



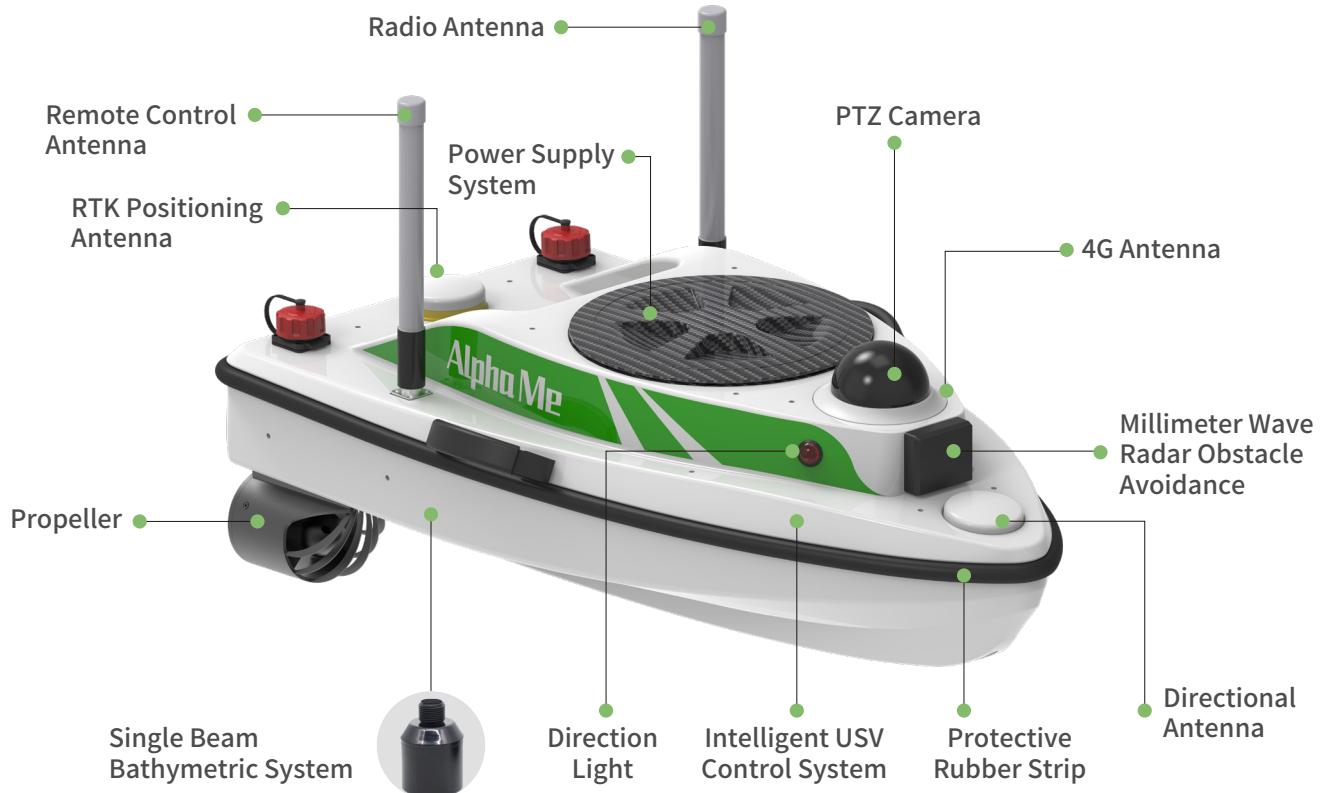
# Alpha Me

## Alpha Efficient USV

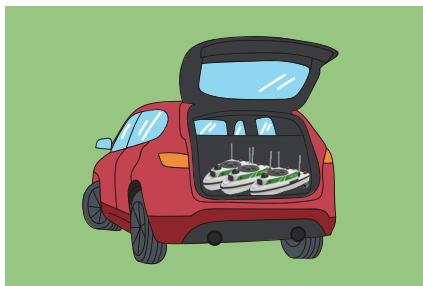
Length 80cm | Weight 15kg | Max 20 knots | 6h Working time



# Alpha Efficient USV



## Portable



80×40×23cm, Easily transported by vehicle

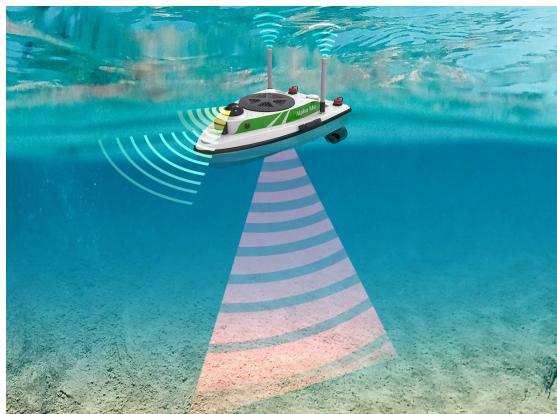


Weigh only 15kg and can be carried by one hand, 12kg without battery



1m long trolley case, convenient for deployment, transfer and business trip

# Make it useful



## High Speed

Regular version 6m/s (10 knots),  
high-speed version 10m/s (20 knots)



