CATALOG

BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

SUMMARY

03 NEXO

06 VASCO

10 WINCH

12 HOVERMAP

14 WATER SAMPLER

16 EXO 3S PROBE

18 BATHYLINK

BATHYDRONE®
ODAS SOLUTIONS

NEXO



BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

Autonomous Surface Vehicle (ASV)for hydrographic missions



Solo deployment

Express launch

Long-range radio

Integrated Android application

BATHYDRONE®

NEXO

The **NEXO** is a compact surface drone from the **BATHYDRONE** range, dedicated to hydrographic missions.

Precise navigation thanks to its **dual-antenna GNSS RTK** and its **long-range radio.**

Operational in **less than 2 minutes** by a single operator.

Mission planning and data collection via **dedicated Android application.**

QGIS data processing plugin

AREAS OF APPLICATION

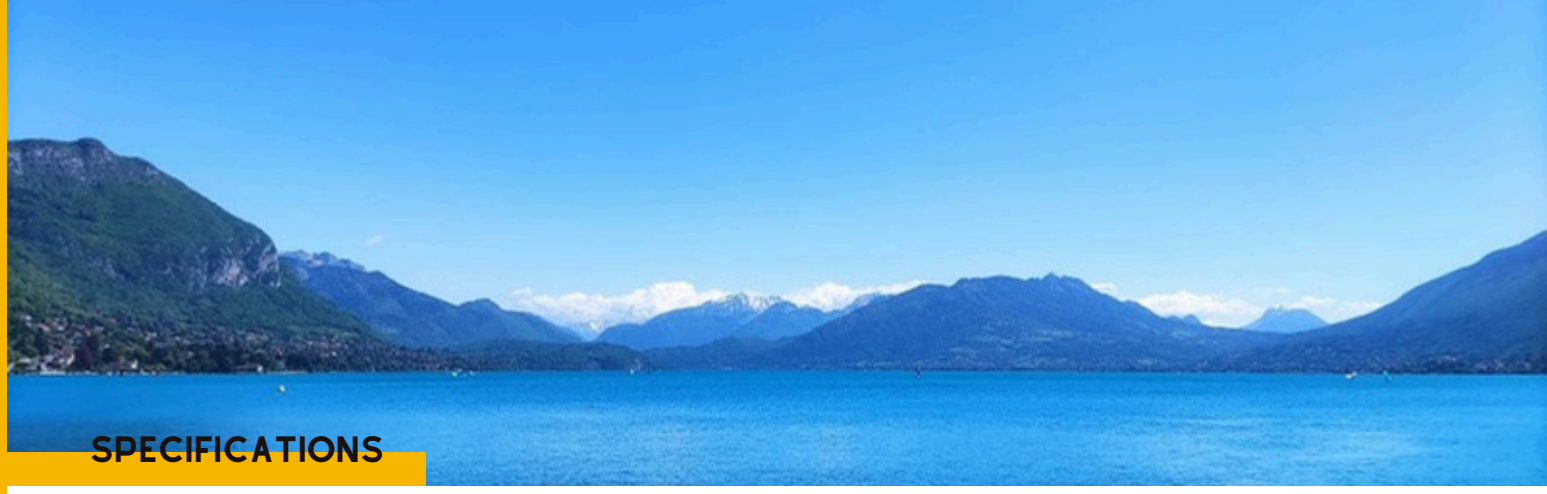
It excels in varied environments:

- Rivers
- Lakes
- Coastal zones
- Confined spaces

KEY ADVANTAGES

- Designed to be resistant and durable
- Interventions in shallow waters (15cm)
- Easy and fast implementation (or deployment)
- Mission automation on control screen
- Long-range waterproof remote control featuring a large, bright screen

