



Introducing ASV-E

- The Ultimate Solution for Efficient and Eco-Friendly Environmental Data Collection



Consistency in data collection to ensure a valid basis for comparison

Features and benefits:

- A flexible and modular platform with the possibility of customisation for different payloads
- SKIPPER autonomous navigation system
- Efficient data collection, accurate measurements, and real-time data
- Amphibious vehicle, ensuring easy launching
- Can be operated by one person
- High safety - no crew on board
- Lower operating costs and environmentally friendly operation
- Reduced noise level for gentle environmental monitoring

Looking for a sustainable and adaptable solution to meet your environmental monitoring requirements?

Discover DanaDynamics ASV-E, an innovative and autonomous sailing drone that will transform the process of gathering environmental data.

With this Environmental Drone, flexibility, green technology, and cutting-edge design come together in a modular platform that can be tailored to your specific requirements.

Our electric-powered ASV is equipped with state-of-the-art features that ensure efficient data collection, precise measurements, and real-time monitoring.

System features:

Autonomous navigation system:

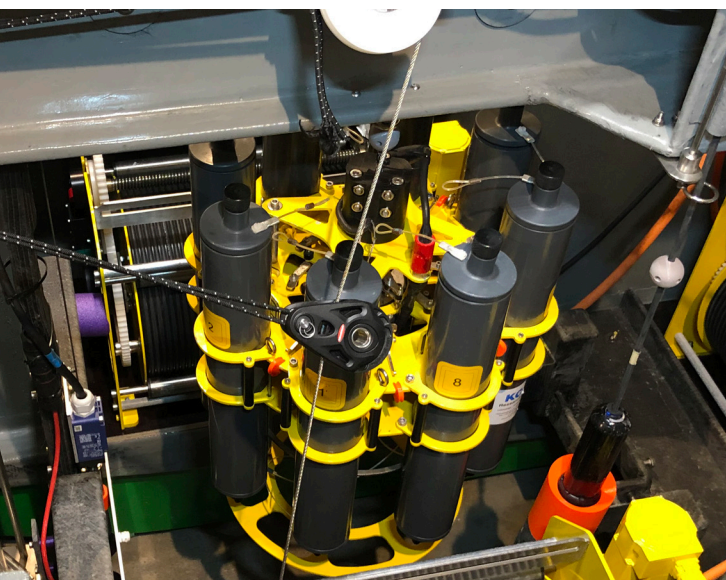
One of the standout features of ASV-E is its autonomous sailing capability. Powered by DanaDynamic's "SKIPPER" autonomous navigation system, the drone can navigate on its own or be remotely controlled by an operator on land. It can follow predefined routes with assigned tasks for sampling, eliminating the need for human intervention and maximising efficiency.

User interface:

Managing and controlling ASV-E is a breeze with our intuitive user interface. With visual feedback from cameras, you have full control and monitoring of the drone's autonomous functions and measurement data. Interacting with and steering the drone towards your desired data collection goals has never been easier.

Data collection and communication:

The drone has an advanced communication module that enables seamless communication. It transmits navigation data, real-time videos, and collected mission data to the operator. The data can be stored both locally on board and in the cloud, ensuring accessibility and security. The information is extracted as data files which can be converted into environmental databases for future use.





Benefits of ASV-E:

Flexible and modular platform:

The drone's flexibility and modularity make it the perfect platform for a wide range of environmental missions. Whether you need to collect water chemistry data, water samples, sediment cores, or perform other environmental measurements, our ASV-E can be customised with the desired payload to meet your specific needs. It can carry up to 300 kg of sampling equipment, giving you ample capacity for all your data collection requirements.

Safety a top priority:

ASV-E prioritizes safety with autonomous sailing and the SKIPPER navigation system. Operators can take control at any time, and automated data collection enhances productivity. This creates a secure and efficient work environment for field personnel.

Environmentally friendly and noise reduction:

ASV-E is an eco-friendly and quiet drone. Its electric propulsion emits no harmful emissions and reduces noise levels for non-disruptive monitoring, maintaining a balance between human activity and nature.

Lower operations costs:

With ASV-E's electric-powered system, operating costs are significantly reduced, which requires less maintenance and eliminates the need for a crew on board. This translates to cost savings and a more sustainable approach to environmental monitoring.

Precision and reliability:

ASV-E delivers precise and reliable data for informed decision-making in environmental protection and management. Our advanced technology and sensors guarantee accurate results, verified by the University of Southern Denmark.

Standard Environmental Equipment:

NISKIN water sampler, equipped with 8x1 liter PVC bottles
Secchi disc for measuring water visibility using camera technology.

In-Situ CTD probe AT500 - (temperature, pH, conductivity, salinity, oxygen content, oxygen saturation, depth)

Multi Corer - retrieves 2 sediment cores.

Electric winches are used to deploy sampling equipment in the water column, operating at depths of up to 36 meters.

Technical Specifications:

- Dimensions: Length 4.7m, Width 1.4m, Draft 0.45 m
- Construction: Mono hull, carbon fiber, Amphibious vessel
- Propulsion: Electric propulsion, 4kW, 48V Li-Ion, operating 8-12 hours, Max speed 5 knots
- Performance: Sea State 2
- Operation on land: Max climb rate 25°, Max heel rate 20°, Ground clearance 35cm
- Navigation system: SKIPPER by DanaDynamics, Operated via touchscreen
- Sensors: GPS, Satellite compass, LIDAR, AIS, VHF, radar, echo sounder, cameras, anemometer, log
- Communication: 4G/5G, VDES, SAT COM
- Payload capacity: 300 kg
- Displacement Weight: 1.100 kg, incl. standard environmental payload

Launch and recovery:

Transporting ASV-E is hassle-free, offering multiple options such as using a boat trailer, in a large van, or container. It can be easily launched from the beach or lakeshore, providing you with flexibility and convenience in your data collection missions.

Applications:

Water Quality Surveys

Lake and River Surveys

Scientific Research

Bathymetry

Port Survey

Harbor Inspections

ASV-E offers eco-friendly and efficient environmental data collection. Our team can help you achieve your monitoring goals.

Contact us for more info and find the perfect solution for your needs.

DanaDynamics

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