

## **Bluefin-9**



The Bluefin-9 is a lightweight, two-man-portable autonomous underwater vehicle with a mission turnaround time of less than 15 minutes. Equipped with a side scan sonar and camera, the Bluefin-9 provides the performance of much larger AUVs in a convenient and rapidly deployable package.

**COMPACT** – The lightweight Bluefin-9 is easily deployed by two people from an inflatable boat and requires minimal support equipment.

ACCURATE NAVIGATION – Bluefin's navigation software combines information from the IMU and multiple other sensors – including GPS, a DVL, a CT sensor and a compass – to provide high-accuracy navigation with an error of less than 0.3% of distance traveled, yielding high-quality data without a costly INS.

**RAPID TURNAROUND** – The combination of a freeflooded architecture, a pressure-tolerant battery and removable data storage reduces turnaround time between missions to less than 15 minutes. Easy access to subsystems reduces time on deck for maintenance and accelerates operational tempo. In addition, the Bluefin-9 is easily maintainable in the field due to its swappable, modular subsystems.

**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.



The Bluefin-9 can be easily launched and recovered from a RHIB

## **Applications**

- Inshore Survey
- Environmental Protection & Monitoring
- Mine Countermeasures (MCM)
- Port & Harbor Security
- Unexploded Ordnance (UXO)
- Rapid Environmental Assessment (REA)
- Intelligence, Surveillance & Reconnaissance (ISR)

## **Bluefin-9**

Diameter	9.375 in (24 cm)
Length	69 in (175 cm)
Weight (Dry)	133.5 lb (60.5 kg)
Buoyancy	2 lb (0.9 kg) net positive
Lift Points	2 (located fore and aft)
Depth Rating	650 ft (200 m)
Endurance	12 hours @ 3 knots with standard payload
Speed	Up to 5 knots
Energy	1.5 kWh of total energy One 1.5 kWh battery pack Lithium-polymer, pressure-tolerant
Propulsion	Gimbaled, ducted thruster for propulsion and control
Navigation	Real-time accuracy < 0.3% of D.T. CEP 50 IMU, DVL, CT sensor, compass and GPS
Antenna	Integrated — GPS, RF and strobe
Communications	RF and acoustic; Ethernet via shore power cable
Safety Systems	Fault and leak detection, acoustic tracking transponder, strobe and RDF (all independently powered)
Software	GUI-based Operator Tool Suite
Data Management	4 GB removable data storage module (RDSM)
Standard Payload	Marine Sonic Technology 900/1800 kHz dual-frequency side scan sonar Deep Sea Power and Light MultiSeaCam 1060
	YSI 6560 CT Probe YSI 6136D Turbidity Probe



The Bluefin-9's thruster enables speeds of up to 5 knots



Bluefin-9 side scan sonar imagery of a shipwreck



**SYSTEM PACKAGE** — The Bluefin-9 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.

2010-12-03

©2010 Bluefin Robotics Corporation

Features and specifications subject to change without notice. Literature may include options not available in all regions. Other options and configurations available beyond standard configuration depicted.