

NEO Magnum

5.112 MWh Commercial ESS

Outdoor Liquid Cooling



- **New cell technology**
Higher energy density packed into the same form factor. Extended battery lifetime & performance.
- **Upgraded Module Design**
Featuring independent O&M window & two-way stop valve; Intelligent liquid cooling technology-maintains $\Delta T < 2.5^{\circ}\text{C}$.
- **Higher ROI & Cost-advantages**
Reduced CAPEX & OPEX; Improved TCO & Lower LCOS.
- **Energy Management**
Peak shaving.
Monitoring and indicating status of battery and other equipment.
- **Frequency Regulation**
Fast response and high accuracy to provide regulation service for grid.
- **Easy Expansion**
Modular design for easy capacity expansion.
- **Smart O & M**
Designed for minimal downtime and simplified maintenance

NEO Magnum Technical Data

Model		SEP-CE5112K
Main Parameter		
Cell Chemistry	LiFePO ₄	
Configuration	1P416S12P	
Rated Energy	5111.8kWh	
Rated Voltage	1331.2VDC	
Voltage Range	1040 ~ 1500VDC	
Charging Current (rated)	1920A	
Charging Power (rated)	2555.9kW	
Discharging Current (rated)	1920A	
Discharging Power (rated)	2555.9kW	
Operating Ambient Temperature	-20°C to +50°C (Charge/Discharge)	
Storage Temperature	-30°C to +60°C	
Environment Humidity	10% ~ 90%RH	
Application altitude	≤3000m (Standard)	
Dimension (W×D×H, mm)	2438x6058x2896	
Weight	~43000kg	
IP Level	IP55-Bat. Room, IP54-Electric Room, IP67-Bat. Pack	
Cooling mode	Liquid Cooling	
Communication protocol	CAN, RS485, TCP/IP	
Certifications	UL1973, UL9540A, IEC 62477-1, IEC62619, IEC 62933-5-2, IEC 63056; UN38.3, UN3536; EN/IEC61000-6-2, EN/IEC61000-6-4; CE	
Color	RAL9016	
Fire Safety	<ol style="list-style-type: none"> 1. Fire panel with heat and smoke sensors 2. Fire resistant enclosure 3. Gas sensor and active ventilation system 4. Automatic aerosol-based fire suppression system 	

NEO Magnum

6.261 MWh Commercial ESS

Outdoor Liquid Cooling



- **High security**

- UL9540A thermal forced spread test evaluation results are excellent, combustible gas monitoring, pressure relief and explosion protection meet NFPA68, NFPA69 specifications;
- "2+2" fire prevention and control measures: The design adopts the modular built-in fire suppression & container firefighting system echelon configuration;
- Large scale fire impact assessment test results were good, no propagation to adjacent container;
- Insulation strength of the system is sufficient, and no breakdown or flashover in 5kVd.c. withstand test. The DC circuit is equipped with multi-level disconnections, which are echelon configuration;

- **Long life and durability**

- Thermal management design adopts centralized cooling, multistage shunt, parallel flow channel, throttling control. The temperature difference of cells in the module is 2°C, and that is 3°C for container level.
- Special energy storage battery, standard cycle 10000+, service life of 20 years;
- Protection is in place and reliable and durable. The protection grade of the enclosure is IP55, the anti-corrosion grade is C4/C5, and the high voltage module is IP67.

- **Solid and reliable**

- Adaptive design, module structure retention and internal force release optimization in the whole life cycle;
- Excellent steel structure stability, 2 times lifting load, 10 times ballast performance recognized by classification society;
- The overall structural stability meets IEEE693 high level earthquake tolerance;
- Electrical components are tested for high temperature durability at 60 ° C; The liquid cooling pipeline is checked at 1000 hours of high temperature cycle;

NEO Magnum Technical Data

Model		SEP-CE6261K
Main Parameter		
Cell Chemistry	LiFePO ₄	
Configuration	[[(2P52S) 8S] 6P]	
Rated Energy	6261.9kWh	
Rated Voltage	1331.2VDC	
Voltage Range	1040 ~ 1500VDC	
Charging Current (rated)	1176A	
Charging Power (rated)	1565.5kW	
Discharging Current (rated)	1176A	
Discharging Power (rated)	1565.5kW	
Operating Ambient Temperature	-20°C to +55°C (Charge/Discharge)	
Storage Temperature	-30°C to +60°C	
Environment Humidity	10% ~ 90%RH	
Application altitude	≤3000m (Standard)	
Dimension (W×D×H, mm)	2438x6058x2896	
Weight	~49000kg	
IP Level	IP55-Bat. Room, IP54-Electric Room, IP67-Bat. Pack	
Cooling and heating mode	Liquid Cooling / heating	
Communication protocol	CAN, RS485, TCP/IP	
Certifications	UL1973-2022, IEC62619-2022, UN38.3, UL9540A-2019, GB/T 36276-2023, IEC62477-2022, IEC62619-2022, IEC63056-2020, IEC60730-2022, UL1973-2022, UL9540A-2019, UL9540-2023, NFPA855-2023, IEEE Std 693-2018, NFPA68-2023, NFPA69-2019, IEC61000-2019, ISO3744-2010	
Fire Safety	<ol style="list-style-type: none"> 1. Fire panel with heat and smoke sensors 2. Fire resistant enclosure 3. Gas sensor and active ventilation system 4. Automatic aerosol-based fire suppression system 	