

| MODEL |  M20 |  M10 |
|-----------------------------------|---|---|
| PHYSICAL | | |
| Dimension (LxWxH) | 1180x700x390 mm | 950x500x350 mm |
| Payload | mini Single-frequency Echo Sounder (default), plus ADCP, Sub-bottom Profiler, Side Scan Sonar, Multi-beam Echo Sounder, etc. | mini Single-frequency Echo Sounder (default) only |
| Material | Nano carbon fiber polymer composite | |
| IP Rating | IP67 | |
| Wind-wave Resistance | Gentle breeze, smooth wavelet | |
| Telecom Interface | Nano SIM card slot available | |
| System Assembly | Modular, plug-in | |
| ELECTRICAL | | |
| Video Communication | 4G telecom & network bridge | |
| Motor Engine | High-efficiency culvert long-life brushless motor | |
| Motor Power | Typical 850W each | |
| Battery | Portable and detachable high-performance ternary Lithium battery, 33V, 45000mAh | |
| Endurance | 5.5 hrs @2m/s | 7 hrs @2m/s |
| | single battery, long-life option available) | |
| PERFORMANCE | | |
| Propulsion | Electric drive | |
| Cruise Speed | 7m/s max. | |
| Steering Mode | Steering engine free, differential steering, reversible | |
| Default Echo Sounder | Built in, highly integrated with transducer, fully automatic operation after power connection. Operating frequency 200kHz, beam angle 5°, sounding angle 0.15-100m (upgradeable). | |
| Optional Echo Sounder | Operating frequency - high frequency≥200kHz, low frequency≤20kHz; beam angle – high frequency≤5°, low frequency≤20° ; sounding angle – high frequency 0.15-300m, low frequency 0.5-600m | N/A |
| POSITIONING | | |
| GNSS Antenna | Dual antenna, pre-installed in front and rear individually | |
| GNSS Constellation | GPS, Glonass, Galileo, Beidou-2, Beidou-3, Beidou-PPP, IRNSS, QZSS, SBAS, L-band, etc. | |
| Single-point Positioning Accuracy | H ≤ 1.5m, V ≤ 2.5m | |
| Beidou-PPP Accuracy | < 10cm, optional | |
| RTK Accuracy | H: ±(8+10-6×D)mm, V:±(15+10-6×D)mm. D refers to baseline length, unit: km. | |
| IMU Onboard | Supports GNSS-inertial, 1PPS, IMU refresh rate 200Hz max. | |
| IMU Performance | Heading accuracy 0.15°@1m baseline, orientation accuracy 0.25°@1m baseline | |

