

KEY FEATURES



Solus-LR Autonomous Underwater Vehicle

Solus-LR is a long-range hydrogen fuel cell powered AUV with an operational range greater than 2000 km. Designed for port-to-port missions, Solus-LR provides a persistent subsea capability supporting ASW, ISR & MCM missions in addition to traditional subsea survey and inspection.

Payloads & Systems

Your choice of standard payloads:

- VLF towed array
- Suction anchor
- MBES, SAS, SSS/SBP
- · Camera & laser
- · OFG Self Compensating Magnetometer
- CTD, pH, CO, and other chemical sensors
- · Variable buoyancy system

Applications

- · Port-to-port missions
- · Anti-submarine warfare
- · Intelligence, surveillance, and reconnaissance
- Mine countermeasures
- Geophysical survey & pipeline inspection
- · Offshore renewables
- Deployment of surveillance payloads



Benefits

- ✓ Longest-endurance AUV. Solus-LR's novel suction anchor and fuel cell enables Solus-LR to hold station at a surveillance location in a low-power state for multiple months.
- ✓ Powered by clean technology. The fuel cell is powered by hydrogen: a high-efficiency green fuel. The vehicle can operate without a fully manned surface vessel, reducing your carbon footprint and ensuring your operations are environmentally sustainable.
- ✓ **IHO compliant.** Solus-LR is compliant with IHO standards for hydrographic surveys.

Standard Configuration Specifications

AUV SPECIFICATIONS

- Depth Rating: 3000 m
- Range: 2000 km
- Speed: 2 m/s (4 kts)
- Length: 8.5 m
- Diameter: 1 m
- Weight: 3700 kg
- Max Ascent/Descent Angle: 45°
- Terrain Following: At altitudes > 3.5 m

OPTIONAL FEATURES

- Comprehensive support package: including spares, support equipment, software, training, and post-processing.
- Belly pack
- Pop-up buoy
- LARS

ENDURANCE/ENERGY

- Endurance: 360 hrs at 1.5 m/s (3 kts)
- 250 kWh hydrogen fuel cell
- 12 hour refuel and turnaround time

SOFTWARE & DATA HANDLING

- · Mission planning tool
- · Performance analysis tool
- Backseat driver
- · Option for on-shore piloting

NAVIGATION

- INS/DVL: Sonardyne SprintNav 300, 500, 700
- Navigation Accuracy: 0.04%, 0.02%, 0.01%
- OAS: Imagenex Delta-T
- GNSS system

COMMUNICATION

- Acoustic Communication: Sonardyne AvTrak 6
- Surface Communication: 2.4 GHz radio
- Satellite Communication: Iridium
- Acoustic Positioning: Sonardyne Ranger 2



All vehicles customizable upon request.

