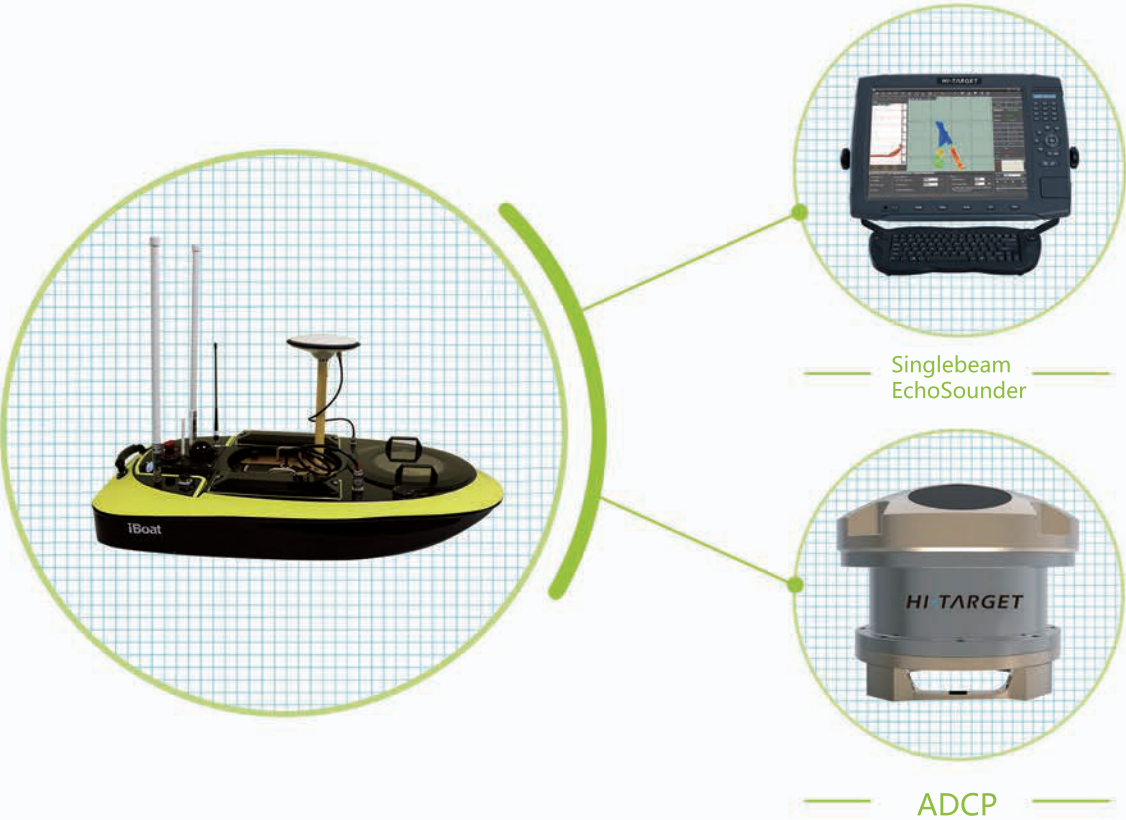
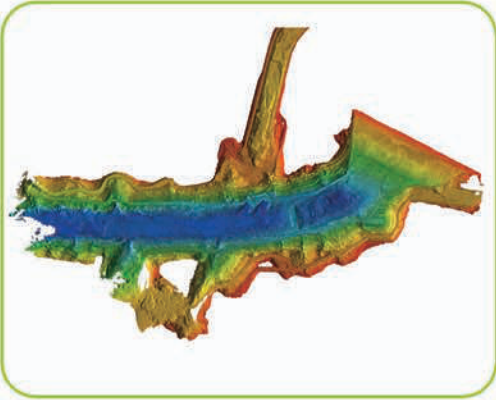


System Extension

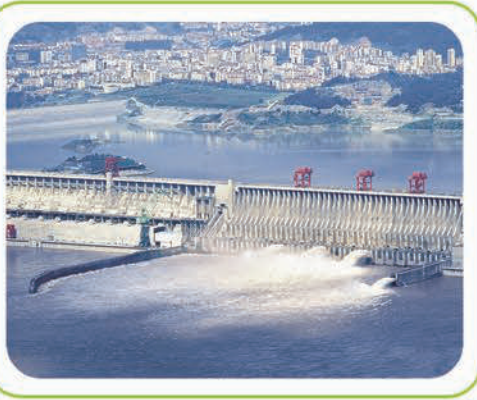
Multiple applications,available for singlebeam echosounder,ADCP,etc.



