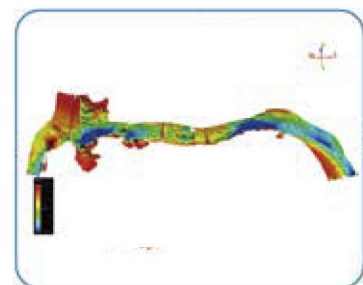


## SYSTEM EXTENSION

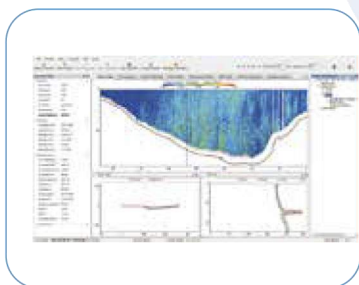
Multiple applications, available for single beam echo sounder, ADCP and side scan sonar.



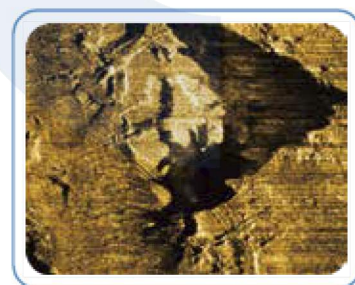
## APPLICATIONS



Bathymetry



Current Measure



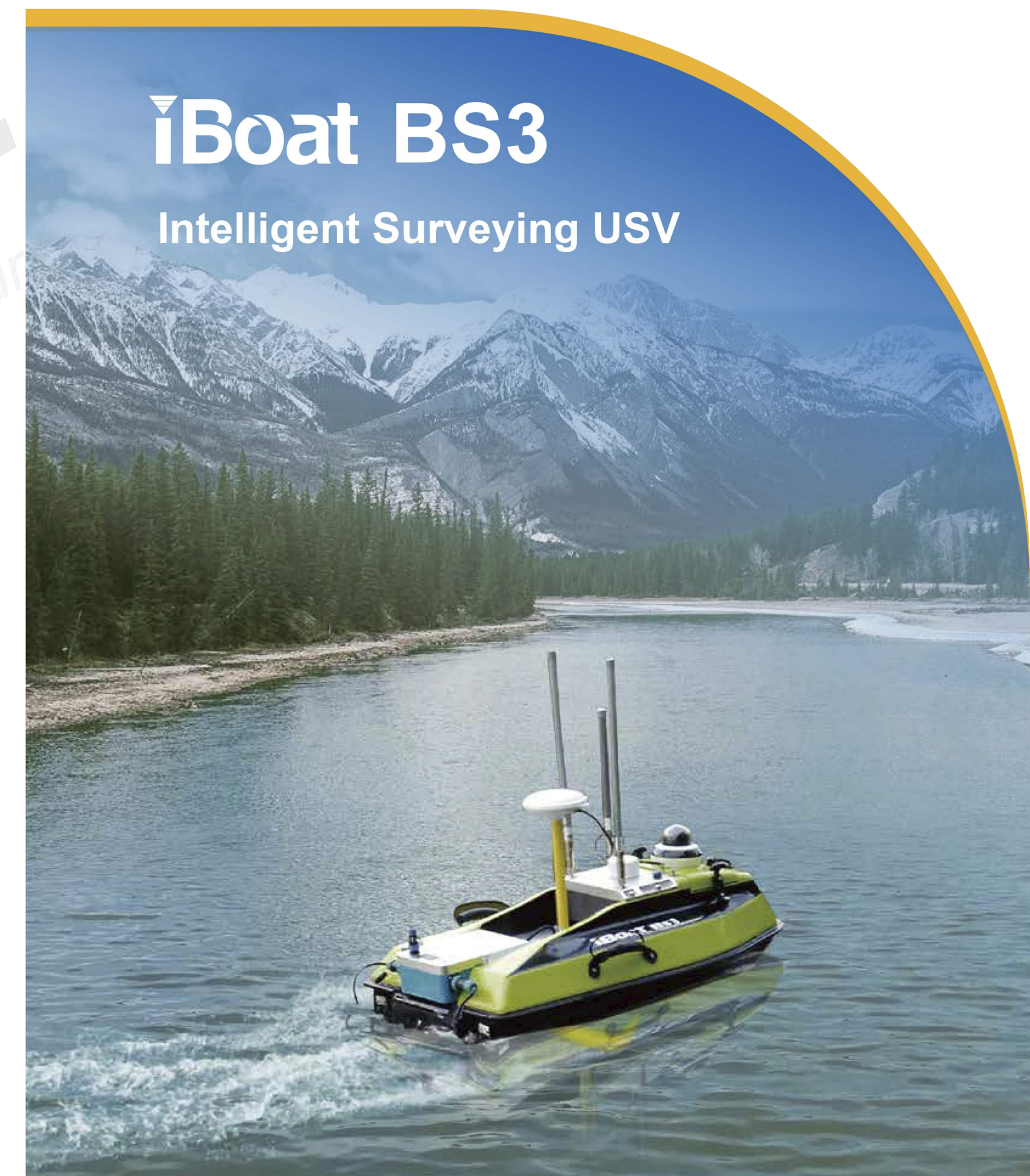
SAR & Investigation

## TECHNICAL SPECIFICATIONS

<b>Hull Parameters</b>	Dimensions	1100mm*520mm*300mm
	Weight of base boat	7kg (without battery)
	Hull material	Kevlar & carbon fiber high-strength composite
	Hull design	Heavy duty trimaran, low barycenter, low resistance, stable sailing
	Anti-wave&wind	3rd wind level and 2nd wave level
<b>Power and Electrical Parameters</b>	Battery endurance	4h with 2m/s ( The battery pack can be added to improve the battery life)
	Maximum speed	6 m/s
	Propulsion	Removable modular culvert propeller
	Propeller type	Brushless DC
	Direction control	Veering without steering engine and sailing reversely
<b>Safety Guarantee</b>	Camera	360° PTZ camera
	Auto-return	Auto-return while low battery or signal loss
<b>Ashore Base</b>	Operating system	Windows 10
	Communicating mode	RF point to point in real-time
	Transmission range	1.5km radio communicating (4G optional)
<b>Intelligent Controller</b>	Navigation mode	Manual or auto-pilot
	Communicating mode	RF point to point in real-time
	Transmission range	1.5km
	Water proof	IP66
<b>Sounding Performance</b>	Function	Real-time switching operation mode, control ship speed, steering and other functions, display the basic information
	Work frequency	200KHz
	Beam angle	5°±0.5°
	Sounding range	0.15m~300m
	Sounding accuracy	1cm ± 0.1%h ( h=depth), 1cm depth resolution
<b>Positioning Accuracy</b>	Storage	Computer-based real-time storage
	RTK	Horizontal: ±8mm + 1ppm RMS    Vertical: ±15mm + 1ppm RMS
	Beacon (optional)	
<b>System Software</b>	SBAS	0.5m CEP
	Hull control system	Autopilot, hull parameter control, coordinate conversion , etc
	HiMAX sounding software	Supporting parameter configuration, coordinate conversion, depth location collecting, post-processing (simulative depth and digital depth combined for conveniently judging false depth), sampling feature point randomly, RTK and tide document for tide gauging, multiple data formats for result output , etc

# iBoat BS3

## Intelligent Surveying USV





## SYSTEM INTRODUCTION

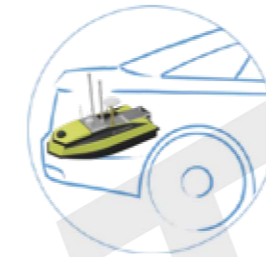
