

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

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Length Up to 5 m (configuration dependent) Up to 400 kg (configuration dependent) Weight in Air

324 mm / 12 ¾" 2000m

Depth Rating

Diameter

4.4 kWh lithium ion rechargeable cells per module.

Battery Module Multiple battery modules can be used on the vehicle

Max Speed > 5 knots

> 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





Endurance

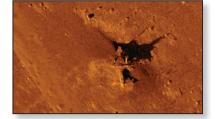
COMMUNICATION

Wireless LAN **Satellite Communications** Acoustic Modem IEEE 802.11g compliant

Full global coverage via Iridium link

Tracking and status updates





NAVIGATION

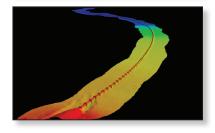
High accuracy DGPS ready receiver

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 duration deployments by utilizing Ultra Short Baseline (USBL) (optional).

*In typical conditions

Teledyne RESON T20 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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