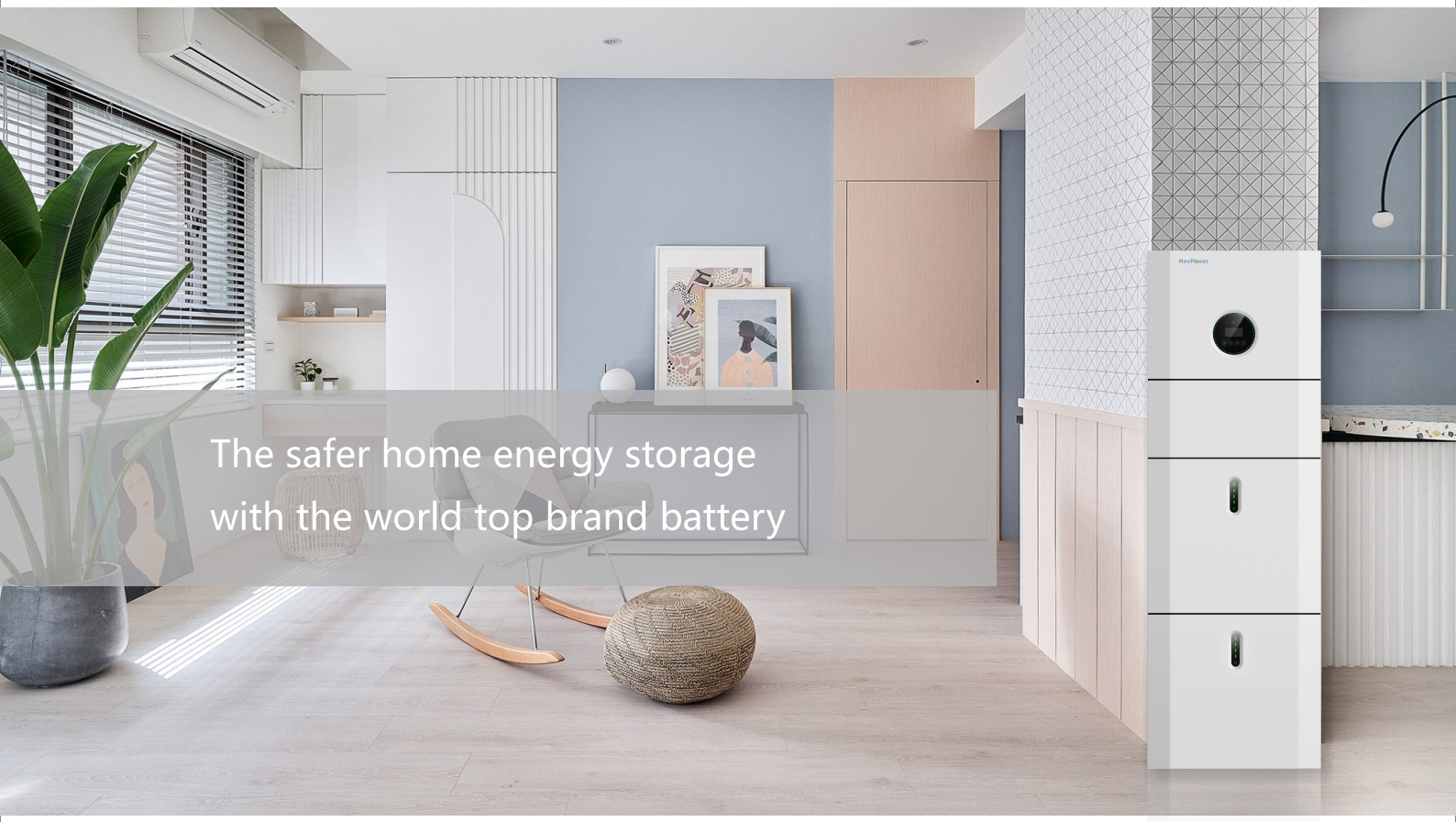
NexPower

Keeping the lights on with the clean energy

NEXess Home Battery Storage



NEXess home battery storage is designed to storge energy from the solar or the grid. It helps our customers save money by time-shifting the grid energy or maximizing the use of the solar energy. It provides the clean energy solution together with the solar generation, as well as acting as the backup energy source in case of power grid outage.

