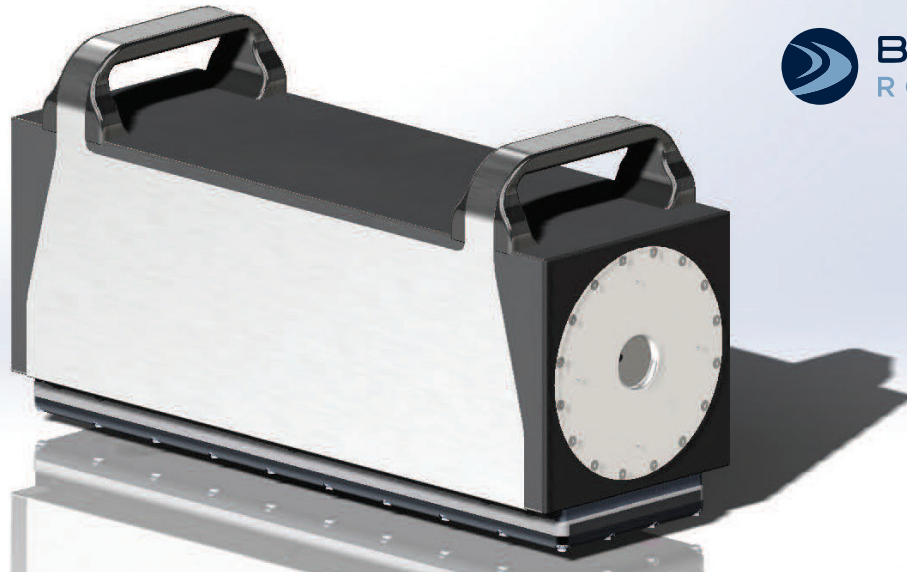


# 1.5 kWh Subsea Battery



Autonomous Underwater Vehicles (AUVs)

---

Remotely Operated Vehicles (ROVs)

---

Profilers

---

Buoys

---

Submersible Systems

---

## Overview

Bluefin's 1.5 kWh Subsea Battery is a pressure-tolerant lithium-polymer battery that provides a reliable, high-energy-density power solution for underwater systems. The battery electronics include built-in protection, monitoring, power control, and battery conditioning. Leveraging over a decade of battery development and with hundreds of units in the field, the 1.5 kWh Subsea Battery has demonstrated utility across a variety of underwater applications.

- **FULLY SUBMERSIBLE** – The 1.5 kWh Subsea Battery is designed for direct submergence in water in any orientation, eliminating the need for a pressure vessel.
- **HIGH ENERGY DENSITY** – The lithium-polymer chemistry provides extremely high energy density while still maintaining good cycle life and performance, which are desirable for subsea applications.
- **SWAPPABLE** – The design of the 1.5 kWh Subsea Battery allows a user to quickly replace a discharged battery with a charged one without ever opening a pressure vessel. This enables rapid turnaround of submersible equipment in the field.
- **RECHARGEABLE** – With the fully automated charging system, full battery recharge can be accomplished in six hours or less.

# 1.5 kWh Subsea Battery

## Technical Specifications

---

- Dimensions
  - 15.1 x 5.2 x 8.2 in
  - (38.4 x 13.3 x 21 cm)
- Weight (Dry): 31.5 lb (14.3 kg)
- Displacement: 8.12 liters
- Depth Rating: 6,000 m
- Energy: 1.5 kWh
- Voltage (Nominal): 30 V
- Capacity (Nominal): 48 Ah
- Cycle Life\*: 300-500 cycles to better than 80% depending on actual conditions
- Discharge Current:
  - 10 A nominal
  - 30 A maximum
- Discharge Temperature: -20 to 48° C
- Charge Current:
  - 12 A nominal
  - 15 A maximum
- Charge Temperature: 0 to 48° C

## Other Features

---

- Rechargeable lithium-polymer cells
- Housing is internally pressure-compensated with oil
- Wet-mateable connectors simplify cable management when used with Bluefin junction boxes
- Serial communications
- Safety electronics for monitoring and prevention of over-voltage, under-voltage, over-current and over-temperature conditions
- UN-certified, stainless-steel shipping container included, which allows shipment via any mode (ground, sea or air)

## Available Accessories

---

- Charger (with cable)
- Discharger (with cable)
- Multi-Battery Junction Box
- Mating Connector

*\*Cycle life is based on data from cell manufacturer. Charge / discharge rate, cell voltage, temperature, cell age and number of cycles all contribute to overall battery life and capacity.*

## GENERAL DYNAMICS

Mission Systems

Adam Mara • 553 South Street • Quincy, MA 02169 • T: (+1)617-715-7040 • M: (+1)617-849-0490  
Adam.mara@gd-ms.com | [www.gdmissionsystems.com/Bluefinrobotics](http://www.gdmissionsystems.com/Bluefinrobotics)

©2018 General Dynamics. All rights reserved. General Dynamics reserves the right to make changes in its products and specifications at anytime and without notice. All trademarks indicated as such herein are trademarks of General Dynamics. All other product and service names are the property of their respective owners. © Reg. U.S. Pat. and Tm. Off.

D-BluefinBattery-02-0118