Hi-Target latest intelligent USV — iBoat BS3 is a swift, efficient and robust unmanned surface vessel, offering the portable, fast, secure and multi-functional service for hydrographic survey and all kinds of water-related applications in different environments like rivers, lakes, reservoirs, harbors and even torrents.



## SYSTEM COMPOSITION AND FEATURES

### Hull Structure

- Streamlined trimaran and low barycenter design to ensure low resistance and sailing stably
- Only 7kg weight  
Small and portable hull convenient for transmission  
Available placement in the car trunk
- Made of Kevlar & carbon fiber high-strength composite with strong resistance to impact



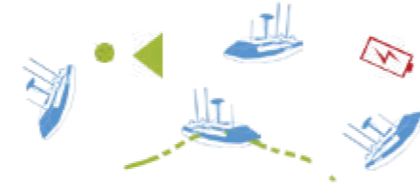
### Power System



- Propellers are applied with culvert-design and protective shield outside to prevent aquatic plants and fishing net from twining.



- Innovate highly integrated modular design making the propellers easy to remove and change. Paralleled level with the boat and convenient for transmission and placement.



- Auto-return while low battery or signal loss.

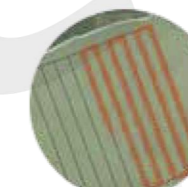
### Base System



- The industrial controller with a large-capacity battery has more than 20 hours of battery life, and it is of easy use with one key to switch between manual and automatic mode while control distance reaches 1.5 km.



- The base station adopts a new omnidirectional high gain antenna and built-in Wi-Fi to guarantee the communication distance not less than 1.5 km.



- iBoat BS3 supports automatic operation, automatic navigation, auto-return to fixed point and users can switch between manual and automatic mode at any time.

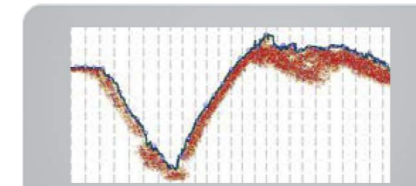
### Hi-Target Sensors



- The Hi-Target HD-510 single beam echo sounder shows fantastic performance with its high-accuracy professional sounding module. The 0.15~300m sounding range adapts to all kinds of complex topographic surveying.



- With Hi-Target high-accuracy GNSS RTK module or DGPS beacon module, the location device support GPS/GLONASS/Galileo/BDS location. Besides, iBoat BS3 is equipped with multiple communication modes, such as UHF radio, beacon and SBAS.



- HiMAX surveying software is available for collecting, guiding and post-processing. The simulative depth and digital depth are combined for conveniently judging true water depth.