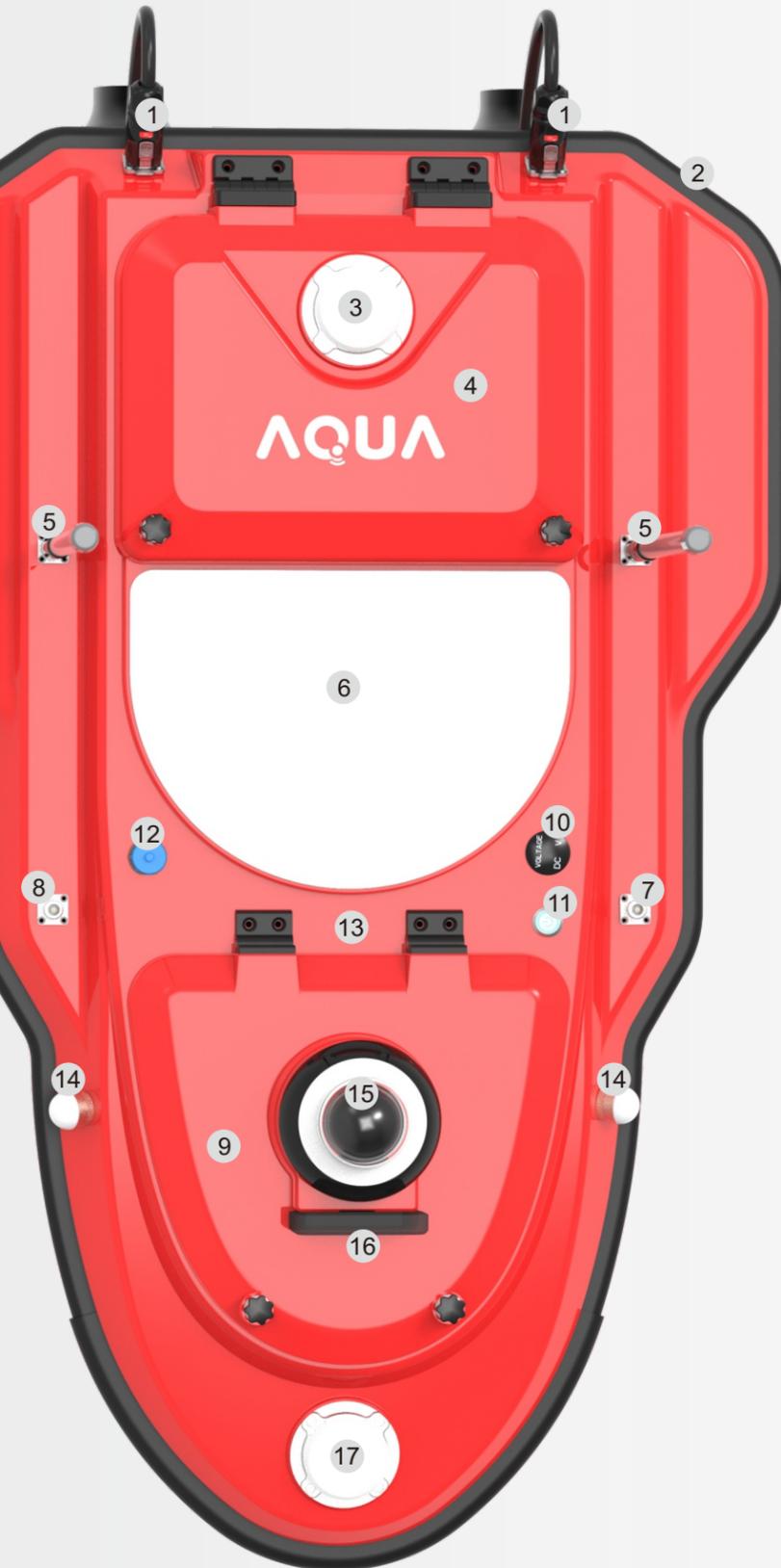
AQUA M20/M10

Built for Marine Unmanned



Note: all information above is subject to change without any prior notice.

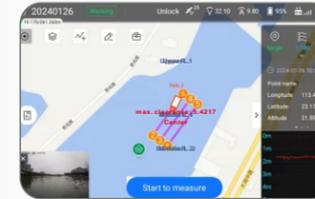
ILLUSTRATION



- 1 **Dual Ducted Propeller**
double propulsion system for powerful cruise
- 2 **Double-decker Trimaran**
smart structural design for reliable and stable cruise
- 3 **Rear GNSS Antenna**
works with inbuilt GNSS for precise positioning
- 4 **Auto-pilot System**
excels in unmanned operation
- 5 **Network Bridge Antenna Port**
talks with remote controller to transfer data
- 6 **Specialized Moon Pool**
ready to fit a variety of payloads like ADCP, multi-beam
- 7 **4G Telecom Antenna Port**
equipped for RTK corrections and vessel remote control
- 8 **Radio Datalink Antenna Port**
communicates with base station for RTK corrections
- 9 **Battery Compartment**
endurance around 5 hours in auto-pilot mode
- 10 **Power Display Panel**
for direct voltage value reading
- 11 **Device Power Switch**
one-key quick start
- 12 **Recharge Port**
standalone or direct onboard charging, optional
- 13 **Mini Echo Sounder F18S**
single frequency, built in as default
- 14 **Double-sided Guide Light**
blinks in green against mission safety
- 15 **World-famous 360° Camera**
provides pano view during missions
- 16 **Millimeter Microwave Radar**
designed for obstacle avoidance
- 17 **Front GNSS Antenna**
provides stable heading info for auto-pilot
- 18 **Remote Control Unit**
mission planning and control all in one



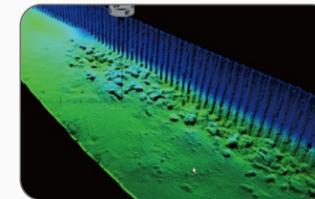
SOFTWARE



Auto-pilot



Satellite Map



Multi-beam Mapping



Obstacle Detection



Dredging Works



Underwater Bathymetry

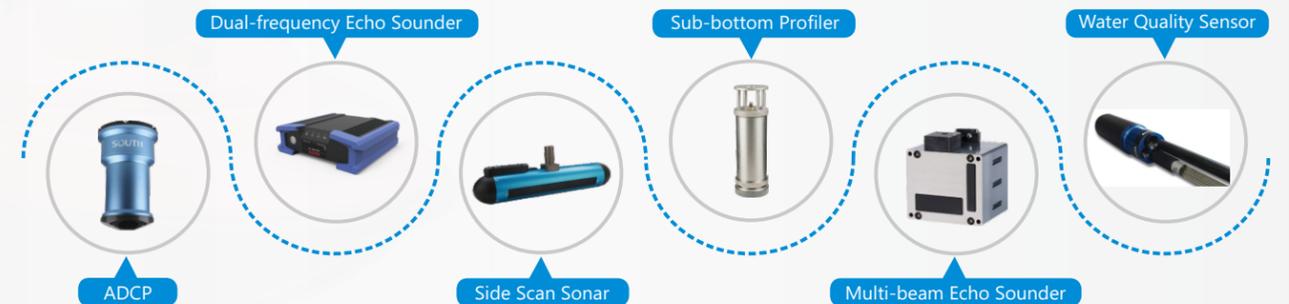


River Measurement



Hydrology Investigation

PAYLOADS



Dual-frequency Echo Sounder

Sub-bottom Profiler

Water Quality Sensor

ADCP

Side Scan Sonar

Multi-beam Echo Sounder

CONFIGURATION

| | |
|----------------------------|----|
| USV hull | x1 |
| inbuilt echo sounder mini | x1 |
| integrated microwave radar | x1 |
| integrated 360° camera | x1 |
| integrated GNSS antenna | x2 |
| network bridge antenna | x2 |
| 4G telecom antenna | x1 |
| radio datalink antenna | x1 |
| battery charger | x1 |
| remote controller | x1 |
| remote controller charger | x1 |
| transport case | x1 |
| software dongle | x1 |

Note: just take M20 for example above.

