



ISURUS™ ROV



Increase Your **Working Capability** With Up to **Six** Additional Hours of **Operational Time**

Purpose-built for offshore wind operations, the Oceaneering® Isurus™ ROV leverages extensive experience and field-proven engineering to provide you with up to six additional hours of operational time per day. Isurus enables you to complete work scopes in challenging environments including severe current conditions and tidal charts while effectively reducing risk, cost, and time spent waiting on favorable weather windows. Capable of work class tasks and high-speed operation, Isurus is ideally suited for renewable energy applications and for completing high-speed ROV surveys.

Benefits



Increases your operating windows in challenging conditions



Boosts your speeds up to 5 knots in forward and reverse



Completes your projects more efficiently, on time, and cost effectively



Reduces vessel costs, idle time and CO₂ emissions



A True Renewable ROV

The Isurus ROV is ideal for renewable project work scopes, including cable lay, performing pre- and post-lay cable survey runs, cable messenger wire hook-up, and foundation installation for offshore renewables.



What Makes **Isurus Ideal** for **Renewable** Projects?

Many offshore wind renewable projects occur in shallow water regions with strong environmental currents. The structures installed for renewable projects often cause localized currents higher than the environmental currents. These currents can prevent traditional ROVs from being able to support 24-hour construction and cable lay operations. Isurus' ability to perform work class ROV tasks in high currents improves the project economics by adding up to six additional hours of work time per day.

Isurus uses Oceaneering's Online Realtime Condition Assessment (ORCA) software system for managing the ROV operations. This system enables ROV pilots, technicians, and supervisors to work with better, simpler control, enabling them to focus on planning and execution of the complex task scopes of the offshore renewable industry.

Built for **Challenging** Operational **Conditions**

The Isurus ROV increases operational windows in areas such as the U.K. Continental Shelf, West Coast Europe, East Asia, Brazil and the U.S. where high currents can affect operations.

A true work class ROV, Isurus integrates full-sized hydraulic manipulators while

delivering the same loads and power-to-payload to devices as a work class ROV.

Isurus can be configured with a variety of visualization technologies including HD cameras, 3D sonar, or augmented reality to enable operations to continue even in poor visibility.

Increased Speed



Isurus can achieve 5 knots in forward and reverse, lateral speeds greater than 2 knots, and a vertical speed of 1.3 knots.

Equipped with advanced vehicle control, navigation, and optional station keeping functionality, Isurus enables work to be completed more efficiently, on-time, and cost-effectively. Beyond holding steady in severe currents, the Isurus ROV delivers a stable platform for cable inspections and survey at high speeds.

A **Green** ROV

Holding station in high currents, Isurus reduces the required vessel days while simultaneously reducing cost, risks, and CO₂ emissions associated with operations.

The Isurus ROV can be piloted from Oceaneering's Onshore Remote Operations Centers (OROCs) to simplify logistics, reduce carbon footprint, and lower risk to employees.

ISURUS



OCEANEERING



Vehicle Specifications

Vehicle Specifications	
Weight in air	7,500 lb / 3400 kg
Dimensions (LxWxH)	8.5 x 5.1 x 6.1 ft / 2.6 x 1.6 x 1.9 m
Depth rating	10,000 ft / 3000 m (standard)
Payload	500 lb / 227 kg
Maximum speed	
Forward/reverse:	+5 kn
Lateral:	+2 kn
Vertical:	1.3 kn

Vehicle Power and Performance	
Hydraulic power units	2 x 85 hp
Propulsion	4 x vectored horizontal 2 x vertical
Thrust	
Forward/reverse:	1,900 lb / 862 kg
Lateral:	1,100 lb / 499 kg
Vertical:	1,200 lb / 544 kg

Vehicle Manipulators and Tooling	
Manipulators (2)	7 function: rate, SC, or hybrid control
Wrist camera assembly	Laser, light, and camera

Hydraulic Tool Control	
+6 directional control valves with proportional pressure and flow	
Maximum 25 gal/min	

Vehicle Cameras and Lighting	
Cameras	Standard definition (SD) High definition (HD) 3D HD (optional) 4K UHD (optional)
Lighting	Up to 8 x 250 W (high-intensity LED)

Vehicle Control and Navigation	
Automatic control	Fly-by-wire station keeping system Auto heading/depth/altitude Cruise control
Heading and altitude sensors	Survey-grade gyro Backup fluxgate compass
Depth sensor	High-resolution digiquartz Backup analog depth sensor
Navigation sensor	Doppler velocity log
Obstacle avoidance sonar	Kongsberg 1071 or 1171 Tritech SeaKing

Vehicle Optional Power / Data Interfaces	
Data links	Multiple RS232 and RS485 Ethernet Optical Fiber
Power	2300 VAC, 200 EHP 24DC & 110 VAC

Tether Management System (TMS)	
Type	Side entry cage
Propulsion	2 x horizontal (cage only)
Hydraulic power unit	1 x 85 hp (E)
Electro-optical Tether	1,800 ft / 500 m standard (cage) 4,000 ft / 1200 m optional (cage)
Cameras	2 x charge-coupled device (CCD)
Lighting	2 x 250 W (high-intensity LED)
Station keeping (optional)	Can be included to further reduce drag and increase operational window

Launch and Recovery Systems (LARS) (choice of)	
Overboarding	
A-frame w/ or w/o docking head	
Heavy weather overboarding system	
Cursor	
Winch	
Heavy lift winch with conventional or OHRA level wind	

Survey Sensor Integration Capabilities (Optional):	
Can carry various survey sensors	Dual Head MBES (multibeam echo sounder), CP (contact proximity), Bathy, MUX, TSS440/ TSS350, SSS/SBP
Survey capable ROV that can have the full suite of survey sensors mounted for route/cable/pipeline surveys in areas of high current or when high survey speed is required.	

The Isurus ROV

Opening new operating
windows for offshore wind

Please contact us for more information
renewables@oceaneering.com



Connecting What's Needed with What's Next™