

## 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 Scenarios

Hydrographic survey and water discharge measurement in lakes, rivers and mine tailing dams

#### Key Features

- 1 Robust and durable hull crafted from carbon fiber composite
- 2 Compact and lightweight design for easy mobilization, launch, and recovery
- 3 Universal through-hull moon pool flexibly adapts to various transducer payloads
- 4 Collision avoidance and real-time video streaming capabilities
- 5 Differential control thrusters ensure exceptional maneuverability
- 6 Effortlessly swappable battery pack with plug-and-play convenience

# 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

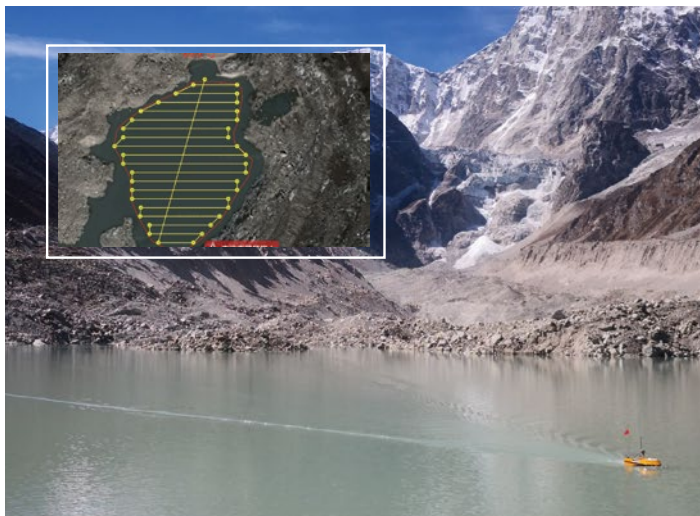
Single Beam Echo Sounder

RTK GNSS Receiver

ADCP

Multi-parameter Water Probe

# APPLICATION CASE



## USV SURVEYS THREE PLATEAU GLACIAL LAKES

### EQUIPMENT USED:

SL20 USV, SBES, RTK GNSS

### 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.