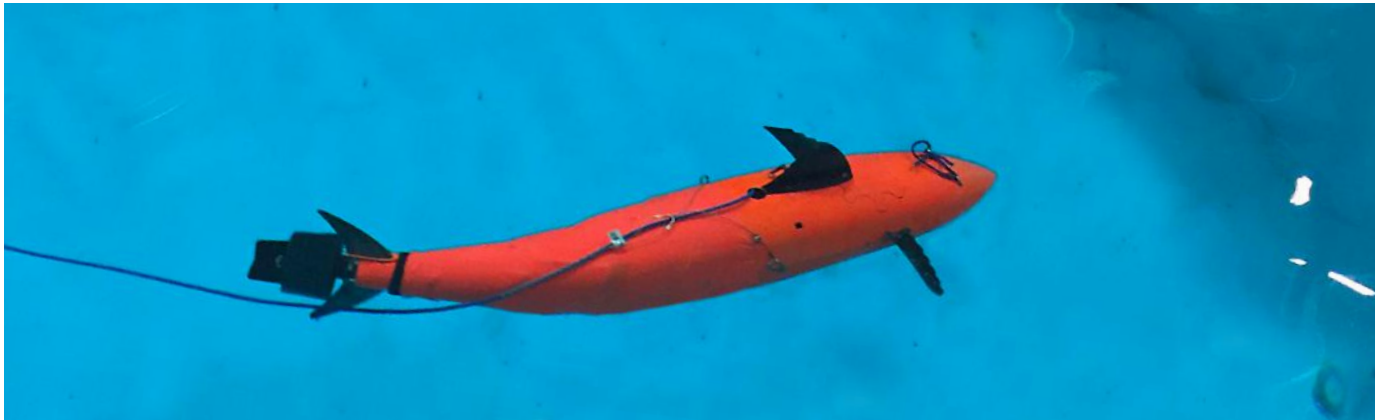




# BIOSwimmer™ Unmanned Underwater Vehicle (UUV)

## Performance and Agility for Security, Inspection, and Search



The BIOSwimmer UUV applies the dynamics of biological fish to advance underwater search, inspection, and to operate in constricted areas inaccessible by other vehicles.

The BIOSwimmer addresses homeland security and commercial maritime capability gaps in littoral waters. BIOSwimmer's powerful features enable users to:

- Increase data collection in confined areas (e.g., close, steady sonar scans of ship hulls and piers)
- Reduce diver risks associated with manual underwater operations
- Perform a breadth of missions (modular design and multi-payload support)
- Provide high performance in harsh environments
- Collect data (live or stored)
- Operate semi-autonomously, autonomously, or manually (override for additional inspection)
- Launch and recover rapidly

## Advantages

### Performance and Visibility

- Provide 100% hull scan coverage (eliminates "blind spots")
- Scans fifteen 700-foot ships in eight-hour shift
- Runs continuously for ~10 hours

