

iBoat BS12

Android-powered Multi-function USV



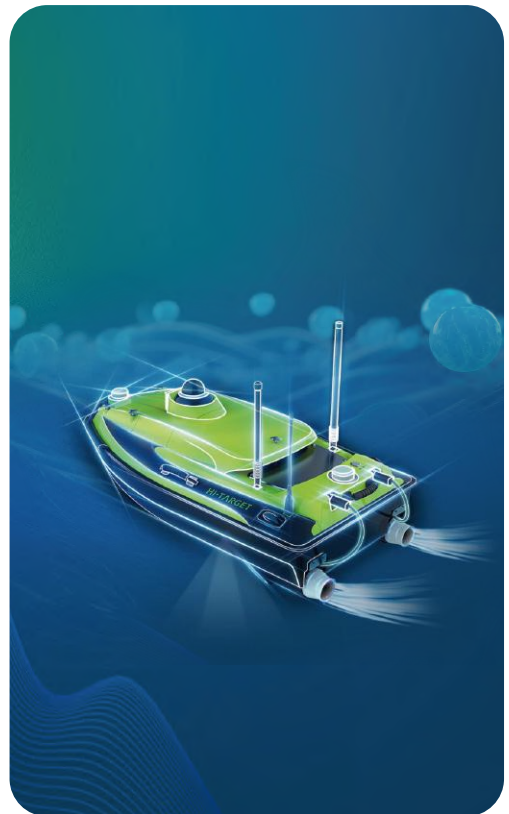
Frequency

iBoat BS12

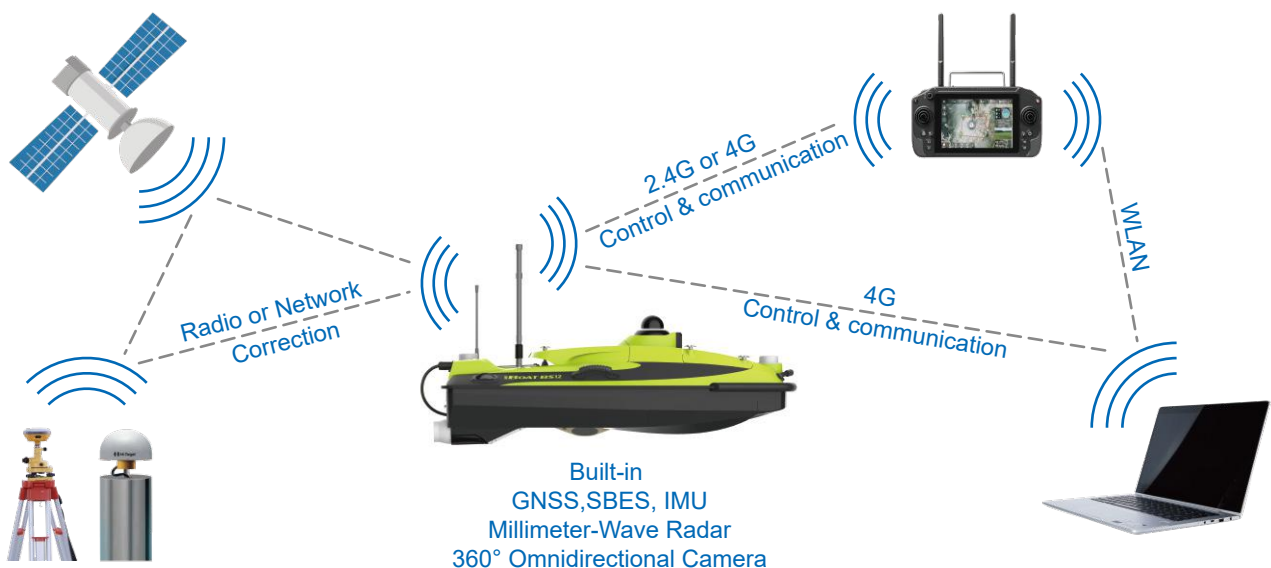
The iBoat BS12, a visionary creation by Hi-Target, emerges as the embodiment of sophistication and simplicity, expertly designed for effortless operation across a multitude of applications.

