

# Monodrone 3000

Unmanned Surface Vehicle



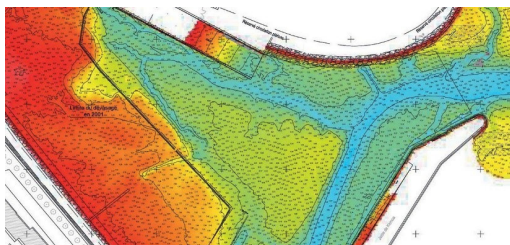
## Monodrone 3000



The MONODRONE 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 MONODRONE3000 endurance is more than 8 hours @2m/s depending of the weather and sea state conditions.



An autonomous 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 :	3m, 1.17m, 1.20m, 0.65m
Weight :	220kg
payload :	65kg
Mooring :	300x300mm

### Performances

Speed (max) :	7 m.s
Speed (survey) :	2 m.s
Propulsion :	2 x 4000W (16HP) Electric

### Power system

Battery :	2x5 kWh - 48V (Up to 10Kwh) lithium battery
Endurance :	8h à 1.5 m.s
Charging time :	9h
Kill switch	

### Communications

RC Radio :	2000m range, frequency 5 GHz
Wi-Fi	3000m long range high bandwidth modem 2.4 GHz
Autopilot :	Mission planning, automatic waypoint navigation, real-time feedback
Telemetry	Radio 5 GHz
Telemetry option :	Radio modem for long distance - LTE

### IT Options

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

### supervisions Options

HD Cameras :	Forward and backward looking cameras
Target detection :	Target detection
Lidar :	Laser scanning (100m)
AIS :	AIS Transponder option

### Storage and transport options

Launch and recovery system :	Cage
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### Equipement de navigation

GNSS :	RTK receiver L1 L2, multi constellation
Base station :	Base GPS RTK
IMU motionsensor :	SBG® Apogee, SBG ®Ekinox, Ixblue® Octans
Modem :	Modem 4G

### Charge utile

Sound Velocity :	AML ®SV-Xchange ...
Multibeam :	Kongsberg®, Norbit®, R2 Sonic®, Teledyne® ...
Singlebeam :	Simrad®, EA40®, PA500® ...

### Option treuil

Winch system :	30m depth in the water column - option 100m, electrical winch
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### Ad-on & sensor options (on demand)

AIS, RTK G NSS, Deep learning -ROS -Embedded computer, 360°/4K/Thermal/IR camera,SBES, ADCP,