

MARINER

UNMANNED SURFACE VEHICLE [USV]

COST EFFICIENT AND RISK-REDUCING MARITIME DATA ACQUISITION





THE UNMANNED FUTURE

MARINER

The MARINER Unmanned Surface Vehicle (USV) is a multipurpose unmanned vehicle for offshore and coastal applications.

The MARINER USV is made of polyethelene and offers a very stable, unsinkable and near maintenance-free construction. The vehicle will fit into a standard 20 feet container for easy cargo shipping.

The MARINER is equipped with a large payload room of more than one cubic meter and can be equipped with a variety of surface and sub-surface sensors/payload types such as: EO/IR camera, radars, oceanographic instruments, hydroacoustic positioning systems, echo sounders (single and multibeam) and sonar systems etc. The sub-surface sensors can be mounted through a moon-pool in the mid area of the craft, and an elevator mechanism for sinking and lowering the sensor under the hull can also be installed.

The MARINER can be delivered with diesel engine or diesel-electric propulsion system with waterjet or stern-drive.

The USV operator monitors the MARINER and its installed payload from the Vehicle Control Station (VCS) which features electronic charts, engine and navigation info. The operator can monitor the surrounding sea areas and get collision avoidance aiding from AIS, radar and video information.



PRODUCT COMPONENTS

01



MARINER USV

02

50 hours (5kts)

1700 kg

10nm typical radio range (VHF/UHF/C-band)

Global range with SatCom/Mobile data

35kts max speed

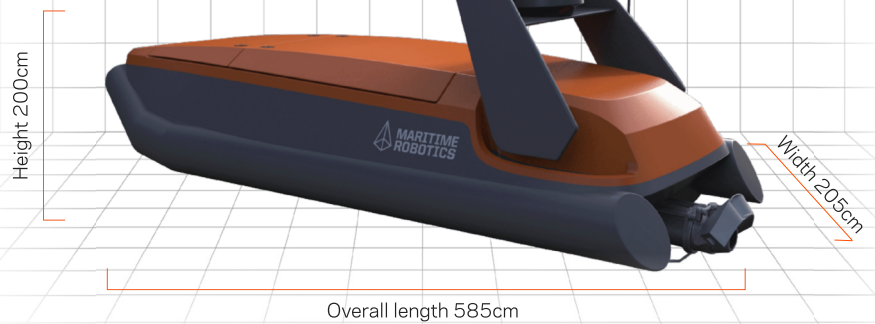
Echosounder, sonar, acoustic positioning

METOC, CTD, ADCP

EO/IR cameras

Radar, lidar

Bow thruster



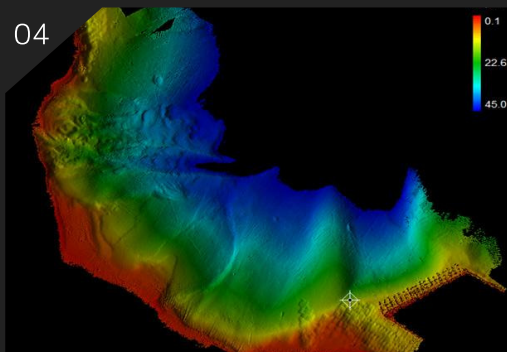
Specifications

03



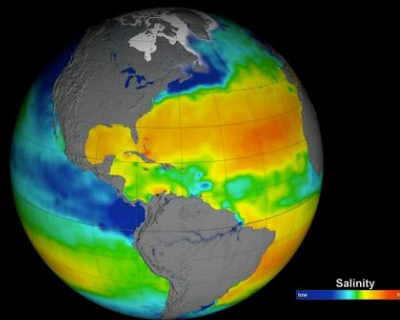
Vehicle Control Station

04



Bathymetry

05



Environmental Monitoring

06



Hydroacoustic Communication

01 MARINER UNMANNED SURFACE VEHICLE (USV)

The MARINER USV is a cost-efficient system for maritime data acquisition that has been proven in both offshore and coastal scenarios.

02 SPECIFICATIONS

Versatile for both faster speed patrolling and slower speed surveying, a large variety of payload and sensors can be integrated on the MARINER. The MARINER can be easily shipped worldwide in a standard 20feet container.

03 VEHICLE CONTROL STATION (VCS)

The USV operator interacts with the MARINER through the Vehicle Control Station usually located on-shore or on a mother-vessel. The intuitive graphical user interface with sea-map, AIS, video and radar overlay can also be augmented with AIS and radar-based collision

04 BATHYMETRY

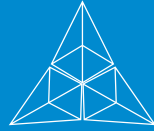
Unmanned Surface Vehicles offers a great advantage in repetitive and tedious missions. Bathymetry is an application where we now see a great potential for a seabed-mapping USV.

05 ENVIRONMENTAL MONITORING

Knowledge and data from our oceans are crucial for a sustainable future. Unmanned Surface Vehicles can carry oceanographic sensors in ways that has usually been too expensive or risky.

06 HYDROACOUSTIC

Robots helping other robots is the next frontier, and we are starting to see that underwater Remotely Operated Vehicles (ROV) and Autonomous Underwater Vehicle (AUV) operations can be made possible due to the very cost-efficient capability of having a USV as a communication relay and support platform on the sea-surface.



UNMANNED SYSTEMS

COST EFFICIENT AND RISK-REDUCING MARITIME DATA ACQUISITION

A LEADER IN UNMANNED SOLUTIONS

Maritime Robotics, developer and supplier of the MARINER, is a leading provider of innovative unmanned solutions for maritime operations and data acquisition. The company develops and delivers Unmanned Surface Vehicle Systems (USV), Moored Balloon Systems (MBS) as well as Unmanned Aircraft Systems (UAS). Our main markets are geophysical surveying, oil & gas, environmental monitoring, and the defence/security market. With technology developed in close collaboration with civilian, governmental and military partners, Maritime Robotics focuses on delivering high-quality system solutions and products that are cost-efficient, reduce HSE risk exposure and are highly deployable, in any conditions.



Brattørkaia 11 - Pirterminalen
7010 Trondheim, Norway



info@maritimerobotics.com



www.maritimerobotics.com
www.facebook.com/maritimeroboticsas



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+47 73 40 19 00