

1.5 kWh Subsea Battery



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.



Batteries can be rapidly swapped in the field

Applications

- Autonomous Underwater Vehicles (AUVs)
- Remotely Operated Vehicles (ROVs)
- Profilers
- Buoys
- Submersible Systems

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Dimensions (L x W x H)	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

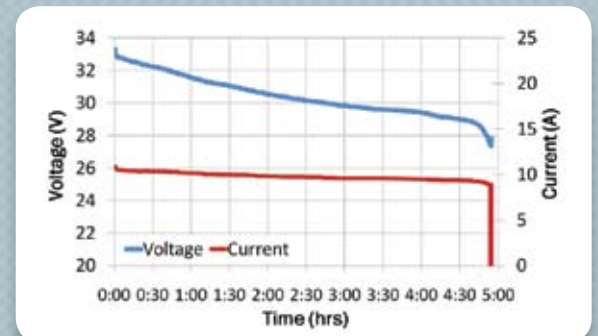
*Cycle life is based on data from cell manufacturer. Charge / discharge rate, cell voltage, temperature, cell age and number of cycles all contribute to overall battery life and capacity.

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)



Ships via UN-certified container for ground, sea or air transport



Typical discharge profile for 1.5 kWh Subsea Battery



Charging is quick and easy using our automated charger

Available Accessories

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