SeaPower™

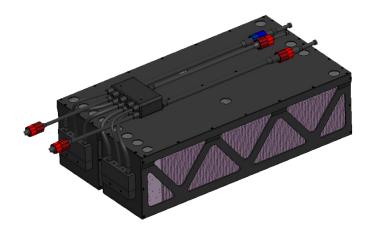




Kraken SeaPower[™] pressure-tolerant batteries have the best energy-to-weight ratio on the market for deep sea batteries. SeaPower's deep-sea proven design operates at depths up to 6,000 m.

Undersea systems are exposed to extremely high-pressure environments. SeaPower's silicone encapsulated lithium-polymer cells are protected from the harmful effects of the seawater while still leaving them flexible and stable. This silicone encapsulation eliminates the need for pressure-tolerant housing and compensators, reducing both weight and costs.

SeaPower's battery blocks can be used singularly or connected in a series of modular banks, depending on your requirement for capacity and voltage. Each battery block is equipped with an integrated Battery Management System (BMS) allowing you to quickly and easily monitor the status and health of the battery.

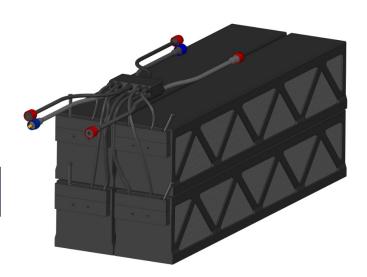


Features

- Reliable, rugged design
- High-energy density
- Oil compensation not required
- Modular system
- Diverse connector options
- Integrated Battery Management System (BMS)
- Data interfaces: CAN, RS485, or customer-specific

Applications

- Remotely Operated Vehicles (ROVs)
- Subsea Resident UUVs
- Autonomous Underwater Vehicles (AUVs)
- Stationary platforms
- Energy storage
- Subsea energy supply

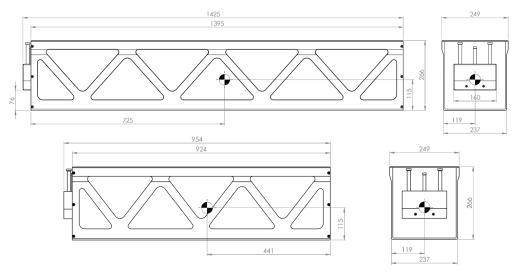


Top image: Two BM114V118 connected Bottom image: Represents four BM57V311/BM513V45 connected to create a larger power source



BM57V311, BM114V118 and BM513V45 Specifications

	BM57V311	BM114V118	BM513V45
Operational depth	6,000 m		
Energy capacity (@ 25°C)	17.7 kWh	13.5 kWh	22.8 kWh
Voltage (Max)	348.6 V	132.8 V	49.8 V
Voltage (Nominal)	310.8 V	118.4 V	44.4 V
Voltage (Minimum)	252 V	96 V	36 V
Current (Continuous discharge)	15 A	28 A	28 A
Current (Continuous charge)	15 A	28 A	28 A
Charge time	>7 hours	>4 hours	>18 hours
Operating temperature (Charging)	10°C to 45°C		
Operating temperature (Discharging)	-10°C to 55°C		
Life cycles	1000 cycles @ 80% Capacity Retention		
Life calendar	>5 - 10 years, 80% retention Depending on use case		
Life storage	-20 - 25°C Continuous 1 year		
	25 - 40°C Continuous 3 month		
	40 - 60°C Continuous 1 week		
Weight (in air)	153 ± 4.0 kg	105 ± 0.5 kg	158 ± 4.0 kg
Weight (in fresh water)	63 ± 2.5 kg	57 ± 0.5 kg	72 ± 2 kg
Dimensions (LxWxH)	1425x249x266 mm	954x249x266 mm	1425x249x266 mm



Top: BM57V311 and BM513V45 Bottom: BM114V118 Measurements are shown in millimeters