### Speed and Maneuverability

- Scans 80% faster than ROVs
- Turns 360-degrees in one body length

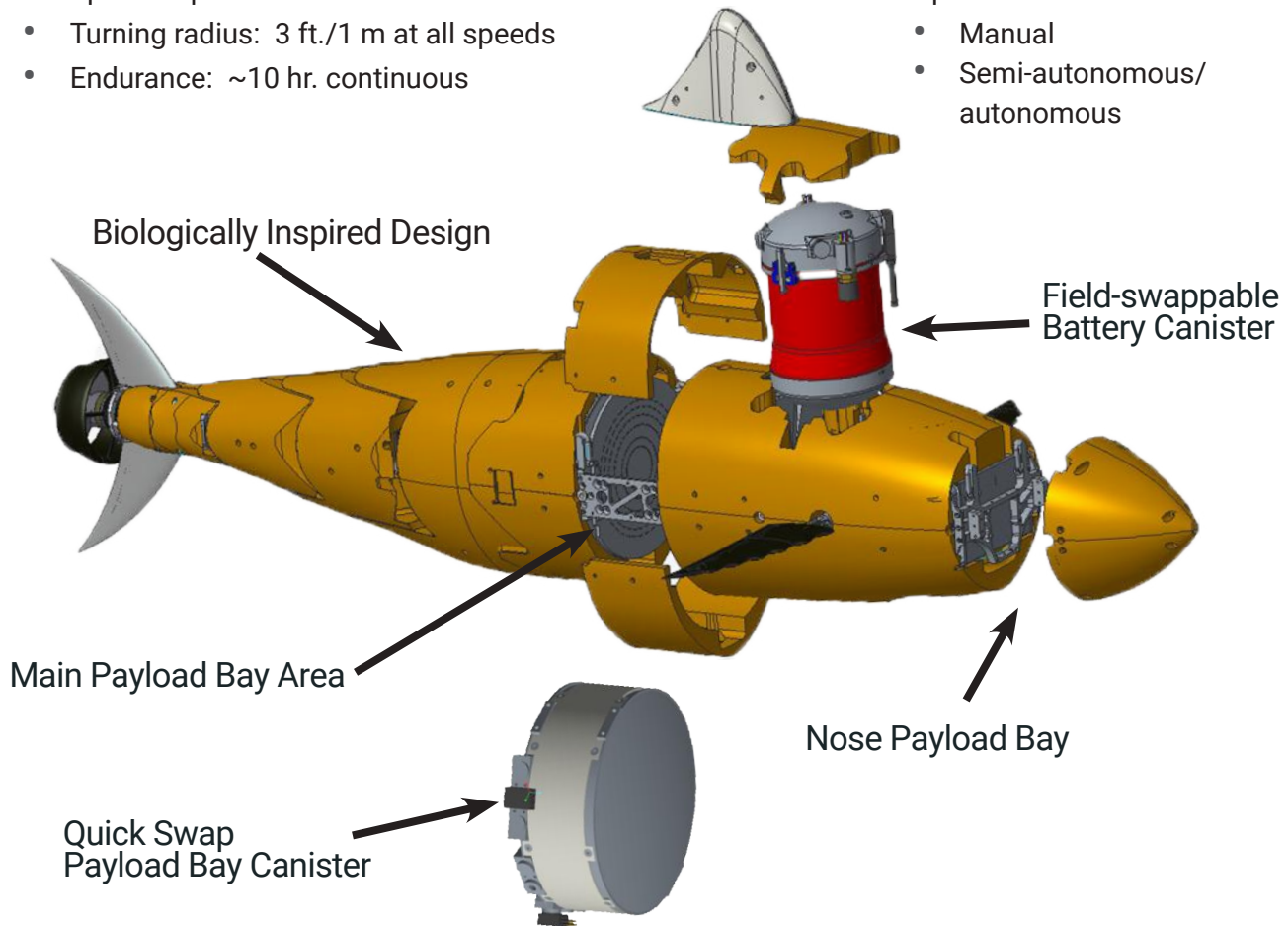
### Efficiency and Value

- Half the cost of a dive team per task
- Half the cost of comparable AUVs



## Specifications

- Length: begins at 5' 5" ft./1.52 m
- Weight (dry): 110 lbs./50 kg
- Speed: Up to 4 knots
- Turning radius: 3 ft./1 m at all speeds
- Endurance: ~10 hr. continuous
- Depth: to 300 ft./91.4 m
- Payload: ~700 cubic inches
- Operation modes:
  - Manual
  - Semi-autonomous/autonomous



## About Boston Engineering

Boston Engineering provides product design and engineering consulting from concept development through connected product capabilities. The company specializes in solving complex challenges in defense & security, medical devices, robotics, and commercial industries. Boston Engineering is also a PTC Platinum Partner, a ThingWorx internet of things (IoT) partner, and an Ansys reseller. Founded in 1995, Boston Engineering is certified to ISO 9001:2015 and ISO 13485:2016 standards. The company is headquartered in Waltham, Mass., and is online at [www.boston-engineering.com](http://www.boston-engineering.com).



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