## Ultra-long battery life

One battery can work for 6 hours under  
speed of 1.5m/s



## Automatic obstacle avoidance

40m millimeter-wave radar obstacle  
avoidance sensing, slowing down and  
automatically bypassing within 10m



## PTZ Camera

Dual-axis PTZ HD camera, optional  
three-axis 360° camera



## Quick release propeller

Specially designed dual-duct high-power  
propeller, designed for quick on-site  
disassembly and replacement



## Smart Upgrade

Automatic reversing in shallow water,  
PPK post-processing, online position  
tracking



## Turn in Place

Lightweight and flexible, no turning  
radius required, can turn around in a  
narrow environment



## Free to expand

55 pre-embedded inserts to support  
deck, side, stern and bottom  
expansion

# Integrated USV control software



Multifunctional remote control with screen, 5.5-inch high-brightness touch screen, digital and image transmission, remote control 1.5km, radio 2km, Android operating system, built-in integrated USV control software, one software can realize all functions required for water operations such as route planning, parameter setting, hull control, data display, status display and results export; user-defined maps can be imported, and satellite remote sensing image base maps can be loaded after networking; routes are automatically generated, and navigation missions, navigation mission breakpoint continuation, automatic return, and automatic cruise are executed.

## Simple operation process



1. Install the battery and antenna



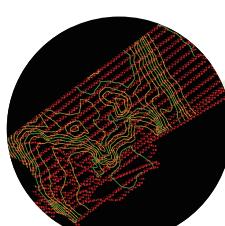
2. USV and RTK setting



3. Plan routes and execute tasks



4. Return & Data output



5. Result achievement

## Professional set

Hull	× 1
USV control system	× 1
Propeller (High-speed version can be customized)	× 2
Positioning and navigation system	× 1
HD camera	× 1
Millimeter wave obstacle avoidance radar	× 1
Built-in single beam sonar depth sounder	× 1
Dual joystick Android LCD remote control	× 1
Battery	× 1
Charger	× 1
Communication Antenna	× 2
GNSS Antenna	× 2
Box	× 1

## Customization



Supports high-speed version customization; supports camouflage and other hull painting customization; supports deck extensions such as warning lights, loudspeakers, launch pads, flags, first aid kits, stern extensions such as tail plates and unhookers, side extensions such as wing and sonar arrays, bottom extensions such as forward-looking sonar, side-scan sonar, fish finders and underwater cameras.

## Technical Specification

<b>Hull</b>	Dimension	800*400*227mm
	Material	Polymer composite materials
	Net weight	15kg
	Maximum load	10kg
	Wind and wave-resistant	Level 5 wind, level 4 wave
<b>Single Beam</b>	Frequency	200KHz
	Sounding range	0.2-120m
	Accuracy	1cm±0.1%h (h the water depth)
<b>Obstacle Avoidance</b>	Beam angle	8°
	Video	Standard HD camera
	Millimeter wave radar	40 Meter
<b>Power</b>	Propeller	High-speed ducted propeller*2 (supports optional high-speed version)
	Power indicators	Single motor with 7kg thrust, with 2 motors
	Top Speed	6m/s, high speed version 10m/s
	Propeller installation method	Semi-embedded, anti-scratch
	Power	24V, 40Ah lithium battery
	Battery life	6h (1.5m/s)
<b>Position and Orientation System</b>	Battery installation method	Removable
	Satellite system	GPS: L1C/A, L1C, L1P, L2C, L2P, L5 BDS: B1I, B2I, B3I, B1C, B2a, B2b GLONASS: G1, G2, G3 Galileo: E1, E5a, E5b QZSS: L1C/A, L1C, L2C, L5
	RTK	Built-in GNSS Receiver
	Positioning accuracy	Horizontal: $\pm(8+1\times10^{-6}D)$ mm, Vertical: $\pm(15+1\times10^{-6}D)$ mm
	Orientation System	High-precision three-dimensional electronic compass Two GNSS Antenna Orientation
<b>Communication</b>	RTK communication	built-in radio, 4G network
	Remote control communication	2.4GHz
	Radio distance	Radio station 2km (typical environment)
	Remote control	Remote control 1.5km (typical environment)
<b>Indicator</b>	Navigation Lights	Red light on the left, green light on the right
	RTK Status	Red and green status indicator
<b>Transport box</b>	Transport box	Industrial Equipment Trolley Case

\*The above technical parameters are for your reference. The company reserves the right to change the design and planning of the product based on the actual product.



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