

Geodrone 1800

Unmanned Surface Vehicle



GEOMATICS ENGINEERING SOLUTIONS



GEODRONE 1800

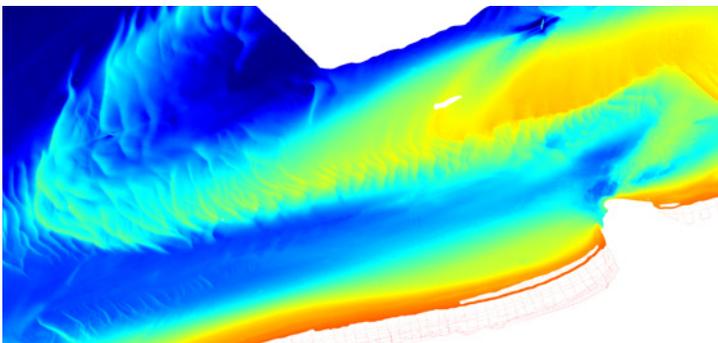
The Geodrone 1800 is a multi-mission, flexible shallow water USV and is easy to transport and deploy.

It is a multi-sensor platform which includes a single or multibeam echosounder, a winch to collect data into the water column until 30 metres and video links with deep learning capabilities.

The Geodrone 1800 endurance is more than 8 hours @ 1.2ms depending on the weather and sea conditions.

A hydrodynamic shape characterises the Geodrone 1800 design, which produces a stable platform for the survey and thereby delivers high-quality data.

An autonomised boat that can sail precisely in accordance with mission planning. A cutting edge technology which make the survey safe an affordable with a diversity of applications, all the while maintaining the highest standards of data quality.



TECHNICAL SPECIFICATIONS

Dimensions

Length, width, air draft, draught	1,80m 0,66m 0,80m 0,15m
Weight	22 Kg
Payload	20 Kg

Performance

Speed (max)	5 m.s
Speed (survey)	1.3 m.s
Motorisation	2 brushless motors

Power system

Battery	2 kWh ion-lithium battery
Endurance	8 hours at 1.3 m.s
Charging time	8 hours
Extra power	600 Wh

Communications

Radio R/C (remote control)	600m range 2,4GHz
Autopilot	Mission planning, automatic waypoint navigation, real-time feedback
Telemetry	2,4GHz radio
Telemetrie - options	Radio modem for long distance- GSM mode

IT options

PC NUC Windows	Core I7 pc
Immersive navigation (FPV)	Live remote control
Software	Compliant with all hydrographic solutions

Supervision options

HD Cameras	Forward and backward looking cameras
Video target detection	Target detection, identification (Artificial Intelligence)
Lidar	Laser scanning (100m)
AIS	AIS Transponder

Storage and transport options

Launch and recovery system	Cage
Cary bag	Soft bag for transportation in a regular car
Airtransportable	Heli Transportable

Survey Equipment

GNSS	SBG Apogee with integrated Septentrio receiver
Base station	Base and rover RTK GPS
IMU motion sensor	SBG Apogee
Sound Velocity	AML SV-Xchange
Multibeam sonar	Norbit WBMS
Singlebeam	Simrad EA400 210/33Khz
Modem	Robustel 4G Modem

Winch option

Winch system	Remote electrical winch for water column measurements (30m)
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Extra payload (can be installed on demand)
Singlebeam sonar, SVP, Multi-parameter equipment, ADCP, ...