

SL40

Hydrographic Survey USV



10 KN | **8h @ 3KN** | **25 KG**

Max. Speed

Endurance

Payload



SBES

MBES

Side Scan Sonar

ADCP

The SL40 USV is designed as a multi-mission hydrographic survey platform and flexible payload mounting make it possible to adapt to different payloads like SBES, MBES, side scan sonar, ADCP, etc. Compact size allows two-person portable and mobilization, powerful engine and long endurance battery maximize the hydrographic survey efficiency in shallow water like lake, river, canal and harbor area. It is the ideal platform to replace conventional works with more economic benefits and protect our surveyor from operation risks on the water.

Application Scenario

Hydrographic Survey and underwater inspection in lakes, rivers, harbors, construction sites, tailing dams, hydropower plants, etc.

Key Features

- 1** Carbon fiber composite, rugged and durable hull
- 2** A powerful water-jet brings 10kn top speed and protects the propeller from debris and water plants.
- 3** Big payload bay and interchangeable payload mount, ready to integrate
- 4** Collision avoidance and PTZ camera for real time video stream
- 5** Two-person portable, easy to mobilize and deploy for survey
- 6** Long endurance battery life and easy to replace battery on field

SPECIFICATIONS

Physical

Dimension	1.65m(L)*0.7m(W)
Weight	42kg (with battery)
Payload	25kg
Draught	0.15m
Hull Material	Carbon fiber composite

Power & propulsion

Propulsion	Electric water jet
Power	33.6V/40Ah Lithium battery x 2

Performance

Survey Speed	3kn
Maximum Speed	10kn
Endurance	8 hours @ 3kn
Real-time Video	PTZ camera
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 Compact Multibeam Echo Sounder Inertial navigation system Lidar ADCP
RTK GNSS receiver Multi parameters water probe etc.

CASE APPLICATION



USV CONDUCT AN AUTONOMOUS SURVEY ON RESERVOIR

EQUIPMENT USED:

SL40 USV, SBES, RTK

APPLICATION:

The SL40 is integrated with a single beam echo sounder and RTK GNSS receiver for bathymetry survey, surveyors use SL40 USV to conduct a survey of a dam to determine the water storage capacity of the reservoir, with a 15cm low draught, and the USV is able to cover almost the full water depth and acquire bathymetric data efficiently.