NENGHUI ENERGY

NH1000K1C-1.38
All-in-one Air-cooling
ESS Container

1MW / 1.38MWh

The NH1000K1C-1.38 is a 1C-rated containerized ESS integrating PACK, PCS, EMS, BMS, HVAC, and fire safety in a single 20ft enclosure. Purpose-built for high-power and large-capacity applications across power generation, grid-side, and C&I sectors.





Ultra-Safe Design

UL9540A certified; LFP battery chemistry with optimized aircooled thermal management.



Extended Service Life

10-year design life; up to 30% longer cycle life.



Robust & Reliable

Segregated battery/electrical compartments; active ventilation; complete fire protection system.



All-in-One Integration

PCS included for direct AC output, reducing footprint and simplifying deployment.



Outstanding Efficiency

95% DC round-trip efficiency, minimizing operating costs.



ntegration Seamless Integration

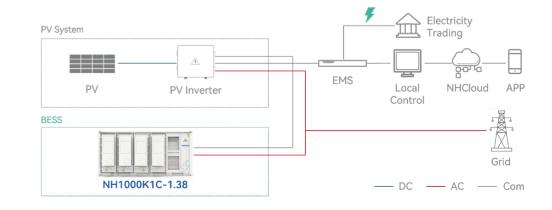
Simple scalability and installation; compatible with third-party SCADA and cloud EMS platforms.

Technical Specification

DC C: 1	
DC Side	
Cell Type	LFP150Ah
PACK	11.52kWh/1P24S
Battery System	1382.4kWh/8P360S
Rated voltage	1152Vdc
Voltage Range	1008-1278Vdc
Pack Ingress Rating	IP20
AC Side	
Rated Power	1000kW
Max. Power	1100kW
THDi	≤3%
Output Voltage	690(- 15%~10%)Vac
Mode of connection	3P3W+PE
Power Factor	0.99/-1lagging~1leading
Nominal Frequency	50Hz/60Hz
General	
Max. System Efficiency	90%
Charge/Discharge Rate	1C
DoD	95% (25±5°C)
SOC Accuracy	3%
Cycle Life	4,000 times
Switching Time	<100ms
Connectivity	Modbus TCP/RTU, CAN2.0
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-20°C~50°C
Humidity	5~90%RH (non-condensing)
Noise	<80dB
Altitude	<2,000m (derating above 2,000m)
Fire Safety	Novec 1230
Dimensions (W*D*H)	6,058*2,438*2,896(mm) without air conditioners 6,058*3,026*2,896(mm) with air conditioners
Weight	≤26t
Compliance	IEC62619, IEC61000, IEC62477, EN50549, UN38.3

Usage scenario

Peak Shaving, Load Shifting, Frequency Regulation, Demand Response, Energy Arbitrage, Trading, VPP



NENGHUI ENERGY 2025 CATALOGUE

NH1000K1C-1.38 Air-cooling ESS Container