



Alpha Surveying

Alpha Mi

Alpha Mi Survey USV

Light and portable | Highly integrated | Extensive and high-precision surveying



Alpha Mi USV for surveying

Alpha Mi is exclusively designed for single-person measuring work of lakes and rivers. Trimaran design ensures stable sailing and is used in conjunction with dual pumpjet thruster, RTK, single beam, HD image, and intelligent ship control are integrated for more convenient and high precision underwater measurement.



Easy Work For Even One Person

The size of an alpha Mi is only 900×500×340mm, the whole set of which can be carried by one single person without difficulty. The hull can be easily put into a car trunk. A single worker is able to quickly conduct his hydrographic survey as soon as the battery and the antennas are installed





Convenient Operation

The boat is ready for measuring work from one site to another within minutes



Working Time

Customized working time, 4-5 hours for 1 battery



Dual Pumpjet Thrusters

Equipped with high-speed thruster, the top speed is up to 6m/s and is able to work in torrent.



4G For Remote Control

4G network brings unlimited control distance



Single beam Echosounder

Equipped with highly sensitive echosounder that enables it to work in shoal, the shallowest of which is 0.3 meter



Protection

Streamline slope design at the bottom of the boat plus blade-like filter and pump protect the vehicle from being entangled by aquatic plants

Integrated Software System

The alpha software system is a software solution used for route planning, parameter setting, hull control, data display, status display and data export, etc. Customized maps and satellite image maps can be imported or downloaded when the network is working. The software system is able to automatically generate routes, execute navigation tasks, continue navigation task after breakout and finally return to the place of departure.



Professional set



| | |
|---------------------------------------|----|
| Hull | ×1 |
| Propeller | ×2 |
| Intelligent hull control | ×1 |
| Built-in RTK | ×1 |
| Built-in HD camera | ×1 |
| Built-in single-beam echo-sounder | ×1 |
| Dual rocker android remote controller | ×1 |
| High performance water-proof battery | ×1 |
| Charger | ×1 |
| Communication antenna | ×2 |
| GNSS antenna | ×2 |
| Network antenna | ×1 |
| Radio antenna | ×1 |
| Carrying Case | ×1 |
| Life jacket | ×1 |
| Tool kit | ×1 |
| Instruction manual | ×1 |

Technical Specification

| | | |
|---------------------------------|------------------|---|
| Physical | Dimension | 900×500×340mm |
| | Material | Polymer material |
| | Design | M-type trimaran |
| | Weight | 16kg |
| | Max Payload | 20kg |
| Echosounder | Anti Wind&Wave | Level 4 |
| | Range | 0.3m-120m |
| | Accuracy | 1cm±0.1%height |
| | Resolution | 1cm |
| Obstacle Avoidance | Beam angle | 7.5°±0.5° |
| | Video | 1080HD |
| Power | Thruster | DC pumpjet thruster |
| | Propeller | 3-piece aviation aluminum alloy paddle |
| | Protection | Double protection from aquatic plants |
| | Speed | Top speed 6m/ s |
| | Battery | 22.2V 30Ah |
| Position And Orientation | Working time | 4-5h(1.5m/s), customized 8-10h |
| | Satellite | GPS: L1C/A, L1C, L1P, L2C, L2P, L5、 BDS: B1I, B2I, B3I, B1C, B2a、 GLONASS: G1, G2, G3、 Galileo: E1, E5a, E5b、 QZSS: L1C/A, L1C, L2C, L5 |
| | RTK | Built-in GNSS receiver |
| | Accuracy | Horizontal: ± (8+1×10 ⁻⁶ D) mm, Vertical: ± (15+1×10 ⁻⁶ D) mm |
| | Channel | 432 |
| Communication | Orientation | Three-dimensional electronic compass Dual GNSS antenna |
| | RTK | Built-in radio and 4G network |
| | Video | 5.8GHz |
| | Remote | 5.8GHz |
| | Control Distance | Unlimited by network, 2Km by radio (Typical Environment) |

*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.

Guangzhou Alpha Surveying Technology Co.,Ltd.

📍 NO.9 Caipin Road, Science City Huangpu District, Guangzhou

☎ +86-20-82108930

🌐 www.alpha-surveying.com