

Vehicle Specifications	Dimension	1185 mm*593 mm*397 mm	
	Weights	10 kg	
	Material	Carbon fiber, Rubber Bumper	
	Waterproof	IP67	
	Anti-wave & Wind	3rd Wind Level & 2nd Wave Level	
	Anticollision Sensor	5-30 Meters Detection Distance	
	Camera	360° Omnidirectional Video	
Power and Electrical Parameters	Propeller Type	Quick Release Culvert Propellers	
	Power	1000 W	
	Speed	0.1~6 m/s	
	Battery Capacity	29.04 V/34.3 Ah (Typical)	
	Battery Endurance	40 km@1.5 m/s	
	Battery Safety	Power Display, High-temperature/Over-current/Short-circuit Protection	
Communication Control	Type	2.4 GHz Wireless Technology (1.7 km); 4G Network	
	GNSS Differential Types	Radio; Network; Controller Internet	
	Navigation Mode	Manual or Auto-Pilot	
	Data Storage Methods	Simultaneous Support for Ship-side Storage and Controller Broadcast	
Controller	System	Android 7.0; Storage 5 GB; SD Card Supported	
	Dimension	272 mm*183 mm*94 mm	
	Weights	1034 g	
	Display	7 inches	
	Battery Capacity	20000 mAh	
	Battery Endurance	6-20 h	
GNSS	Channels	1408	
	Position Accuracy	RTK	H: ±8 mm+1 ppm ; V: ±15 mm+1 ppm;
		DGNSS	H: ±0.4 m+1 ppm; V: ±0.8 m+1 ppm;
		Single	H: 1.5 m ; V: 2.5 m;
	Directional Accuracy	≤0.2°	
	Timing Accuracy	≤20 ns	
Single Beam Echo Sounder	Frequency	200 KHz	
	Beam Angle	≤5°±0.5°	
	Accuracy	±0.01 m + 0.1% x D (D is the Depth of Water)	
	Depth Range	0.15m ~ 200 m	
	Data Formats	Standard NMEA, DESO 25, ODOM, Knudsen, Bathy, Echosound	
IMU	Refresh Rate	200 Hz	
	Position Accuracy	< 1 m/30 s	
	Directional Accuracy	≤2.1°/h	



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iBoat BS12

Android-powered Multi-function USV



iBoat BS12

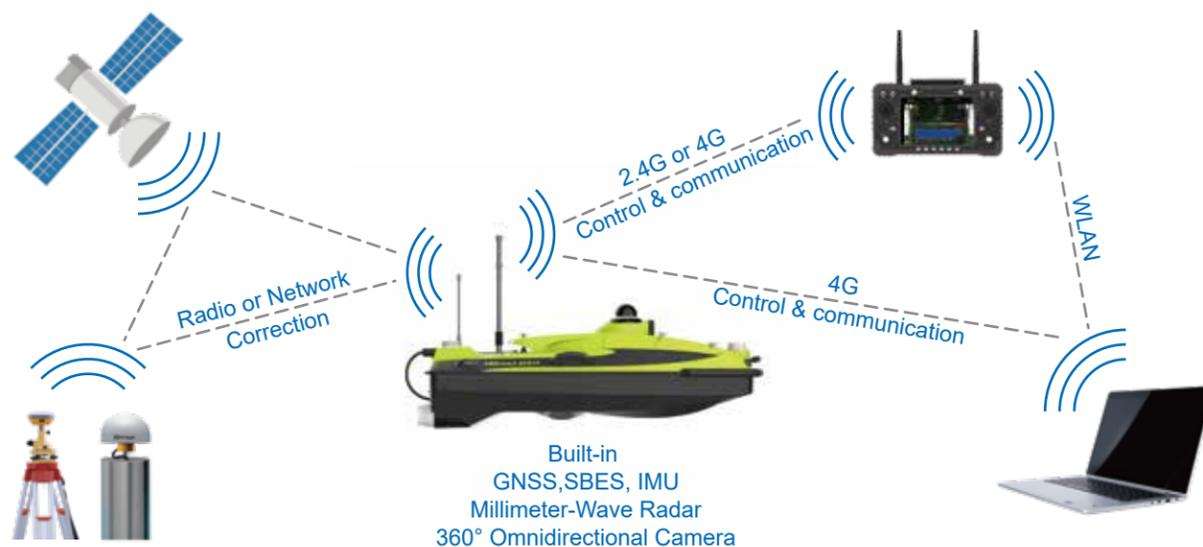
The iBoat BS12, a visionary creation by Hi-Target, emerges as the embodiment of sophistication and simplicity, expertly designed for effortless operation across a multitude of applications.

Engineered with the latest CFD technology and boasting a sleek carbon fiber and Kevlar hull, the iBoat BS12 is as tough as it is elegant. Its corrosion-resistant construction ensures durability in even the harshest conditions. Matched with the newly developed boat control system and a robust 40km range battery, it achieves a remarkable top speed of 6 m/s, all while maintaining stability in tumultuous waters. For precise navigational accuracy, the integrated IMU offers sub-meter positioning capabilities when losing satellite signals.

This autonomous vessel is your ultimate partner for a wide range of tasks, offering compatibility with leading devices such as ADCP, side-scan sonar, dual-frequency sounder, multi-parameter water quality meters, image sonar, and more. Whether you require precise current measurements, bathymetry, underwater surveys, or water quality assessments, the iBoat BS12 stands ready to meet your every need.



WORKING PRINCIPLE



FEATURES

Revolutionized Control System



- Real-time position and bathymetry data backup
- Easily import and plot tracks for seamless navigation
- Trajectory tracking and hovering with adaptive water flow
- Get collision and shallow water warnings for added safety
- 2.4G and 4G dual-channel connectivity makes no limitation on control distance
- USV configuration and data collection can be all done in the software

Seamless Integration and Expansion

- IMU module to compensate for positioning accuracy
- Millimeter wave radar for collision prevention
- 360° Omnidirectional camera for recording photos and videos
- Both GNSS and bathymetry data can be input to ADCP or SSS to improve their accuracy.
- Exceeds IHO special order, CHS exclusive order & USACE New Work



APPLICATIONS

