



SWALE OCEANOGRAPHIC

Unmanned Surface Vehicles - USV



M80 – Multi-Functional Off-Shore Boat

The M80 is the most capable of the OceanAlpha autonomous boats, Capable of surviving Sea State 5 and allowing operations in Sea State 3. It enables efficient and safe hydrographic and oceanographic surveys with a choice of optional features and functions. Lidar, ADCP, Multi-Beam, Side Scan Sonar or Sub-Bottom profiler may be fitted.

Length:	5.65m
Beam:	2.4m
Draught :	0.4m
Operating conditions:	Sea State 3
Maximum speed:	12 knots
Endurance:	50 hrs @ 6 knots
Payload:	150Kg



Features

- Automatic Identification System (AIS)
- Autonomous navigation by GPS waypoints or remote control
- Modular design – flexible configuration.
- On-board profiling winch
- 1st Person view video (live telemetry)
- Collision avoidance radar (75m range)
- Real time data
- Robust aluminium hull



Applications

- Bathymetric survey
- Hazard location
- Hydrographic mapping
- Oceanographic Measurements

- Pipeline Survey
- Security patrol
- Under-water searches
- Water quality / pollution monitoring

Intelligent Navigation System

- Simple way-point programming
- Autonomous navigation algorithm
- High accuracy GNSS (RTK-GPS)
- High accuracy gyro for inertial navigation system
- Automatic obstacle detection and avoidance

Real-time communication

- Operation, attitude and mission status of USV
- Measurement data of hydrology, water quality and others
- Real-time video with WiFi and 4G LTE

Professional Hull Design

- Durable Aluminium
- Trimaran design ensures stability
- Anti-corrosion, sealed & waterproof
- Compact, light, reliable and convenient

Endurance

- Diesel Engine
- Water-Jet Thrusters
- Long endurance (50 hours @ 6 knots)

Handheld Remote-Control

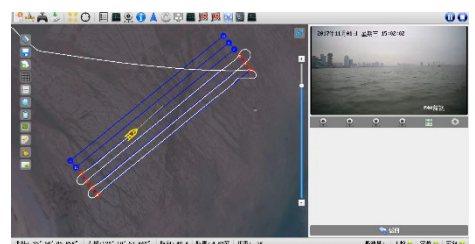
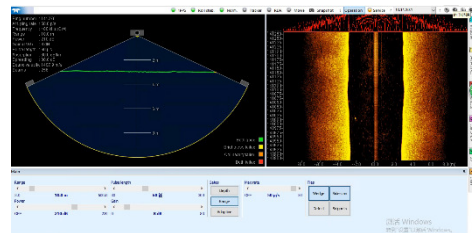
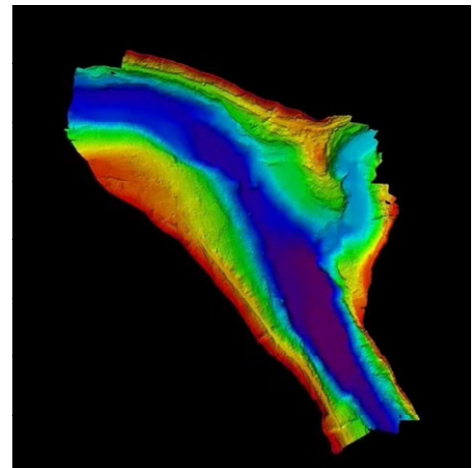
- Real-time communication
- Manual operation
- Mission assignment
- Status monitoring

Base Station

- Data storage and management
- Data analysis, Automatic report generation
- Distribution mapping
- Measurement data acquisition, display and storage
- Mission planning & reporting
- Optional relay station to extend communication range
- Real-time multi-angle video
- Satellite map download and management

Flexible Integration of Equipment

- ADCP
- Multi-Beam or Side Scan Sonar
- Sub-Bottom Profiler
- Laser Scanning System



SWALE TECHNOLOGIES Ltd

Unit 51G, Rm48 Whitehill & Bordon Enterprise Park, Budds Lane, Bordon, GU35 0FJ, UK
Tel: +44 (0)1420 473334 Email: Sales@swaletechnologies.com www.swaleocean.co.uk