

# Marine Energy Storage Systems



## Effortless Efficiency



Pomega's Marine Energy Storage Systems revolutionize marine exploration by offering exceptional cycle life, high energy density, and superior safety. With LifePO4 technology, vessels are no longer tethered to shore power, ushering in a new era of sustainable and independent exploration.

These systems provide extended range, exceptional power delivery, and rapid recharge capabilities, empowering vessels to venture further into uncharted territories and power demanding onboard systems effortlessly. Additionally, Pomega prioritizes sustainability by minimizing environmental impact through the use of non-toxic materials, seamless integration with solar panels for self-sufficient energy, and extended battery lifespans to reduce waste.

With compact designs and minimal maintenance requirements, Pomega's Marine Energy Storage Systems optimize onboard space and streamline operations, while advanced battery management systems ensure safety and maximize lifespan. Choose innovation, sustainability, and unparalleled performance with Pomega for an exhilarating nautical experience.

Applications		
➤ Easy Installation and Operation	➤ Off-Grid Application	➤ Communication interface bluetooth and CANBus
➤ Inceasable Capacity	➤ Elegant Design	➤ Serial Connection
➤ Modular Structure	➤ Long Lifetime	➤ High Level Protection



## Portable High Performance Batteries



Basic Properties	PBM-12100	PBM-12200	PBM-24100
Cell Type	LiFePO <sub>4</sub> - Prismatic		
Nominal Voltage	12.8V		25.6V
Operating Voltage Range	11.2V - 14.2V		22.4V - 28.4V
Nominal Capacity	100Ah	200Ah	100Ah
Nominal Energy Capacity	1280Wh	2560Wh	2560Wh
Max. Charge Voltage	14.2V		28.4V
Recommended Charge/Discharge Current	50A/50A	100A/100A	50A/50A
Max. Cont. Charge/Discharge Current (*)	100A/100A	150A/150A	100A/100A
Max. Charge/Discharge Current (<15s)	200A/200A	400A/400A	200A/200A
Capacity By Temperature	100 % (25°C), 94 % (0°C)		
Cycle Life (**)	≥6000 cycles		
Normal Operating Temperature	25°C		
Charging Temperature	-20~50°C		
Discharging Temperature (***)	-20~50°C		
Storage Temperature	-20~55°C		
Warranty	10 years		
Functional Properties			
BMS Protections	UV, OV, OC, UT, OT, SC		
Screen	No		
Communication Interfaces	Bluetooth, CAN		
CAN Communication Protocols	NMEA2000		
Parallel Connection	Yes (up to 8 batteries)		
Serial Connection	Yes (up to 48V)		
Safety Relay Control	Yes (over relay connector)		
Dry Contacts	No		
Protective Vent	Yes		
Internal Self Heating	Yes (integrated thermal heat-pad with control)		
Compatible Inverter (****)	Pylontech, Deye, Senergy (Communication :CANBUS, mainly ongrid inverters) Epever (Communication : RS485 , mainly off-grid inverters)		
Mechanical Properties			
Battery Case Material	PC-ABS		
Power Terminals	M8 Screw In		
Protection Level	IP65		
Humidity	5% - 85% RH (non-condensing)		
Altitude	<3000 m		
Dimension (WxDxH)	279x205x215 mm	475x205x215 mm	475x205x215 mm
Weight	13±1 kg	22±1 kg	22±1 kg

(\*) Operates for a complete cycle (full charge/discharge) under 20°C without interruption. (\*\*\*) Performance may vary in different conditions  
 (\*\*\*) Test Conditions: 25°C, 70% SOH (\*\*\*\*) Contact us for other inverter brands