



APstorage C&I Ocean 400L & 200L

**Innovative all-in-one
Liquid Cooled
Energy Storage Solutions for C&I**

Modularity provide a lower Levelized Cost Of Storage and improved safety to your ESS battery projects



Safe

- Liquid cooled
- Thermal management and fire protection for each cluster
- Isolation of faulty cluster



Modular

- Modular design and compact size
- System upgradability during the project life
- Convenient for transportation & Installation
- Suitable for various applications



Efficient

- Energy density per cluster
- Improved production
- Longer life time



Easy to maintain

- Simplified Maintenance per cluster
- Standardization of components enables rapid repairs and replacements, minimizing downtime.

Modular Liquid-Cooled Energy Storage System

Ocean 400L and 200L Specifications



PRODUCT CHARACTERISTICS

- **Flexibility:** All-in-one design for easy transportation and installation.
- **Diverse Applications:** Suitable for diverse applications. Support for various modes, including virtual grid, on-grid, and off-grid.
- **Improved production:** Each cluster operates independently, optimizing battery performance, reducing energy losses, and enhancing overall system efficiency.
- **Intelligent Temperature Control:** Liquid cooling with the cell temperature difference controlled within 3°C, which significantly improves the system lifetime.
- **Precise and Reliable:** cell temperature collection, achieving higher discharge capacity.
- **Flexible Expansion:** The modular design allows for easy capacity expansion in the future, without major system overhauls, ensuring adaptability to evolving application needs and technological upgrades. Support program OTA upgrade or using a local drive.

TECHNICAL PARAMETERS

Ocean 400L Liquid-Cooled ESS

Ocean 200L Liquid-Cooled ESS

	Ocean 400L Liquid-Cooled ESS	Ocean 200L Liquid-Cooled ESS	
AC Parameters	Rated Power	200 kW	100 kW
	Rated Output Voltage	690 V	400 V
	Rated Grid Frequency	50 Hz/60 Hz	50 Hz/60 Hz
DC Parameters	Battery Cell Type	LFP-314Ah	
	Battery Module	1P52S/52.25 kWh	
	Electrical Configuration	1P416S	1P260S
	Nominal Capacity	418 kWh	261 kWh
	Charge/Discharge Rate	≤ 0.5 C	
Cycle Life	8000cycles, @25°C, 95% DOD, 70%SOH EOL		
General Parameters	Operating Mode	Back-up power supply, Peak Shaving and Valley Filling, Demand Control, Reactive Power Regulation	
	Thermal Management	Liquid-cooled	
	Fire Protection System	Aerosol	
	IP Rating	Battery Compartment: IP65, Electrical Compartment: IP54	
	Operating Temperature	-20°C to 55°C (> 45°C derating)	
	Operating Humidity	0~95%, no-condensation	
	Operating Altitude	≤ 3,000 m (>3000, derating)	
	Dimensions (W × D × H)	1,400 mm × 1,400 mm × 2,400mm	1,000 mm × 1,350 mm × 2,350 mm
Weight	≈ 3,900 kg	≈ 3,000 kg	
Communication	Communication Interface	Ethernet/4G	
	Communication Protocol	MODBUS-TCP, MQTT, IEC61850	