



The Bluefin-12D is a modular autonomous underwater vehicle with flexibility that allows for swappable payloads. Not only can it dive deeper, but it has greater energy and payload capacity than its shallower counterpart. The Bluefin-12D is a combination of immense capability and efficient packaging customizable for a variety of applications.

FREE-FLOODED MODULARITY – The vehicle design includes swappable payload sections and battery modules for in-field mission reconfiguration. Subsystems can be quickly accessed for rapid turnaround between missions and also allow for in-field maintenance, accelerating operational tempo.

VERSATILITY & SCALABILITY – Standard building blocks enable a variety of configurations without having to design from scratch. The Bluefin-12D can accommodate new payloads and enhanced energy sections – evolving with expanding requirements or changing applications. It can also be delivered with an empty payload section and a standard payload interface for customer payload integration.

ACCURATE NAVIGATION – The Bluefin-12D uses an INS to provide the best possible navigation accuracy. Dead reckoning drift is typically less than 0.1% of distance traveled, yielding higher quality data. USBL aiding further improves navigation accuracy.

EASE OF USE – An intuitive software package enables quick and easy planning and monitoring of missions and rapid post-mission processing and display, and is capable of exporting data to third-party software.



Swappable batteries facilitate rapid mission turnaround.

Applications

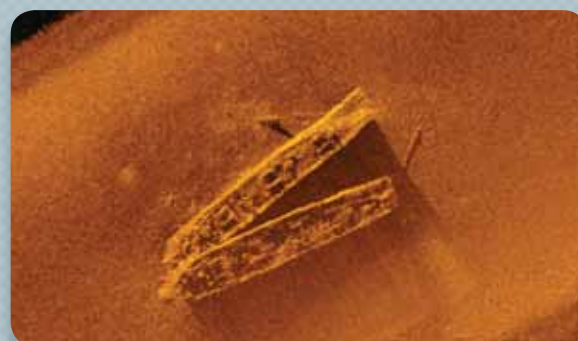
- Offshore Survey
- Search & Salvage
- Archaeology & Exploration
- Environmental Protection & Monitoring
- Mine Countermeasures (MCM)
- Unexploded Ordnance (UXO)

Bluefin-12D

Diameter	12.75 in (32 cm)
Length	14.2 ft (432 cm)
Weight (Dry)	574 lb (260 kg)
Buoyancy	8 lb (3.6 kg) net positive
Lift Points	1 (located mid-vehicle)
Depth Rating	4,921 ft (1,500 m)
Endurance	30 hours @ 3 knots with standard payload
Speed	Up to 5 knots
Energy	7.5 kWh of total energy Five 1.5 kWh battery packs Lithium-polymer, pressure-tolerant
Propulsion	Gimbaled, ducted thruster for propulsion and control
Navigation	Real-time accuracy $\leq 0.1\%$ of D.T. CEP 50 INS, DVL, SVS and GPS USBL tracking with vehicle position updates
Antenna	Integrated — GPS, RF, Iridium and strobe
Communications	RF, Iridium and acoustic; Ethernet via shore power cable
Safety Systems	Fault and leak detection, dropweight, acoustic tracking transponder, strobe, RDF and Iridium (all independently powered)
Software	GUI-based Operator Tool Suite
Data Management	4 GB flash drive for vehicle data Plus additional payload storage
Standard Payloads (others available)	Swappable Payload 1: EdgeTech 2200-MP 120/410 kHz side scan sonar Swappable Payload 2: Digital camera, LED-based strobe



Pop-off nose releases a line for easier vehicle recovery



Bluefin-12D side scan sonar imagery of a shipwreck



SYSTEM PACKAGE — The Bluefin-12D comes as a part of a comprehensive system package primarily consisting of the vehicle, support equipment, spares, software, training and 1-year warranty.



OPERATOR TOOL SUITE — Each system includes an intuitive software package that provides the interface between the AUV and operator for all phases of a mission, including planning, monitoring and execution, data management, and post-mission analysis.