision Avoidance	Yes

Control & Communication

Control Mode	Remote Control / Autonomous
Remote Control	1km
Data Telemetry	2km
Software	OceanAlpha USV Control Software

INTEGRATIONS

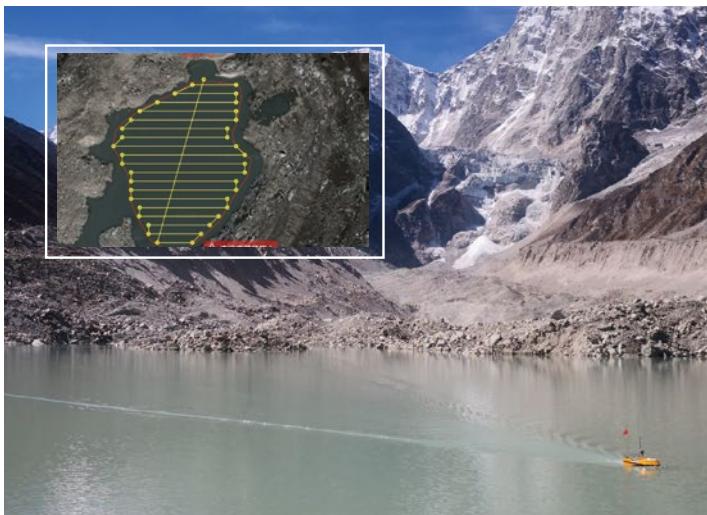
Single Beam Echo Sounder

RTK GNSS receiver

ADCP

Multi parameters water probe

CASE APPLICATION



USV SURVEYS THREE PLATEAU GLACIAL LAKES

EQUIPMENT USED:
SL20 USV, RTK GNSS , SBES

APPLICATION:

L20 USV conducted a bathymetry survey at three plateau glacial lakes with an average altitude of 4,500 meters and 7°C at daytime. Challenging road conditions make it very difficult to mobilize and survey with conventional survey boats. Unknown water data could be a danger to surveyors. The compact SL20 USV is easy to mobilize, launch and recover with only one person, the data was first time successfully collected and processed remotely and safely at the shore side.