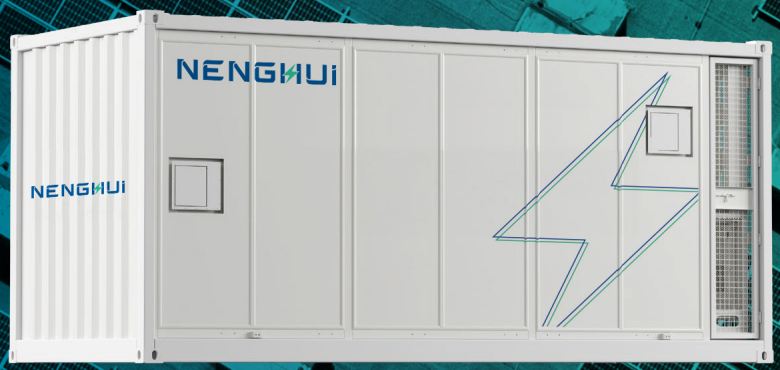
NENGHUI

N20HC5000

Liquid-cooled ESS Container

5MWh



Nenghui's N20HC5000 factory-assembled DC battery storage container ships with 12 battery racks on the 5.015MWh 20ft container, power distribution cabinet, fire suppression system and advanced liquid-cooling system. And the module is made up of 1P104S LFP prismatic cells. Each cell undergoes strict quality inspections to ensure high energy density, wide operating temperature range, extended battery life, as well as the highest protection and safety features.

Ultimate Safety

Cabinet and pack-level fire suppression system with aerosol. Support temperature, smoke and gas multiple detection. Passed UL9540A, NFPA 69, IEC62933 certification.

Liquid Cooling

Liquid-cooled system is designed with low energy consumption. Lower temperature difference of the cells and higher cell consistency.

Long Service Life

Support maximum 10-year warranty. Excellent performance of battery system in service life.

Smart O&M

Easy online O&M service with NHCloud both on cloud platform and APP. Support 7*24h cloud-edge monitoring.

Technical Specification

	Battery Module Parameters	Battery Cluster Parameters	Container System Parameters
Combination Model	1P104S	1P416S	12P416S
Standard Charge-discharge Rate		≤0.5C	
Rated Energy	104.5kWh	418kWh	5015.96kWh
Nominal Voltage	332.8V	1331.2V	
Charge and Discharge Efficiency	≥93%@25±3°C, 0.5C	≥92%@25±3°C, 0.5C(excluding auxiliary power consumption)	
Thermal Management Mode		Liquid cooling	
Temperature Difference of a Single Battery Pack Cell	≤3°C	/	/
Communication Mode	/	CAN	CAN/RS485/Ethernet
IP Rating	IP67	/	IP55
Battery Charge Operating Temperature		0°C~55°C	-30°C~55°C
Battery Discharge Operating Temperature	-20°C~55°C	-20°C~55°C	-30°C~55°C
Storage Temperature		-10°C~50°C	
Dimensions (W*H*D)	2180*790*250mm	/	6058*2438*2896mm
Weight	670±5kg	/	<43T
Storage Humidity		0~95% (no-condensing)	
Altitude		≤ 3000m (>2000m derating)	
Compliance		IEC 62477-1, IEC 61000-6-2/4, IEC62619, IEC63056, IEC62933, UL9540A, UN3536	

Usage Scenario

Peak Shifting, Peak Shaving, Demand Response
DAM & ASM (aFRR, mFRR, etc)
PV Integration
Back-up Power