



Image credit: Valeport Limited

Inshore multi-purpose Uncrewed Surface Vessel

HydroSurv's REAV-28 heads up the company's range of low-impact and non-invasive small Uncrewed Surface Vessels (USVs). Its design makes it ideally suited to operations within inland categorised waters and environmentally sensitive worksites.

For surveyors and coastal practitioners demanding a truly multi-purpose hydrographic and environmental survey platform, REAV-28 is a research-informed solution developed to carry larger payloads and operate in significant wave heights up to 1.5m.

Benefits

Robust, marine-grade aluminium alloy construction

Modular, demountable structure

Available with a range of market-leading, front-end mission manager and autopilot technologies

High-integrity *Virtual Watchkeeper* proprietary vessel control system

WiFi and cellular communications

Docking joystick

Ruggedised embedded and base station computers included

Trailer portable

Inshore multi-purpose Uncrewed Surface Vessel

REAV-28

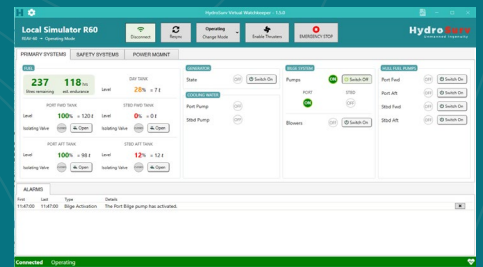


From over 40 candidate designs, HydroSurf's engineering team has optimised the hull length, mass and drag characteristics of the REAV-28 using extensive hydrostatic and hydrodynamic analysis tools. The USV's shallow-draft, symmetrically-hulled catamaran form permits straightforward launch and recovery by road trailer with just a two-person team, including challenging shallow-sloped beaches and foreshores. The fully-welded marine-grade alloy construction subdivides each hull into three compartments, providing a robust, high-integrity solution to stand up to the rigours of frequent use.

Featuring twin, independently-steerable electric outboards, REAV-28 may be configured with either two or four lithium propulsion batteries. A designated 1,280Wh lithium service battery is fully separated from these propulsion batteries, enabling them to be interchanged without interruption to critical vessel and survey control systems or payload.

Central to REAV-28's utility and user experience is a variety of proven mission management and autopilot technologies from industry-leading providers that run seamlessly alongside HydroSurf's proprietary *Virtual Watchkeeper* vessel control system. Our customers' needs are diverse. HydroSurf's team works hard to understand each customer's use case and the third-party equipment integrations necessary to deliver a turnkey solution which plays well out of the box. As a company, HydroSurf works closely with leading OEMs to provide case studies for a variety of equipment and vessel integrations.

In addition to a comprehensive base specification, REAV-28 is available with a range of optional upgrades, including a tightly-integrated profiling winch, additional situational awareness sensors and specialist IP radio systems.



REAV-28's critical systems are controlled and monitored through HydroSurf's proprietary *Virtual Watchkeeper* vessel control system. REAV-28 is available with a choice of industry-leading autopilot systems NaviSuite Kuda developed in close-consultation with HydroSurf.

EIVA



Image credit: EIVA A/S

+44 (0) 333 772 9306 info@hydro-surf.com

Unit 5 Jardine Park, Bradman Way, Grace Road West,
Marsh Barton, Exeter, EX2 8PE, United Kingdom

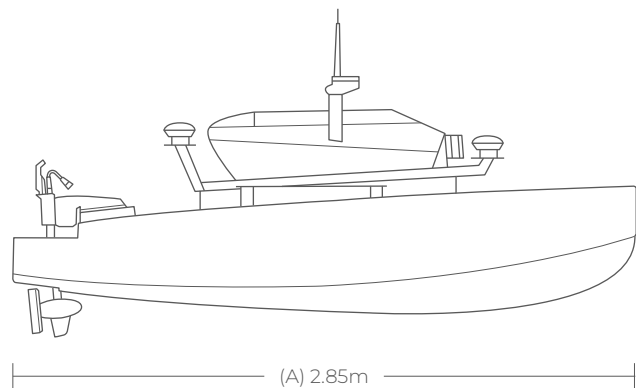
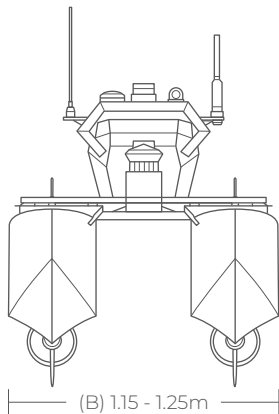
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Length overall	2.85m (A)
Breadth	1.15 - 1.25m, configurable (B)
Hull depth	0.55m
Lightship draft	0.45m (including outboard skeg)
Displacement ¹ (Lightship)	200kg
Hull form	Symmetrically hulled catamaran
Construction	5083 marine-grade aluminium alloy
Propulsion	(2) x Torqeedo Ultralight 1103 (1,1kW)
Propulsion batteries	(2) x Torqeedo 915Wh batteries = 4.5 hrs @ 3kts (4) x Torqeedo 915Wh batteries = 9 hrs @ 3 kts
Service battery	Victron Energy, li-ion 26.5vDC (1,280Wh)
Maximum speed	5.5 kts
Communications	Joystick RF (<200m) WIFI 2.4 / 5 GHz (<1.5km) Cellular
Payload	(2) serial ports (2) Ethernet ports 12/24vDC power ²
Support equipment (standard)	Docking joystick Navigation camera Rugged embedded PC (IP66) Base Control Station PC (IP54) ³

1. Approximate value subject to configuration specific design.

2. 48vDC / 230vAC available as an option.

3. Excludes screen, keyboard, mouse, etc.



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