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 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, 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



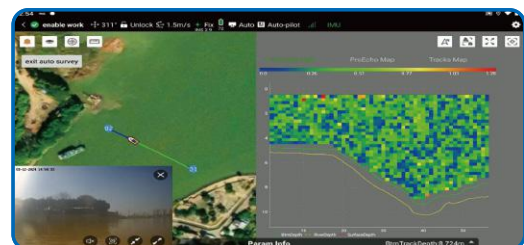
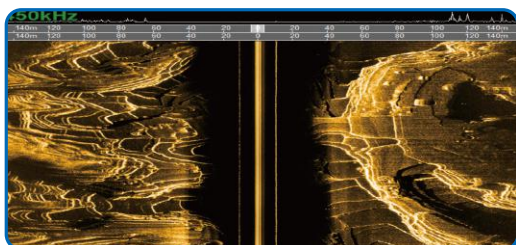
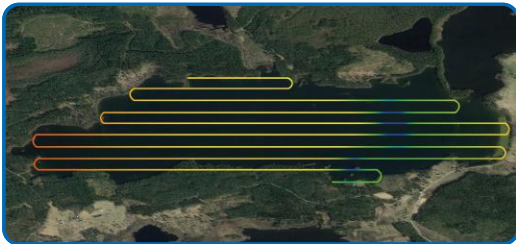
- Real-time position and bathymetry data backup
- Easily import and plot tracks for seamless navigation
- Trajectory tracking and hovering with adaptive water flow
- Get collision and shallow water warnings for added safety
- 2.4G and 4G dual-channel connectivity makes no limitation on control distance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



Vehicle Specifications	Hull dimension (L × W × H)	1185 mm*593 mm*397 mm		
	Weight	25kg (No Battery)		
	Max Load	25kg		
	Material	Carbon fiber (optional Kevlar) , Rubber Bumper		
	Anti-wave & Wind	3rd Wind Level & 2nd Wave Level		
	IP Rating	IP67		
	Indicator light	Two-color light		
	Camera	360° omnidirectional video		
	Anticollision sensor	Detection distance 10-30 meters		
	Propeller	2*Brushless Propeller		
	Direction control	Veering without steering engine		
	Maximum speed	6m/s		
	Battery endurance	One battery 4.5h with 1.5m/s, total 2 batteries		
Controller	System	Android System		
	Software	Hi-Survey Boat		
	Control range	1.3km on 2.4GHz; Unlimited on 4G		
GNSS Performance	Satellite system	GPS, BDS, GLONASS, Galileo		
	RTK Positioning accuracy	H: ±8mm + 1 ppm RMS V: ±15mm + 1 ppm RMS		
	Heading accuracy	0.2° @1 m baseline		
	INS accuracy	2.1°/h, <1m/20s		
	Refresh Rate	200Hz		
Single beam echo sounder		Single frequency(standard)	Dual frequency(optional)	
	Frequency	200kHz	200kHz	24kHz
	Beam angle	6.9°±2°	6.9°±2°	34.1°±3°
	Depth range	0.2-200m	0.2-200m	0.8-600m
	Accuracy	±1cm+0.1%h	±1cm+0.1%h	±10cm+0.1%h
	Resolution	1cm	1cm	10cm
Software		Mission planning		
		Vessel Monitoring		
	Hi-Survey Boat (Android controller)	Coordinate conversion		
		Bathymetric data acquisition		
		Bathymetric data download		
		Bathymetric data processing		
	HiMAX (Windows system)	Bathymetric data correction		
		Bathymetric data export		
Expandable Sensors	Acoustic Doppler Current Profiler			
	Water Sampler			
	Side-scan Sonar			
	Multi-parameter Water Quality Meter			



AUTHORIZED DISTRIBUTION PARTNER

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