

ROBUST

ALPHA

ME

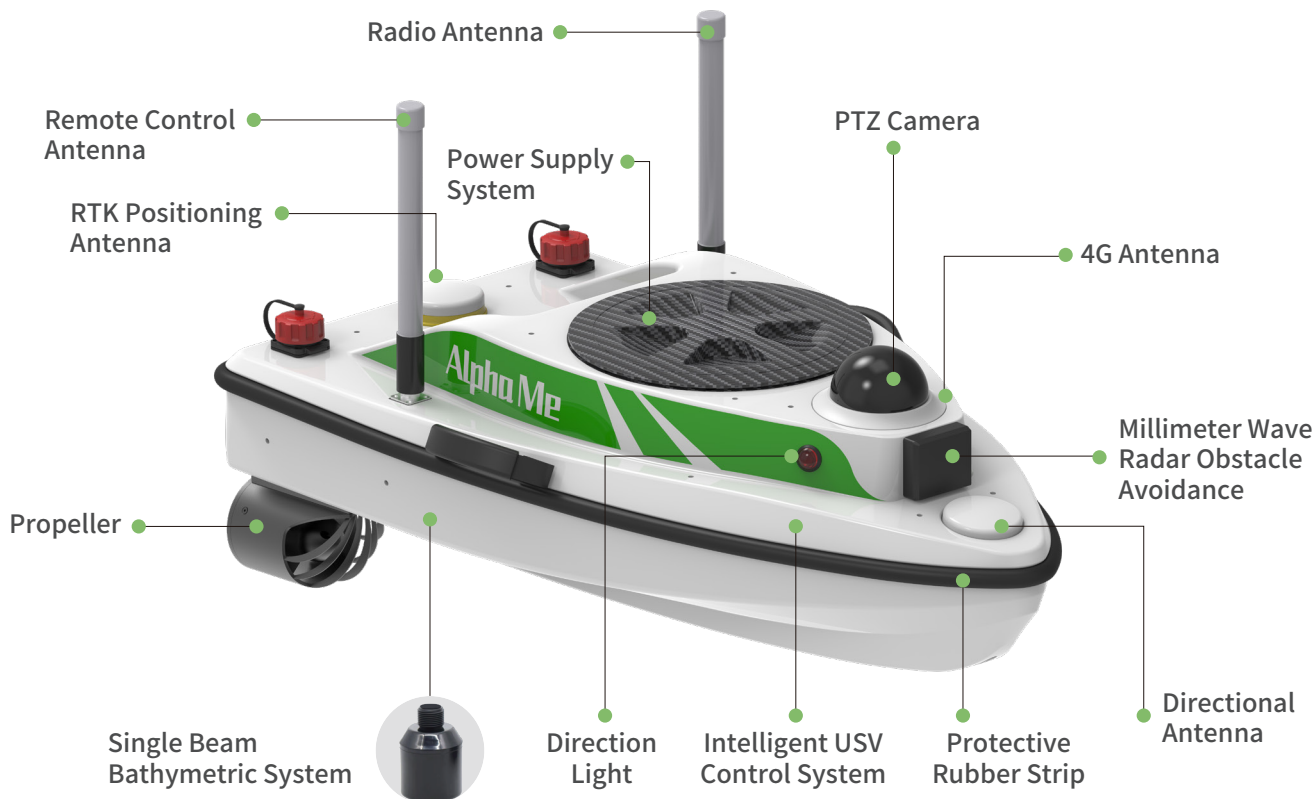
robust Lite Weight Intelligent USV

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

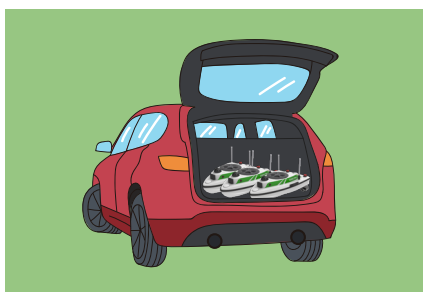


ROBUST Lite Weight Intelligent USV

ROBUST Me is an innovative new USV. With Alpha Surveying's continuous investment in R&D and the application iteration of surveyors and users at home and abroad, it has achieved a comprehensive breakthrough in fluid power, endurance, volume, weight, and intelligence. Making the most useful USV is one of the company's product goals.



Portable



80×40×23cm, Easily transported by vehicle

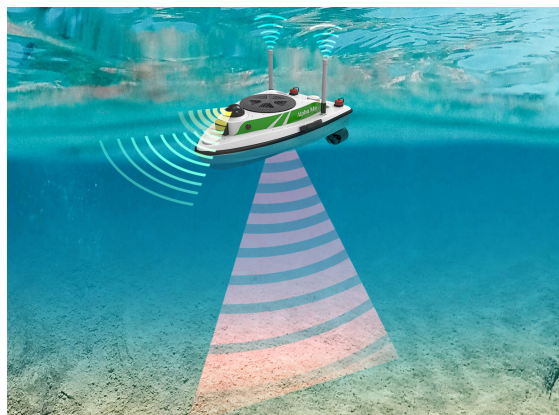


Weigh only 15kg and can be carried by one hand, 12kg without battery



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

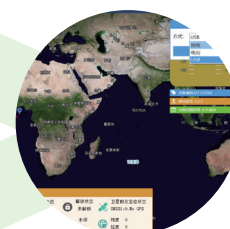


Multifunctional remote control with screen, 5.5-inch high-brightness touch screen, digital and image transmission, remote control 1.5km, radio 2km, Android operating system, built-in integrated USV control software, one software can realize all functions required for water operations such as route planning, 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.

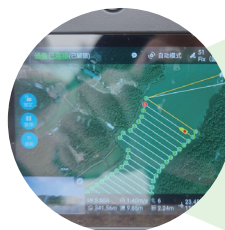
Simple operation process



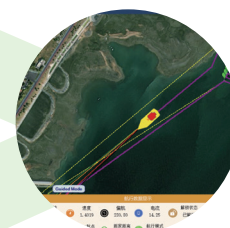
1. Install the battery and antenna



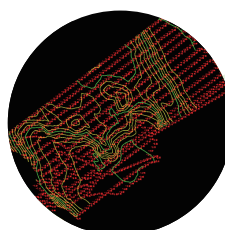
2. USV and RTK setting



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

Hull	Dimension	800*400*227mm	
	Material	Polymer composite materials	
	Net weight	15kg	
	Maximum load	10kg	
Single Beam	Wind and wave-resistant	Level 5 wind, level 4 wave	
	Frequency	200KHz	
	Sounding range	0.2-120m	
	Accuracy	1cm±0.1%h (h the water depth)	
Obstacle Avoidance	Beam angle	8°	
	Video	Standard HD camera	
Power	Millimeter wave radar	40 Meter	
	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)	
	Battery installation method	Removable	
	Position and Orientation System	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: ±(8+1×10 ⁻⁶ D)mm, Vertical: ±(15+1×10 ⁻⁶ D)mm	
Orientation System		High-precision three-dimensional electronic compass Two GNSS Antenna Orientation	
Communication	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)	
Indicator	Navigation Lights	Red light on the left, green light on the right	
	RTK Status	Red and green status indicator	
Transport box	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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