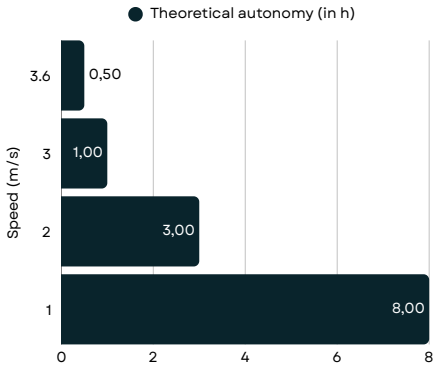
ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com



SPECIFICATIONS

Dimensions	L 120cm x W 55cm x H 35cm
Weight	20kg without battery
Maximum speed	4 m /sec
Minimum draft	15 cm
Payload capacity	5 kg

Autonomy (with a single-beam echosounder)





EQUIPMENT

- Rotomolded hull
- Propulsion: 2 brushless thrusters
- Control: Latest generation autopilot
- Remote Control: Android, range up to 2km in open field
- Power Supply: 1 Lipo 30 Ah battery (2.8 kg) and charger
- **Android application, developed by our Bathydrone teams**, dedicated on the remote control
- Handling trolley
- Video: Navigation camera at the front
- Case allowing the transport and storage of all accessories

Available Instruments

- **Single-beam echosounder:**
  - **Tritech PA500**
  - **Airmar SS510**
  - **Unabara Z-AXIS (bi-frequency)**
- **Starfish sidescan**



Bathydrone Android application

ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com

BATHYDRONE® ODAS SOLUTIONS

VASCO



BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

Autonomous surface vehicle for hydrographic missions



1 operator

Rapid deployment

Extended range

Automatic mission

BATHYDRONE® VASCO V2

The VASCO V2 is a surface drone compatible with a wide range of sensors (single-beam, dual-frequency, multibeam echosounders, and ADCP probes), all of which can be easily swapped thanks to its pre-configured architecture.

As the natural evolution of the original VASCO, it delivers enhanced performance and superior results.

It now features a dual-antenna GNSS RTK system and a new radio module for improved navigation, while still allowing missions to be easily programmed from the shore.
Its design ensures optimal stability across various environments – coastal areas, harbors, lakes, rivers, and more. Robust, fast, and versatile, the VASCO can be carried by a single operator and deployed in under five minutes.

