Sodium-Ion Saltwater Battery (AIB™)

The world's safest and most environmentally friendly battery

The patented Aqueous Ion Exchange Battery (AIB[™]) has already proven itself in thousands of systems. These batteries are a sealed energy storage system based on saltwater electrolyte.

Saltwater technology

To meet the challenges of increasing energy consumption and the growing share of renewable energy, energy storage is essential. High efficiency, safety, cost-effectiveness, and sustainability are the key factors. The saltwater batteries are completely maintenance-free and optimized for daily deep discharges. Frequent partial charges and discharges have no impact on the battery lifespan.

Advantages and key features of saltwater technology:

- The safest and most environmentally friendly energy storage
- Non-flammable cells non-explosive
- Completely maintenance-free
- Fully plug & play system
- Eco-friendly saltwater electrolyte
- Made from common, non-toxic materials
- Completely safe to touch
- Can be discharged 100%
- Long lifespan, even with partial charging
- Wide temperature range from -5°C to +50°C
- Transportable as non-hazardous goods no ADR required



Operation and performance			
Nominal Energy	675 Wh (4A charge/discharge)	2.7 kWh (8A charge/discharge)	2.7 kWh (4A charge/discharge)
Nominal Voltage (V)	DC 12	DC 24	DC 48
Voltage Range (V)	8.8 - 15	17.5 - 30	35 - 60
Charge Curve	CC (constant current)	CC (constant current)	CC (constant current)
Depth of Discharge (DoD)	100	100	100
Efficiency (%)	88.5	88.5	88.5
Max Charge Current (A)	20	40	20
Max Discharge Current (A)	20	40	20
Operating Temperature	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C
Storage Temperature	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C
Minimum Lifespan	5,000 cycles @ 80% DoD	5,000 cycles @ 80% DoD	5,000 cycles @ 80% DoD
Dimensions (HxWxD mm)	235x313x329	929x313x329	929x313x329
Weight (kg)	35	140	140

