RONDAL
ULTIMATE RELIABILITY

SKUA 12

The Skua 12 wind-powered Unmanned Surface Vessel (USV) is the solution for long duration missions over long distances. This 12 metre long USV harvests its energy for propulsion and sensors from wind, water and sun. Making the USV independent from fuel and capable of sailing undisturbed for a year. The Skua 12 is equipped with a standard set of sensors which can be expanded for specific payload options.

The Skua 12 is designed to withstand all weather conditions and the innovative wing sail provides sufficient speed, even in light winds. The USV fits inside a 40ft container.



APPLICATIONS

COAST GUARD AND DEFENSE

- Intelligence, surveillance and reconnaissance
- Protection of (submarine) infrastructure
- UAV/UUV launching platform
- Anti-submarine warfare

RESEARCH

- Hydrography
- Oceanography
- Marine Biology
- Fisheries Research

ADVANTAGES

- Very long autonomy (up to 1 year)
- Deployable worldwide
- Flexible use due to modular payload
- Low operational costs
- Silent and emission-free

EXECUTION AND PAYLOAD

BASIC VERSION

- High performance solid wing sail with 2 flaps
- Battery electric
- Electric propulsion with hydro generator

OPTIONS

- Extra batteries (+16 kWh)
- Additional payload capacity (+250 kg)

STANDARD NAVCOM

- Stabilized 360° camera for ISR
- Radar
- AIS & VHF
- Satellite internet + backup
- Navigation lights and communication according to COLREGS

OPTIONAL PAYLOAD

- Multibeam echosounder
- Hydrophone
- UAV with docking station
- Launchable ROV or UUV
- Towed thin line sonar (incl. winch)
- Sensors through moonpool

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Building on a Dutch maritime heritage spanning more than 140 years, the team combines extensive experience in advanced maritime engineering, large aluminium vessels, composite sailing systems and technical components. By bringing together this expertise with its engineering and production facilities, Rondal has the capability to support the development and scalable production of Sailing USVs, with the potential to build dozens of vessels annually.



SPECIFICATION

Length:	11.95 meters
Beam:	2.29 meters
Displacement:	3.2 m^3
Air draft:	12.5 meters
Payload area LxW:	3.0 x 1.1 meters
Max. weight payload:	250 kg

ENERGY MANAGEMENT

Max. solar panel generation:	2.5 kWe
Max. hydro generation:	2.5 kWe

PROPULSION

6 knots wind, sailing	5 knots
12 knots wind, sailing	8.1 Knots
20 knots wind, sailing	10 knots
No wind, electric	5 knots
Range without wind	100 Nm
Top speed, electric	8 knots

KEY TECHNOLOGY: RONDAL AERO WING SAIL

The Aero Wing Sail is a fully automated wing sail equipped with multiple flaps. Unlike traditional sails, this wing sail is rigid, fixed shape, and wear-resistant, and it adjusts automatically. Thanks to its advanced flap system, the wing sail is significantly more powerful and easier to control than traditional sails or wing sails without flaps.





KEY TECHNOLOGY: RONDAL HYDRO GENERATOR

Rondal has developed the Hydro Generator, a highly efficient system for generating electricity while sailing. The Hydro Generator operates quietly and creates minimal drag during sailing. The version used for the Skua 12 can rotate 180°, allowing it to also function as a propulsion system.