

**Uncrewed Surface Vessel for Hydrographic Survey Applications** 



The **HydroCat-550™** USV is capable of transiting from inshore to nearshore environments with high-resolution equipment payloads to conduct preplanned autonomous hydrographic surveys.

The 5.5m (18ft) catamaran features individually-articulating pontoons, a gimballed deck, retractable sonar pole mount, and independently-actuated electric motors.

The vessel can be transported via trailer, programmed to execute missions, and navigate up to sea state 5 conditions with its aluminum hull construction.

#### **FEATURES**

- Wifi Data Communication System
- Onboard Industrial PC
- Independent Roll and Pitch Damping / Control
- Gimballed Payload Bay (Actively Cooled)
- Remote-Controlled Sonar Deployment Pole
- 4 Batteries (With option for additional batteries to extend operational endurance)
- 2 x 25HP Equivalent Torqueedo™ Motors With Electric Tilt / Trim
- AutoNav™ Autopilot System
- Auto-Stop Smart Charger for Payload Batteries
- Nav Aids (Strobe, Nav Lights, Day Shapes)
- Integrated Lifting Points
- Custom-Configured Dual Axle Trailer



Independently articulating pontoons

#### **AVAILABLE SYSTEMS**

- Single or Dual Head Ultra-High Resolution Multibeam Echosounder
- Sidescan Sonar
- Magnetometer
- Sub Bottom Profiler
- SmartCast™ Sound Velocity Profiling Winch
- 180° HD Video Camera
- Collision Avoidance Assist (LiDAR or LiDAR + Camera system)



High-powered payload options, like Teledyne's IDH T-50

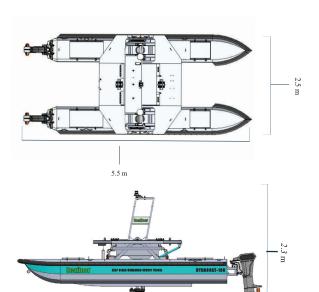


Transportable via trailer

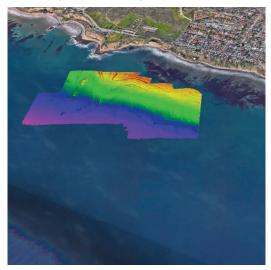
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# HydroCat-550™

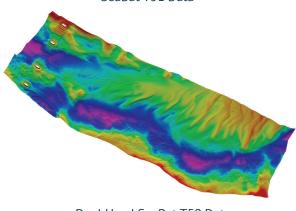
**Uncrewed Surface Vessel** 



HydroCat-550 Specifications



SeaBat T51 Data



Dual Head SeaBat T50 Data

## **Specifications**

Typical Survey Speed 2.5 kn - 4.5 kn

Top Speed 12 knots RCV

Length 5.5 m / 18 ft

Hull Width 2.5 m / 8 ft

Height 2.3m / 7.5 ft

Transducer Wells Main, SVP

Frame Powder Coated Aluminum

Hardware Stainless Steel

Weight 800 lbs

Endurance Up to 8 Hours at Survey Speed

GPS Customer Specified

Payload 362.87 kg / 800 lbs

Power 25.2 VDC

Motor Dual Electric Outboards

R/C 2.4 GHz/900MHz Long Range RCU

(868MHz UK)

Remote Range Up to 2km

#### **Instrumentation Options**

## **Sonar Modules**

Multibeam

Echosounder

Singlebeam

Echosounder

ADCP/DVL

Side Scan Sonar

Subbottom Profiler

Magnetometer

#### **Auxiliary Sensors**

Sound Velocimeter

Sound Velocity

Profiler / CTD Wi-Fi

Remote Desktop

HD Thermal Camera

Remote SVP Winch

LiDAR

GPS/GNSS RTK/GNSS

DGPS INS

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