

The Mariner

Uncrewed Surface Vessel (USV)

The multi-purpose platform built on years of industry experience and designed to excel in environmental monitoring, maritime surveillance, and high quality data acquisition in both shallow and deep waters.

The **Mariner**

THE MARINER USV is a durable and robust vessel with a broad payload capacity, optimal for coastal and offshore operations. Engineered for seamless integration with sensors for various applications, the Mariner offers a reliable and safe solution for your maritime operations.

CUSTOMIZED FOR YOUR **PAYLOADS**

The Mariner is designed to accommodate a wide range of payload, tailored to its intended use. Common integrations include sensors and sonars for surveying and environmental monitoring, as well as systems for surveillance and ROV-support. Additionally, It can be equipped with a moonpool elevator or fixed gondola, ensuring optimal conditions for data collection and minimizing interference, enhancing data quality.



DURABILITY AND MANEUVERABILITY FOR ENHANCED ACCESS

Mariner's durable construction, combined with the advanced navigation and control system, creates an exceptionally user-friendly platform for various payloads. Its low-speed manoeuvrability allows for close-proximity surveys near objects and obstructions. The water jet propulsion system and shallow draft, enables the Mariner to access areas typically challenging for traditional survey vessels. Its ability to carry sensors both above and below the waterline makes it a versatile tool for a range of maritime applications.

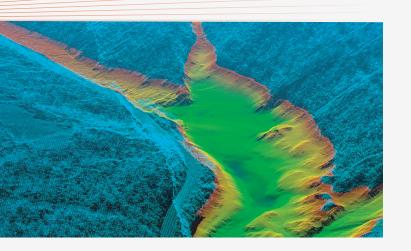


BOOST YOUR FLEET'S

CAPABILITIES AND PERFORMANCE

Incorporate the Mariner into your existing fleet to significantly enhance its capabilities, offering safe and easy deployment making it an effective force multiplier. Capable of both autonomous and remote-controlled operations, it can expand your fleet's operational range at a fraction of the cost of manned vessels. The Mariner not only improves situational awareness but also enhances overall operational efficiency.





OCEAN mapping and exploration

The versatile design and robust construction enables the Mariner to collect high-resolution seafloor and water-column data using a variety of sensors. Sensors such as Singlebeam- and Multibeam Echo Sounders, Sub-bottom Profilers, Sidescan Sonars, and Sound Velocity Profilers are tightly integrated with both the vessel and the **Autonomous Navigation System** ensuring optimal user-experience.

MARITIME surveillance and security

The Mariner can be equipped with various radars, cameras, and sonars to detect and track different objectives in the area. Various high-bandwidth communication links grant shore stations or other vessels to easily access information from the Mariner. The USV offers a safe solution that allows greater access to certain areas in a cost-effective way.

OFFSHORE support

The Mariner can operate in various offshore operations such as patrolling and monitoring pipelines, platforms, and wells using its onboard sensors. It can also serve as a support vessel for Autonomous Underwater Vessels (AUVs) and act as a force multiplier for larger fleets.





Feature	Description	Standard	Add-on
Dimensions (LxWxH)	5980 mm x 2060 mm x 2700 mm	/	
Dry weight	2000 kg	/	
Draft*	500 mm	/	
Hull material	High Density Polyethylene (HDPE)	/	
Propulsion	Hamilton Jet with 196 hp Yanmar Diesel Engine	/	
Standard fuel tank	200 liters	/	
Bow thruster	Standard for precise slow speed navigation	/	
Power systems	12VDC, 24VDC and 230VAC	/	
Moonpool wells	1	/	
Launch and recovery	Industrial remote control for launch and recovery	/	
Fuel capacity*	50 h operation time at survey speed	/	
Top speed*	24 kts	/	
Sea State (Beaufort Scale)*	4 for survey 6 for transit 7 for survival	/	
Autonomous and remote-control	Maritime Robotics Autonomous Navigation System	/	
Vehicle Control System	VCS Rugged Laptop	/	
Standard situational awareness	Camera / AIS class B / Radar	/	
High-bandwidth communication	LTE (4G)	/	
Additional communication links	MBR / Starlink		/
Enhanced situational awareness	Maritime Robotics SeaSight / AIS class A / VHF		/
SeaCapture	Tightly integrated data capturing software		/
External control	Ability to navigate using 3rd party software		/
Formation mode	For operating several Maritime Robotics USVs in formation		/
Rack Mount VCS Computer	For fixed installations		/
Redundant propulsion	Twin Electric Pods		/
Extra fuel tank	Additional 200 liter fuel tank for enhanced capacity		/
Additional generator	Enhanced power capacity for payload		/
Launch and recovery system	Launch and recovery cradle or standard boat trailer		/
Payload mounting system	Moonpool Elevator or Fixed Gondola		/
Winch	Autocast SVP winch		/
Various payload integrations	Additional systems and sensors for survey, support, monitoring and surveillance		/

 $[\]star$ Depending on conditions and payload integrations.

Enabling ocean space autonomy

Maritime Robotics is a leading supplier of autonomous navigation systems and uncrewed platforms, enabling ocean space access through autonomy. The company delivers innovative solutions world-wide, facilitating safe and cost-effective ocean operations that significantly reduce CO₂ emissions.

Since 2005, Maritime Robotics has been developing and supplying autonomous and remotely operated systems and platforms for ocean operations including marine mapping and surveying, met-ocean data acquisition, harbor security, research, and ROV-support to global industry professionals. The company is in Trondheim and Vanvikan, where an experienced team with access to every aspect of the supply chain is ensuring global success.