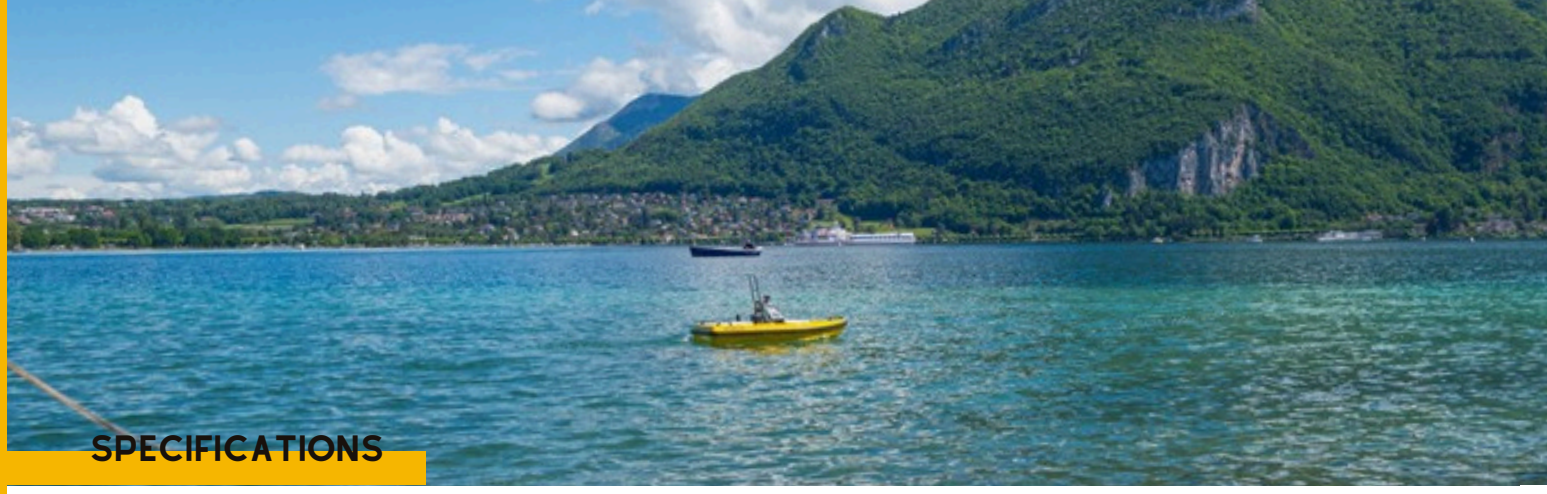
FIELDS OF APPLICATION

- Single-beam and multibeam bathymetry, ADCP probes, side-scan imaging
- Coastal areas, rivers, canals, inland waters

PRODUCTS BENEFITS

- Versatile platform for integrating a wide range of sensors
- Carbon construction
- Enhanced stability in challenging environments and strong tidal currents
- Capability to operate in shallow waters (20 cm)
- Simple and rapid deployment by a single operator
- Automatic mission programming
- Long-range waterproof remote control with a large bright display

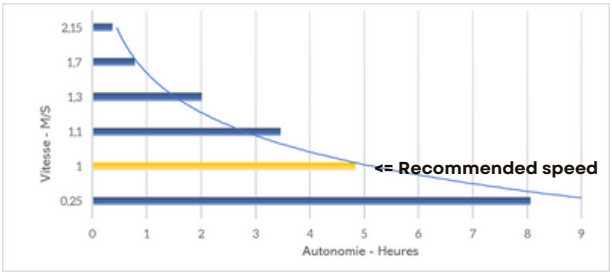
ODAS SOLUTIONS - Bathydrone
+33 (0)6 95 35 09 24
contact@odas-solutions.com



SPECIFICATIONS

Dimensions	L150cm x l69cm x H42cm (folded gantry)
Weight	28kg without battery
Maximum speed	3.6 m /sec
Minimum draft	20cm in single beam
Payload capacity	10kg

Endurance
(with a single-beam sensor)





EQUIPMENT & OPTIONS

- Carbon hull ensuring strength and lightness, with paint and varnish finish
- Anodized aluminum gantry
- 2 brushless motors with completely redesigned propulsion
- Latest-generation autopilot
- Android remote control, range up to 2 km in open field
- 2 LiPo 22 Ah batteries with charger
- Hot-swap battery capability
- Current and voltage probe with display on the remote control
- Onboard PC (Windows)
- Integrated and easily accessible 4G modem
- New version of Hydromagic, allowing direct mission programming
- Main switch with power indicator
- 3-wheel trolley for easy all-terrain handling and water launch
- 1 waterproof camera with GoPro mount
- Flash light on the gantry
- Carry handles
- Case for transport and storage of all accessories
- Compatible with the next-generation Pico MB-133 multibeam echosounder



Available Instruments
Single frequency: 500 kHz or 200 kHz
Dual frequency: 10–30 kHz low frequency and 200 kHz high frequency
Multibeam echosounder: 256 beams with PICO MB133 inertial navigation system
Side-scan sonar: Starfish Tritech

Other Options

- Additional 6S 22 Ah battery
- BathyLink: GNSS base communication box and total station
- Winch for specific probes (e.g., Swift SVP)
- Custom paint color

Additional options available from the distributor

ODAS SOLUTIONS - Bathydrone
+33 (0)6 95 35 09 24
contact@odas-solutions.com

BATHYDRONE®
ODAS SOLUTIONS

VASCO

Options

BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

WINCH

BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

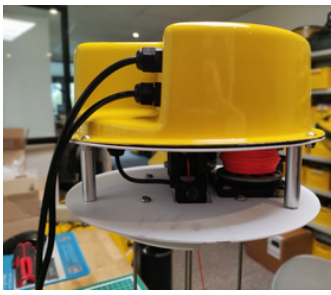
Tél : (+33) 6 95 35 09 24

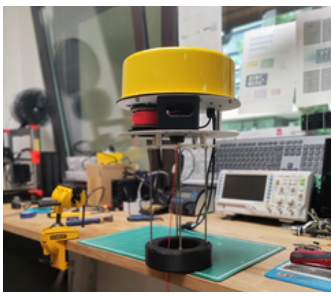
11 bis rue du Docteur Geley
74000 ANNECY

WINCH









We have developed various options that are perfectly suited to your surface drone from the BATHYDRONE® range.