Applications



Underwater topographic surveying



Hydrographic surveying

● Technical Specifications

Hull Parameters	Dimensions	1047mm×555mm×190mm
	Weight of base boat	14KG
	Hull material	Kevlar & carbon fiber high-strength composite
	Boat shape	Double-M streamline design , low barycenter , small resistance
	Anti-wave&wind	3rd wind level and 2nd wave level
Power and Eletrical Parameters	Battery endurance	4 hours at 2m/s
	Top speed	4.5m/s
	Propulsion	Brushless DC outdrivers
	Propeller type	Two ducted propellers
	Direction control	Veering without steering engine and sailing reversely
Safety Guarantee	Auto-return	Auto-return while low battery or dropped signal
Ashore Base	Operating system	Supporting Windows and Android(Laptop or pad available depending on necessity)
	Communicating mode	RF point to point in real-time
	Transmission distance	Wireless bridge 2km (5Km、10Km、15Km optional)
Intelligent Controller	Navigation mode	Manual or autopilot ,switchover at any time
	Communicating mode	RF point to point in real-time
	Reacting distance	2Km
	Waterproof grade	IP65
	Function	Work mode switch in real-time, basic information display of USV in real-time,velocity and direction control of USV
Sounding Performance	Work frequency	200KHz
	Beam angle	5°±0.5°
	Sounding range	0.15~300m
	Sounding resolution	1cm±0.1h (h=depth) , 1cm depth resolution
Location Accuracy	RTK	Horizontal : ±8mm+1ppm RMS Vertical : ±15mm+1ppm RMS
	Beacon (optional)	0.5m (1δ)
	SBAS	1.0m CEP
System Software	Hull control system	Autopilot,hull parameter control,coordinate conversion and 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 and etc.

Descriptions and specifications subject to change without notice.

Hi-Target AUTHORIZED DISTRIBUTION PARTNER

Hi-Target Surveying Instrument Co., Ltd.

ADD: Building 13, Tian'An Technology Zone HQ Center, No. 555, the North of Panyu Rd, Panyu District, 511400 Guangzhou, China.
TEL: +86 20 2288 3944 E-mail: info@hi-target.com.cn www.hi-target.com.cn

iBoat BSI
Intelligent Surveying USV

- Portable Double-M design with ducted propellers
- Manual or autopilot ,switchover at any time
- Professional sounding module range up to 300m
- Auto-return while low battery or dropped signal

