



# ASV Viper

**A fully autonomous USV built for fully uncrewed & self-directed marine operations.**

ASV Viper is powered by MarineAI's Guardian AI, a full-stack autonomy engine that enables self-guided navigation, real-time environmental awareness, and mission execution with no operator input.

The vessel is capable of independent route planning, vessel avoidance, and adaptive responses in dynamic ocean conditions, ensuring safety, efficiency, and mission reliability without human intervention

## Viper Mission Capabilities:



### OFFSHORE WIND & SUBSEA CABLE SURVEYS

Viper's autonomous operation and endurance allow it to work safely and efficiently in harsh offshore conditions while reducing vessel time and cost. Its advanced sensor payloads deliver high-quality data needed to plan, install, and maintain offshore wind infrastructure and subsea cables.



### HYDROGRAPHIC & GEOPHYSICAL SURVEYS

Viper can collect high-resolution bathymetry and seabed data in shallow or restricted areas where larger vessels can't safely operate. It can be fitted with systems like MBES, side-scan sonar, and SBPs to deliver precise mapping and subsurface insights.



### ENVIRONMENTAL & OCEANOGRAPHIC MONITORING

Viper can autonomously collect continuous water-quality, current, and meteorological data in areas that are difficult or costly for crewed vessels to access.

# General Specifications

**Registry:** Halifax, Nova Scotia 🍁

**Built:** Plymouth, United Kingdom

**Official Number:** C37892NS

**Length:** 11.55 metres

**Beam:** 2.35 metres

**Displacement:** 4.5 tonnes

**Top Speed:** 12 knots

**Cruising Speed:** 6 knots

**Survey Speed:** 4-8 knots

**Construction:** Aluminum

**Fuel Capacity:** 1200L

**Certification:** NC1 200 nm

**Autonomous Control:** Level 4

**Keel Payload Capacity:** 750kg

**Voltages Supported:**  
12/24/48 VDC; 220/240VAC



## Inquiries



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## Primary Sensors

X Band 20" Radar, Daylight HD Cameras, AIS Class B, Airmar 200 Weather Station, Echomax XS Active Radar Reflector, Industrial PC's, Nvidia GPU

## Communications & Data

- Starlink Marine (High Performance)
- 4G/5G Cellular Connectivity
- Iridium Satellite Communications

Sensor-optimized keel with payload capacity of 750kg that can support MBES, SBP, sidescan sonars, magnetometers, ADCPs, and more.

- Containerized transport in a 40 ft high-cube container
- Air-transportable and globally deployable
- Modular payload bay and keel enable rapid configuration

