



## Long Endurance Subsea Batteries

### **SeaPower Key Features**



### Highest Subsea Energy Density

- Proprietary potting technology eliminates the need for pressure housing or oil compensation.
- Market-leading energy density for rechargeable subsea batteries.



### Certified, Safe, and Reliable

- Engineered for safety and reliability at cell, battery, and system levels.
- Compliant with U.S. Navy and maritime safety and transportation standards.

### **Modular Scalable Energy Solution**

- Customizable battery modules to meet specific power requirements.
- Scalable solutions supporting applications from small to extra-large underwater vehicles.

# Energy and Reliability for Extended Missions

Kraken's SeaPower is a subsea lithium ion battery featuring a proprietary polymer matrix for pressure-tolerant encapsulation and an integrated Battery Management System (BMS).

This breakthrough in battery encapsulation technology delivers 200% greater energy density and 46% less weight per kWh compared to traditional oil-compensated or pressure-housed subsea batteries.

Its exceptional energy-to-volume and weight ratios enable extended, deeper, and more complex underwater missions.



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## Advanced Technology

SeaPower batteries use pressuretolerant Li-ion pouch cells embedded in a polymer matrix, eliminating housings or oil compensation. Rated to 6,000 m, the modular system features a slave/ master BMS architecture enabling parallel operation across varying state of charges, real-time telemetry, and software-based power control. The system architecture scales efficiently, exceeding 5 MWh.

## **High Quality**

Kraken batteries are subjected to stringent ISO-certified quality control procedures. Each unit is rigorously pressure-tested up to 660 bar to ensure reliability and durability. Adhering to international standards, the batteries are certified for safe air transport and constructed to meet the challenges of offshore missions. Consistent manufacturing and traceability across every module ensure dependable performance in mission-critical environments.

### **Enhanced Reliability**

Kraken batteries are essential for missioncritical operations, delivering consistent performance and dependability. The BMS includes a solid-state relay with power over rails to reduce dependency on cables and connectors. Every cell is closely monitored for temperature and voltage, with system-wide communication to ensure reliable mission execution. Redundant safety and fault-tolerant design enable safe operation in extreme subsea conditions.



**EXTENDED MISSIONS** Strategic Efficiency in Naval Operations

## FROM 40 TO 100+ HOURS ENDURANCE

An offshore operator, utilizing SeaPower's pressure-neutral batteries, upgraded their UUV's battery capacity from 48 kWh to 96 kWh within the same volume while achieving a 46% reduction in weight per kWh.



Performance specifications represent maximum sensor values and may vary due to environmental conditions, vehicle stability, and operational specifics.