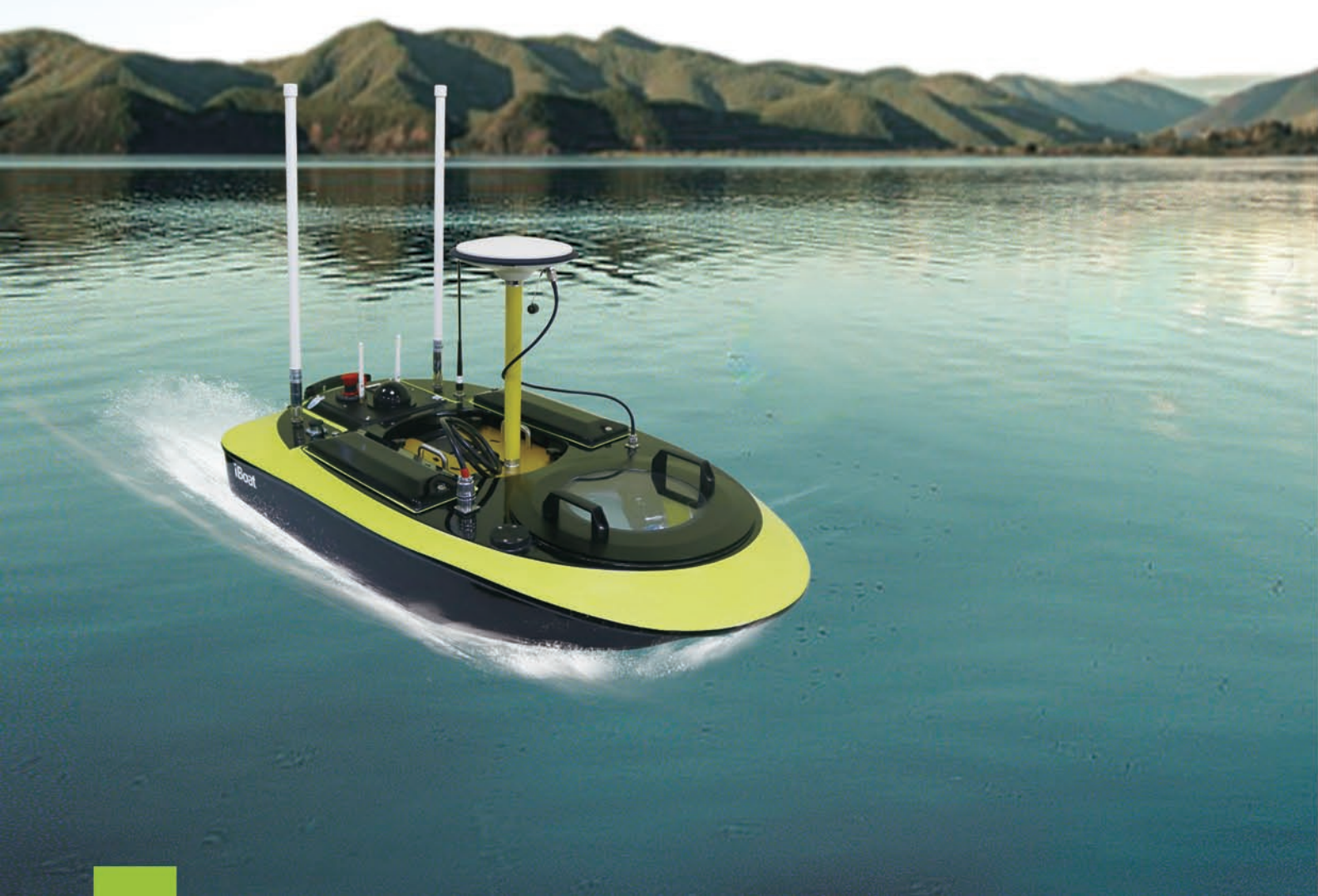


System Introduction

The Double-M shape design applied on iBoat BS1 equips the vehicle with many advantages such as light hull,high speed,high anti-wave performance,easily changeable batterys,etc.

The vehicle propellers are driven by brushless DC motor while the ducted design protects it from aquatic plants and twining of fishing net.

The USV makes great sense in underwater topographic surveying and hydrographic surveying in areas such as inland channels,lakes and reservoirs equipped with GNSS system,singlebeam echosounder or ADCP.



System Composition and Features

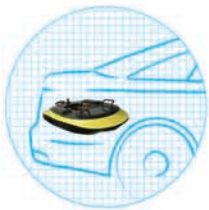
Professional hull design,high-performance sounding module,high-accuracy location module.Controlling,collecting and processing softwares are all independently designed and researched by Hi-Target. High integration and outstanding holistic performance adding perfect after-sales service provide you with one-stop service.

Hull Structure

Double-M shape hull
Streamline design



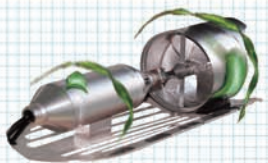
Only 14 KG weight
Small and portable hull convenient for transmission
Available placement in the car trunk



Kevlar & carbon fiber high-strength composite ,resistant to impact



Power System



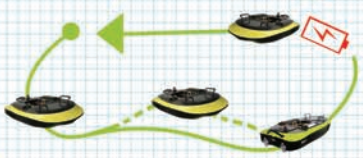
Propellers are applied with ducted design and protective shield outside to prevent aquatic plants and fishing net from twining.



Parallellled level with the boat and convenient for transmission and placement.



Maximum speed at 4.5m/s with two ducted propellers.



Auto-return while low battery or dropped signal .

Base System



Industrial controller is of easy use with one key to switch between manual and automatic mode while control distance reaches 2 Km.



Applying directive antenna,communicating distance is more than 2 Km.



Automatic operation,automatic navigation,auto-return to fixed point and switch between manual and automatic mode at any time.

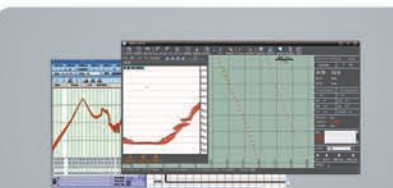
Surveying System



The Hi-Target HD-MAX 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 devices support BDS location equipped with multiple communicating modes including UHF radio , beacon and SBAS.



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