NEXess home energy storage is suitable for the standalone installation and/or the coordination with the solar generation.

"Safety First" Philosophy

Built upon our "Safety First" philosophy, NexPower is committed to providing the safer home battery storage for our customers. we employed the cutting-edge safety control technology and the world top brand CATL battery to enhance the safety. Our products are fully compatible with the international safety standards.

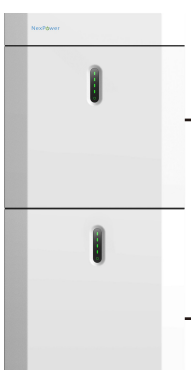
Structure

Hybrid inverter for battery and solar, 3.68kW/5kW

Electrical connectors

1 st base battery, 5.1kWh

2nd optional battery, 5.1kWh



3rd optional battery, 5.1kWh

4th optional battery, 5.1kWh

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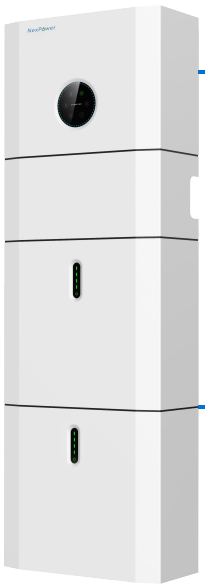
Features

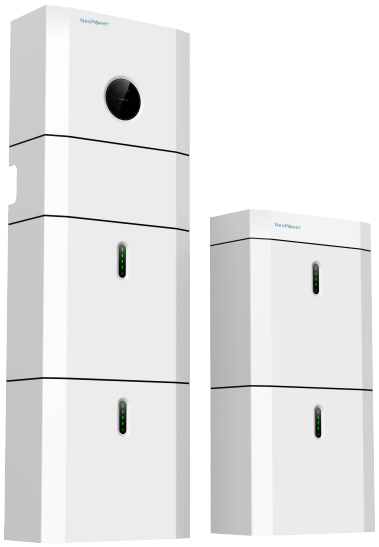


World top brand CATL battery

Innovative integrated design

12-year battery warranty

- Integrated design to reduce the exposed electrical circuits and enhance the safety
- Utilizing the world top brand CATL battery
- 12-year battery warranty, 10000 cycles of battery
- Flexible configuration of battery pack, from 5.1kWh to 20.4kWh
- Utilizing 48V low-voltage battery to enhance the safety
- Built-in battery management to enhance the safety
- Battery cell automatically grouped by the robots, to keep the high consistency and achieve the high safety
- Adopting the safer “LiFePO4 (LFP) “battery



- Hybrid inverter for both solar and battery, suitable for both AC and DC coupling with the solar generation
- Be suitable for the new and/or the existing solar generations
- Supporting VPP (Virtual Power Plant) function
- IP65 dust- and water- resistance
- Be suitable for outdoor and indoor installation
- Small footprint: 0.6m*0.25m （0.15 m²)
- Modular-based structure for easy installation, replacement and future extension
- Be capable of single-person installation
- Wifi/4G and cloud-based remote monitoring platform and mobile phone App
- Approved safety certificates

