TELEDYNE MARINE

OSPREY

Autonomous Underwater Vehicle

Flexible Solutions for Varied Applications

The Osprey AUV is built upon the proven Gavia modular design. The Osprey has a 324mm/12¾" diameter to accommodate additional energy and sensor options to meet demanding applications with a 2000m depth rating. The Osprey utilizes a fully modular design based on the Teledyne QuickLock mechanism and Teledyne Vehicle bus.

Features include an efficient rim drive thruster, removable data pod, increased capacity battery modules, enhanced obstacle avoidance capability and more capable and customizable sensors, autonomy and payloads to meet a variety of mission requirements from defense, commercial and scientific users.





PRODUCT FEATURES

Features

- Fully modular design
- 2000m depth rating
- Extended endurance options up to 24 hrs+
- Utilizes proven Gavia mechanical and software design
- Utilizes proven Gavia chart-based graphical user interface
- Wide array of additional sensors available including SAS, SSS, MBES, SBP, and camera systems
- Thruster option includes low noise, highly maneuverable rim drive thruster
- Highly accurate navigation with optional USBL aiding

Applications

Commercial:

- Pre/post Construction Support
- Pipeline Inspection

Defense

- Mine Countermeasures (MCM)
- Rapid Environmental Assessment (REA)
- Search and Recovery (SAR)
- Sonar Training

Scientific

- Oceanography
- Marine Archeology



Osprey Autonomous Underwater Vehicle

TECHNICAL SPECIFICATIONS

SPECIFICATIONS

Length	Up to 5 m (configuration dependent)	
Weight in Air	Up to 400 kg (configuration dependent)	Synthetic Aperture Sonar (SAS) image
Diameter	324 mm / 12 ¾"	
Depth Rating	2000m	
Battery Module	4.4 kWh lithium ion rechargeable cells per module. Multiple battery modules can be used on the vehicle at a time	
Max Speed	> 5 knots	
Endurance	Dependent on speed and exact configuration. Typical configuration over 24 hours at 3.5 knots with two rechargeable battery modules. Vehicle can be operated with up to 3 batteries for increased endurance or batteries can be field swapped for continuous operations.	1600 kHz sample Side Scan Sonar data image
	COMMUNICATION	
Wireless LAN	IEEE 802.11g compliant	
Satellite Communications	Full global coverage via Iridium link	Side Scan Sonar
Acoustic Modem	Tracking and status updates	with Gap Fill
	NAVIGATION	1
	High accuracy DGPS ready receiver	
	High-precision DVL-aided Inertial Navigation Systems (INS) from Exail with Teledyne RDI Doppler Velocity Log (DVL) and direct sound velocity meter.	
	Positioning accuracy can be maintained over longer	Teledyne RESON T20

Positioning accuracy can be maintained over longer duration deployments by utilizing Teledyne or leading third-party USBL systems.

*In typical conditions





multibeam sonar





Osprey AUV Modularity

The modular construction of the Osprey AUV allows the user to conduct a variety of missions with field-changeable modules. Additional Osprey AUV modules can be purchased at later dates to increase capability as mission requirements evolve.





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