BATHYDRONE®

Designed and manufactured entirely in our Annecy workshop, the **winch** is an option that allows measuring instruments such as the SWIFT SVP speed meter or any other probe to be lowered in order to carry out bathymetric surveys and hydrological and oceanographic measurements.
It is compatible with the **VASCO** model via the central well or at the rear of the boat.

FEATURES

- ✓ Easy installation without tools
- ✓ Control of the winch via the radio control of your BATHYDRONE®
- ✓ Automatic stop of the winch upon contact with the bottom
- ✓ Descent of the instrument to a depth of 30 m

ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com

HOVERMAP

BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

HOVERMAP









We have developed various options that are perfectly suited to your surface drone from the BATHYDRONE® range.

BATHYDRONE®

The **Hovermap** LiDAR is fully compatible with the **VASCO** model.
It incorporates the latest LiDAR detection technology to deliver high-density point clouds with increased coverage.
This combination allows you to capture detailed and accurate data over a larger area in less time.

FEATURES

- ✓ Range of 300 meters and over one million points per second
- ✓ Real-time feedback thanks to the boat's Bluetooth connection
- ✓ Can be used in the most challenging environments, above or below ground, inside or outside a tunnel
- ✓ Get information faster



ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com

WATER SAMPLER

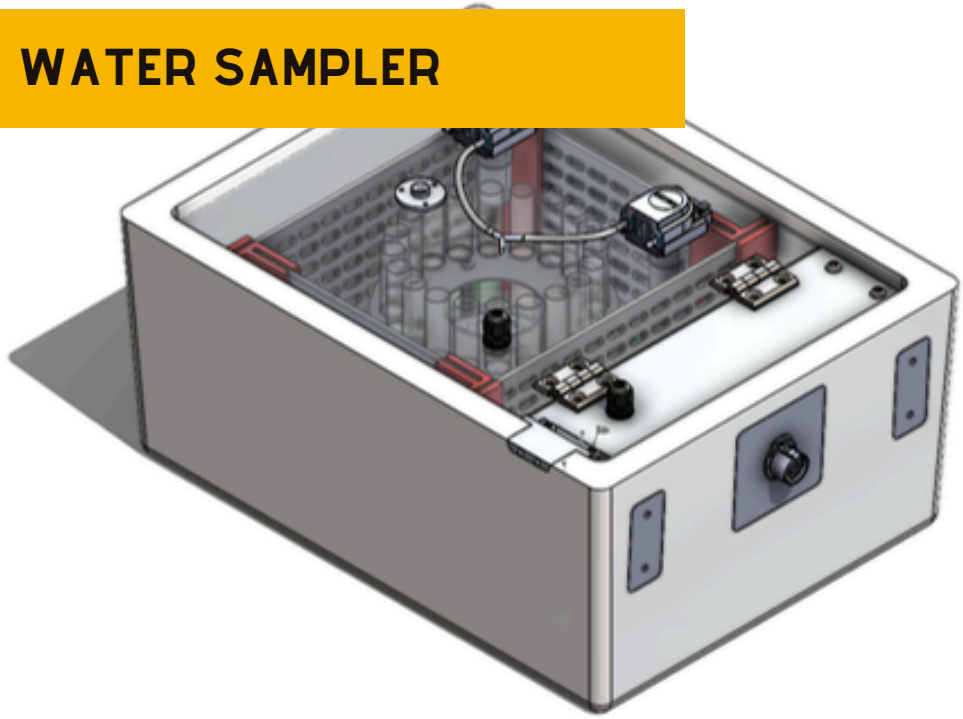
BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

WATER SAMPLER









We have developed various options that are perfectly suited to your surface drone from the BATHYDRONE® range.

