

MARINER X

UNMANNED SURFACE VEHICLE [USV]

COST-EFFECTIVE AND RISK-REDUCING MARITIME DATA ACQUISITION



ENABLING OCEAN SPACE AUTONOMY



MARINER X

The MARINER X Unmanned Surface Vehicle (USV) is a multi-purpose unmanned vehicle for offshore and coastal applications. The Mariner X can be launched from port and transit offshore or deployed from vessel based davit. Designed primarily for survey not speed, the vessel has two actuated moonpools and two dedicated sensor positions.

The MARINER X USV is made of polyethylene and offers a very stable, unsinkable and near maintenance-free construction.

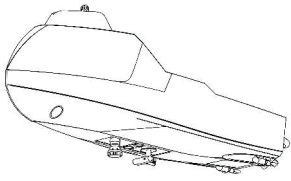
Maritime Robotics SeaControl allows for command and control of the MARINER X with SeaSight providing situational awareness through radar, AIS and camera integration.

As standard the USV is fitted with a GNSS Compass, Class B AIS, Cameras, WiFi and LTE Modem. The deck space has a rail system to allow for mounting of custom payloads including survey navigation, satellite communications, deck generators, winches, and deck cargo.

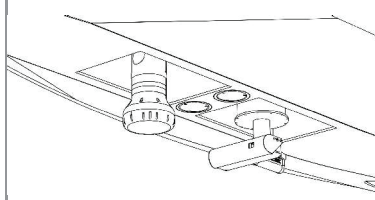
A truly customisable vessel, the bow area hosts the Maritime Robotics core hardware and payload racks with communications and radar under a dedicated protective radome. This leaves a large backdeck for custom applications. MARINER X CLASS USV, a self-contained platform including everything needed to commence integrating your sensors of choice.



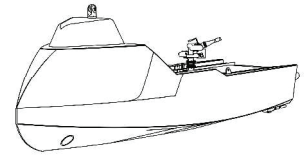
Applications/Options



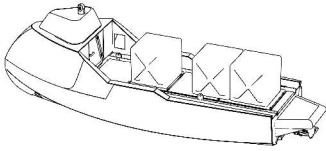
Multibeam & Acoustic Modem



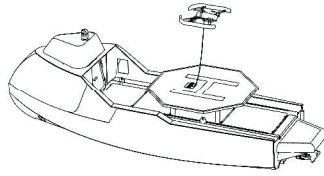
Multibeam & Acoustic Modem



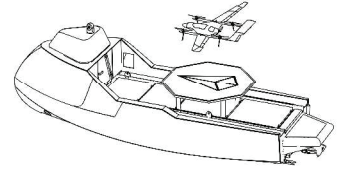
Fire Monitor



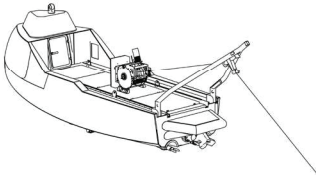
Cargo/Freight



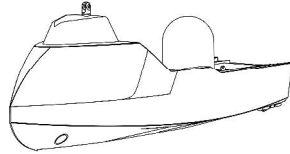
Tethered Drone



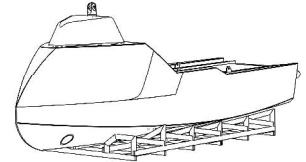
UAS



Towing Winch




Satellite Communications




Transport Cradle (Standard)

Specifications

 MBR 179/179 Up to 30km
4G/LTE/SatCom/Iridium SBD Global Range

 12kn max speed

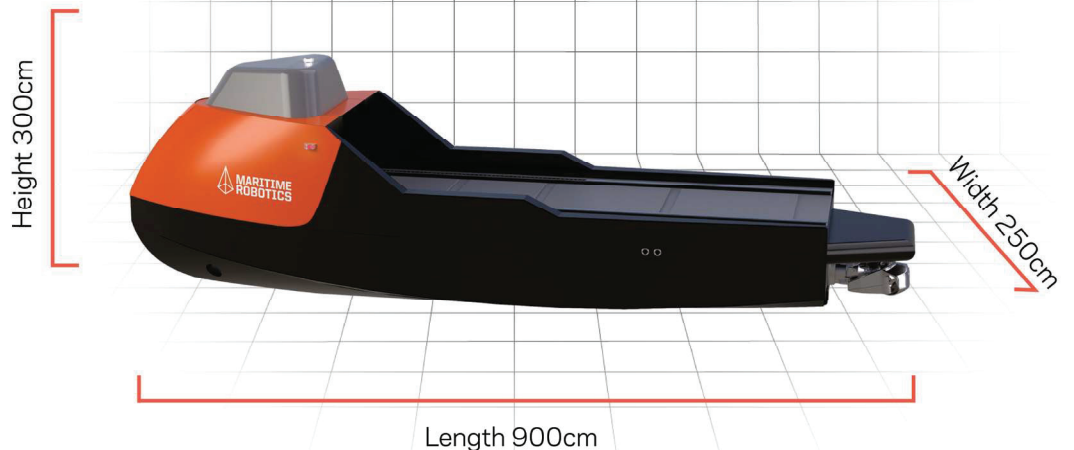
 Endurance: 25days (4kn)

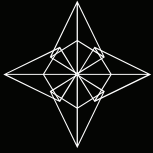
 7,000kg (Fueled and with payload)

 Rail system for custom payloads

 2 Moonpools

 2 Sensor Positions





MARINER X



SPECIFICATIONS

Length x Width x Height	900 cm x 250 cm x 300 cm 354.3" x 98.4" x 118.1" (Designed to fit within a container footprint for shipping. 2.8m wide with field installed fender)
Draft	100cm 39.4" (Sensors to 150cm)
Dry weight	7000kg 15432.36lbs
Hull material	HDPE
Propulsion	Primary: Yanmar 4LV230 with Hamilton HJX29 Jet Redundant: Twin Torqeedo Cruise 10.0 with 11.2kW battery bank
Endurance	Primary: Capacity 2000L Diesel: Approx. 3L/Hour @ 4 knots gives range in excess of 2500 NM. Endurance up to 25 days*
Speed	Maximum 12 knots / Cruise 8 knots (For efficiency) / Survey 4-5 knots
Command and Control	Maritime Robotics SeaControl (Operator Station: Rack mount or Rugged Laptop) Industrial Remote Control for Launch and Recovery
Situational Awareness	Maritime Robotics SeaSight / Radar / AIS / Camera
High-bandwidth comms	✓
Available Power	12VDC system with 12V Alternator 1.5kW 24VDC system with 24V Alternator 0.5kW 230VAC system (Inverter) 1 kW Option: 230VAC Generator 6.5kW
Options	SVP Winch, Seakeeper, VSAT, Single point lift, Payload AC

INTEGRATIONS

Bathymetric Singlebeam	Fisher Echo Sounder	Towing Winch
Sub Bottom Profilers	Surveillance Equipment EO/IR Camera Systems	AUV Launch and Recovery / Charging
Multibeams	On-board software for correction services over the NTRIP protocol	Profiling Winch
Sidescan Sonar	USBL	Cargo Transport
Environmental Sensors	SVP Sensor	UAS Docking Platform / Tethered Drone
Aquatic Habitat Echo Sounder	Underwater Hyperspectral Imager	ROV Handling