

## **C-Enduro**

# LONG ENDURANCE MARITIME UNMANNED SURFACE VEHICLE (LEMUSV)

**C-Enduro** provides 'Persistent Presence' for the collection of offshore data. The advanced energy harvesting design can be used for a variety of Research, Military and Commercial applications.

#### **Key Features**

 3 months endurance, in excess of 4 knots for over 4000 miles range.

Advanced mission planning and energy budget tool.

Data transmission for sensor and vessel data.

• Far field and reactive collision avoidance capability.

Low operating costs (per mile, per data point).

 Large payload capacity (>0.5m³, over 50W continuous power).

Rugged Carbon Fibre, self-righting catamaran hull.

Diesel, Solar, Wind, Methanol and wave power options.

 Diesel Generator provides assured power for propulsion and payloads in all environmental conditions.

#### Applications and Sensors

Metocean & Oceanographic data collection.

Renewable Energy surveys.

Marine construction support.

Environmental surveys e.g. CO<sub>2</sub> monitoring.

Seismic support e.g. Passive Acoustic Monitoring.

Data gateway e.g. AUV/ROV/Glider to satellite.

Security and Situational Awareness



#### **ASV**

ASV Ltd designs and constructs rugged and reliable unmanned systems using innovative marine technology for commercial, government and military applications. Established in 1998, ASV is based near Portsmouth in the United Kingdom and is part of the Global Fusion Group, incorporating C&C Technologies, an international marine services organisation based in Lafayette, USA, which provides offshore positioning, survey, geo-science, and autonomous marine vehicle services worldwide.

### **C-Enduro** – Sensor Options

Wetlabs Triplet Puck	CTD (Lowered by winch to 250m+)	Airmar Weatherstation
ADCP	PAM	CO <sub>2</sub>
Camera (Stills / Video)	Motion Reference Unit / Waves	Acoustic Modem
ASW Payload (Towed array or dipping)	Electronic warfare	Multibeam / Sidescan Sonar

Plus Guest Sensors (Please contact us with details)

### **C-Enduro** – Technical Specifications

Length	4.1m.
Beam	2.45m (road transportable).
Height	~2.8m (including antennae), 1.5m (mast off and placed on top).
Draft	0.45m.
Weight	~350kg (lightship), ~450kg (fully loaded).
Primary propulsion	2 x DC brushless motors (1.4kW each).
Endurance	Up to 3 months utilizing solar / wind / diesel energy. Please contact ASV for further details and access to mission planning tool.
Speed	0-7 knots operational speed range.
Command/control	ASView control system. Iridium SBD/RUDICS. LOS IP Radio.
Navigation Aids	GPS, AIS, Radar Reflectors, Navigation Lights, collision avoidance radar, depth sounder.
Solar panel system	12 high efficiency panels generating a peak electrical power of 1200W.
Diesel generator system	Electric start diesel generator providing a peak charging power of 3.2kW. Can be run continuously for higher speed and payload missions.
Wind turbine system	Lightweight three blade system generating a peak output power of 600W.

ASV is part of the Global Fusion Group of companies, which incorporates C&C Technologies Inc.

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