Geodrone 3000
Unmanned Surface Vehicle

GEODRONE 3000

The Geodrone 3000 is a rugged, multi-mission, flexible, shallow water USV, design for complex coastal environments and harsh conditions.

It provides a 65 kg payload and a multi-sensor platform which is capable of integrating a number of survey sensors including a winch to collect data into the water column until 100 meters and telemetry/video links with deep learning capabilities.

The Geodrone 3000 endurance is more than 8 hours @2m/s depending of the weather and sea state conditions.

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.

SPECIFICATIONS

Dimensions
Length, width, air draft, draught	3,00m 1,17m 1,20m 0,65m
Weight	220 kg
Payload	65 kg
Moonpool	30x30cm

Performances
Speed (max)	7 m/s
Speed (Survey)	2 m/s
Motorisation	2x4000W (16HP) brushless inboard engine

Power system
Battery	2x5 kWh - 48V (Up to 10Kwh) lithium battery
Endurance	8h@1,5 m/s (2 batteries) extension
Charging time	9 hours
Kill switch	

Communications
R/C radio	2000m range, frequency 5 GHz
Wifi	3000m long range high bandwidth modem 2,4G
Autopilot	Mission planning, automatic waypoint navigation, real-time feedback
Telemetry	5 GHz radio
Telemetry- option	Radio modem for long distance - LTE

IT options
Computer in option	Rugged survey computer
Navigation(FPV)in option	Live remote control
Software	Compliant with the all the market hydrographic solutions

Supervision options
HD Cameras	Forward and backward looking cameras
Video target detection	Target detection
Lidar	Laser scanning (100m)
AIS	AIS Transponder option

Storage and transport options
Launch and recovery system	Cage

Survey Equipment
GNSS	RTK receiver L1 L2, multi constellation
Base station	Base RTK GPS
Motion sensor/Heading/Position	Ekinox-D
Sound Velocity	Valeport Swift
SVS	AML X-Change SVSensor
Multibeam sonar	Norbit WBMS
Modem	Robustel 4G Modem

Winch option
Winch system	Remote electrical winch for water column measuremuents (30 to100m depth)

Ad-on & sensor options (on demand)
AIS, RTK GNSS, Deep learning - ROS - Embedded computer, 360°/4K/Thermal/IR camera, SBES, ADCP, MBES, Multiprobe water column sensors, Katfish SSS