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Technical Specifications

Hybrid Inverter	3.68kW	5kW
Solar Input		
Max. DC Voltage	580	580
Nominal Voltage	400	400
MPPT Voltage Range	80V-560V	80V-560V
Start Voltage	130V	130V
Number of MPP Tracker	2	2
Strings Per MPP Tracker	1	1
Max. Input Current Per MPPT	15A	15A
Max. Short-circuit Current Per MPPT	18A	18A
AC Output (Grid)		
Nominal AC Output Power	3680W	4999W
Max. AC Apparent Power	7360VA (from grid)	7360VA (from grid)
Max. AC Output Power	3680W	4999W
Nominal AC Voltage	230Vac	230Vac
AC Grid Frequency Range	50 / 60Hz±5Hz	50 / 60Hz±5Hz
Max. Output Current	16A	22A
Max. Input Current	32A	32A
Power Factor (cosΦ)	0.8leading-0.8lagging	0.8leading-0.8lagging
THDi	<3%	<3%
Battery Input		
Battery Type	LFP (LiFePO4)	LFP (LiFePO4)
Nominal Battery Voltage	48V	48V
Max. Charging Voltage Range	40-60V	40-60V
Max. Charging Current	50A	100A
Max. Discharging Current	80A	100A
Battery Capacity	100-400Ah	100-400Ah
Charging Strategy for Li-Ion Battery	Depend on the BMS	Depend on the BMS
AC Output (Backup)		
Max. Output Apparent Power	4000VA	5000VA
Peak Output Apparent Power	6900VA 10sec	6900VA 10sec
Max. Output Current	16A	20A
Nominal Output Voltage	230V±0.2%	230V±0.2%
Nominal Output Frequency	50/60Hz±0.2%	50/60Hz±0.2%
Output THDv (@Linear Load)	<2% (Linear Load)	<2% (Linear Load)
Efficiency		
Max. Solar Efficiency	97.60%	97.60%
Euro. Solar Efficiency	97.00%	97.00%
Protection		
DC Switch	Bipolar DC Switch (125A/Pole)	Bipolar DC Switch (125A/Pole)
Anti-islanding Protection	Yes	Yes
Output Over Current	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes
String Fault Detection	Yes	Yes
AC/DC Surge Protection	DC Type II, AC Type III	DC Type II, AC Type III
Insulation Detection	Yes	Yes
AC Short Circuit Protection	Yes	Yes
General Specifications		
Dimensions W x H x D	540*590*240mm	
Weight	32kg	
Operating Temperature Range	-25℃~+60℃	
Noise (dB)	<25	
Max. Operation Altitude	2000m	
Max. Operation Humidity	0~95% (No Condensation)	
IP Protection Class	IP65	
Topology	Battery Isolation	
Communication	RS485/CAN2.0/WIFI/4G wireless	
Display	LCD/APP	
Approved Standards	IEC/EN 62109-1&2, IEC/EN61000-6-1, IEC/EN61000-6-2, EN61000-6-3, IEC/EN61000-6-4, IEC/EN61000-3-11, EN61000-3-12, IEC60529, IEC 60068, IEC61683, IEC62116, IEC61727, EN50549-1, AS 4777.2, NRS 097, VDE-AR-N-4105, CEI0-21, G98, G99, C10/C11	

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Technical Specifications

Battery			
Physical		**Operation**	
Battery Type	LFP (LiFePO4)	Max. Charge/Discharge Current	50A/80A, 0.5C/0.8C
Weight per Pack (5.1kWh)	58KG	Rated DC Power	4096W
Dimension (W x D x H)	540*500*240mm	Max. Charge/Discharge Power	2825W/4096W
IP Protection Level	IP65	Operating Temperature Range	0 to 50℃ charging -10 to 50℃ discharging
Warranty	12 Years	Humidity	0~95% (No condensation)
Electrical		**BMS**	
Energy Capacity	5.1kWh per pack, Max. 4 packes	Modules Connection	4
Depth of Discharge (DoD)	90%	Capacity	100-400Ah
Nominal Voltage	51.2V	Power Consumption	<2W
Max. Short-circuit Current (Fuse)	125A	Monitoring Parameters	System voltage, current, cell voltage, cell temperature,PCBA temperature measurement
Operating Voltage Range	44.8-56.5V	**Certificate**	
Internal Resistance	<20mΩ	Safety(Pack)	IEC/EN 62619, UN38.3
Cycle Life	10000 cycles (25℃, 90% DoD)	Safety(Cell)	IEC/EN62619, UN38.3, UL1973

Ordering Information

NexPower Ordering Information	Home Battery Storage					
Ordering Code	NEXess-52LA					
Description and Option	NEXess	–	5	2	L	A
Hybrid Inverter						
3.68kW			3			
5kW			5			
Battery						
5.1kWh				1		
10.2kWh				2		
15.3kWh				3		
20.4kWh				4		
Frequency						
50Hz					L	
60Hz					H	
Communication						
Wifi						A
4G wireless						B
RS-485 serial port						C

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