

ME120

HYDROGRAPHIC SURVEY USV



10 KN

Max. Speed

8h @ 4KN

Endurance

60 KG

Payload



MBES



Water Probe



Side Scan Sonar



ADCP

The ME120 is designed for autonomous hydrographic and oceanographic surveys from inland waters to coastal areas. Compatible with small multibeam sonars as well as other survey instruments, the convertible catamaran design can be easily assembled and disassembled, quickly changing and installing different instruments during a survey, and transported by van.

Application Scenario

Hydrographic Survey and underwater inspection in lakes, rivers, harbors, construction sites, tailing dams, hydropower plants, reservoir etc.

Key Features

- 1 Intelligent route planning Autonomous navigation collision avoidance
- 2 Catamaran hull enhances sailing stability and data quality
- 3 Auto wet-end lifter to protect instruments and improve sailing speed
- 4 Easy to maintain: batteries, instruments and engines can be quickly replaced
- 5 Modular design for quick transportation and deployment
- 6 Mobile online survey, can return video and acoustic data in real time

SPECIFICATIONS

Physical

Dimension	2.5m(L)*1.4m(W)
Weight	160kg (without the lifter)
Payload	60kg
Draught	0.45m
Hull Material	Carbon fiber composite

Power & propulsion

Propulsion	Duct type thruster
Power	50AH,4 Units

Performance

Survey Speed	4kn
Maximum Speed	10kn
Endurance	8h @ 4kn
Real-time Video	Yes
Collision Avoidance	Millimeter Wave Radar

Communication

2km 5.8Ghz (Optional 5km 1.4Ghz)

INTEGRATIONS

Single Beam Echo Sounder

Compact Multibeam Echo Sounder

Inertial navigation system

Lidar

ADCP

RTK GNSS receiver

Multi parameters water probe

etc.

CASE APPLICATION



UNMANNED BOAT APPLIED IN BRINE LAKE OF HIGH SALINITY

EQUIPMENT USED:

ME120 USV, Single-beam depth sounder

RESULT:

ME120 joined the national potash mining project conduct routine bathymetry surveys in Brine Lake which the salinity is ten times of seawater. The anti-corrosion and anti-salt spray capabilities of USV successfully met this huge challenge. At the same time, the smooth communication of video and data can be well achieved through the private network of the USV, regardless of the poor public network communication in the remote Tarim Basin.