BATHYDRONE®

To enable you to collect water samples, we have designed a unique surface water sampling system that can be adapted to your BATHYDRONE®.

Quick and easy to install, this instrument can collect 20 samples of 14 ml each from the areas of your choice: salt water, fresh water, or polluted water.

Thanks to its interchangeable carousel, which can be changed in less than a minute, you will be able to carry out multiple sampling missions in quick succession. Its passive cooling insulated enclosure allows you to obtain high-quality samples that can be geographically located.

FEATURES

3 ways to trigger a sample collection:

- Waypoint in a mapping mission
- Radio control button
- Software interface

Contamination in sampling hoses managed by two peristaltic pumps.



The customized software provided allows you to:

- Control the quantity of samples taken
- Monitor the temperature of the insulated chamber
- Clean the system after the mission
- Real-time monitoring

ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com

EXO 3S PROBE

BATHYDRONE®
ODAS SOLUTIONS

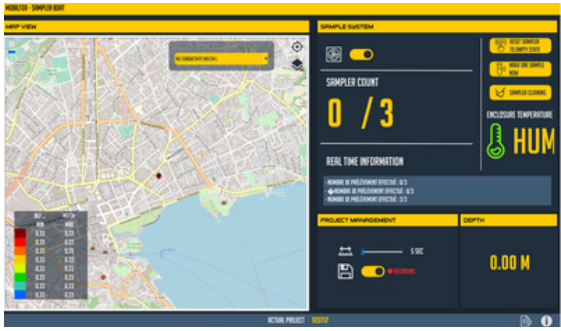
contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

EXO 3S PROBE







We have developed various options that are perfectly suited to your surface drone from the BATHYDRONE® range.

BATHYDRONE®

The Xylem **EXO 3S** probe is a versatile solution for oceanography and underwater exploration.
It interfaces seamlessly with the **VASCO** from the BATHYDRONE® range, providing accurate and reliable data collection.
It is robust, durable, and offers full connectivity with the BATHYDRONE®.

FEATURES

- ✓ Adapter supplied for direct installation in the central well
- ✓ Power supply via the boat
- ✓ Continuous operation
- ✓ Up to 5 sensors can be connected
- ✓ Comes with customized real-time data mapping software and CSV exports, designed by our team

High-precision sensors measure:

- temperature
- conductivity
- salinity
- turbidity
- pH
- dissolved oxygen
- nutrients
- ...

ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com

BATHYLINK

BATHYDRONE®
ODAS SOLUTIONS

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY

BATHYLINK









We have developed various options that are perfectly suited to your surface drone from the BATHYDRONE® range.

BATHYDRONE®

To enable you to interface your existing instruments (GPS and total station) with your BATHYDRONE® **VASCO**, we have developed **BATHYLINK®**.

This solution allows you to choose between:

- using a GNSS base station and transmitting RTK correction data to the BATHYDRONE®
- using a total station in tracking mode and positioning the BATHYDRONE® using a prism

FEATURES

- Compatible : Leica Geosystems Trimble and any other device capable of serial communication
- IP67 waterproof enclosure
- Operating frequency compliant with EU usage
- Range: 2km in open space

USE CASE

- Basic/mobile use in the absence of internet coverage
- Bathymetric surveying in the absence of GNSS coverage (tunnels, bridges, etc.)

ODAS SOLUTIONS - Bathydrone
(+33) 6 95 35 09 24
contact@odas-solutions.com

BATHYDRONE®

ODAS SOLUTIONS

NEXO VASCO Sumo

contact@odas-solutions.com

Tél : (+33) 6 95 35 09 24

11 bis rue du Docteur Geley
74000 ANNECY