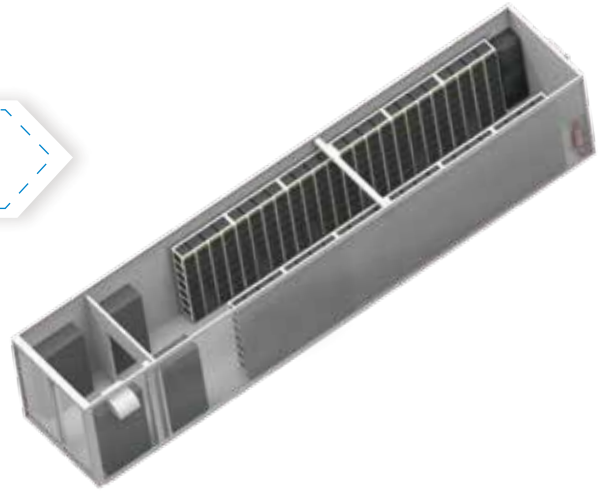


ENERGY STORAGE SYSTEM



Battery Performance

- EV graded power battery, stable and mature technology, robust quality.
- Steel sealed cylindrical package, excellent safety performance.
- Uniform heat distribution and fast dissipation.
- NMC cathode material system with high energy density and super long working life.
- Hundreds of individual cells connected parallel ensure the consistency of the battery module.

BMS

- Multi-physical fields coupling simulation modeling.
- Dynamic analysis on the internal state of battery.
- Compute SOC, SOE real time to ensure the optimal performance and safe working boundary.
- Based on electrochemical principle to assess the current SOH.
- Fully Intelligent algorithm auto adjusts the internal battery model to ensure the high accuracy of SOC estimation within the product life cycles.
- Active and passive balance engine equipped.
- Real time monitor voltage, temperature, insulation state, communication and system warning together with at least 30 days' log recording.

Thermal Management System

- Honeycomb array structure are designed to maximize the heat exchange efficiency of the battery pack.
- The internal of the container uses circulating convection design to ensure the thermal field distributes uniformly to improve the reliability and stability of the whole system.

Scada System

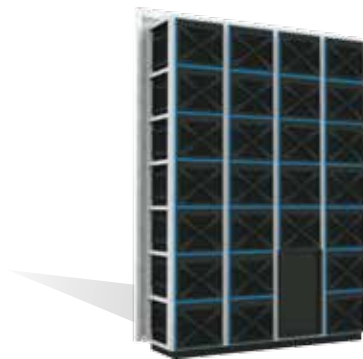
- Support massive data storage and search.
- Real time online monitoring of the battery information on each single cell and accurately diagnosis system operation status and warn failure.
- Fully unattended operation system supports remote real-time control and optimizes the system dispatched efficiency.

MODULE






Project	LFP	NCM
Module	AW-L-65P7S	AW-N-65P7S
Capacity	188Ah	292Ah
Energy	4.22kwh	7.86kwh
Standard Voltage	22.4V	50.4V
Voltage Range	18.9-25.2V	37.8-58.8V
Standard Charging	0.5C	0.5C
Max Charge And Discharge Current	1C	1C
Max Continuous Discharge Power	3C	3C
Measurement	240x260x576mm	240x260x576mm
Weight	40kg	47.5kg
Protection Level	IP20	IP20
Communication Method	CAN2.0, RS485	CAN2.0B, RS485
Balanced Approach	Active equilibrium (between groups/groups)	

PACK

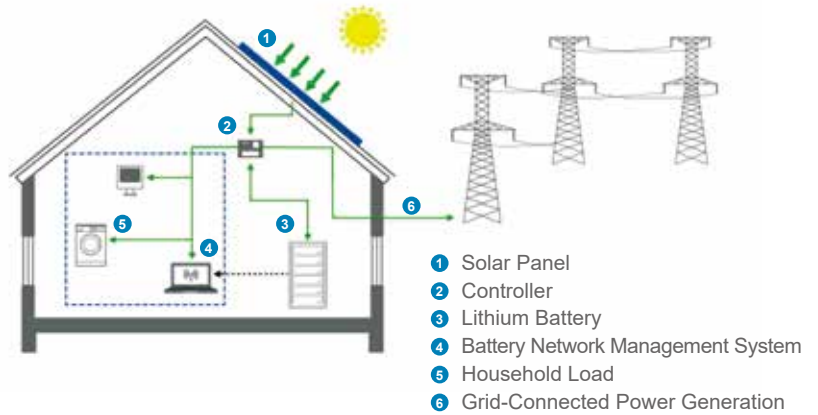


Project	LFP	NCM
Module	28pcs	28pcs
Connection Method	1P28S	1P28S
Control Box	1pcs	1pcs
Nominal Voltage	627.2V	705.6V
Voltage Range	529.2V-705.6V	627.2V-823.2V
Capacity	188Ah	292Ah
Max Charge And Discharge Current	370A	150A
Max Continuous Discharge Power	236kW	86kW
Energy	118kWh	206kWh
Weight	1300kg	1500kg
Measurement	1500x1500x615	1250x2300x615

	20-foot Container	Nominal Power : 250 kW Nominal Capacity : 824 kWh	Nominal Voltage : AC 400 V Nominal Frequency : 50 Hz / 60 Hz
	30-40-foot Container	Nominal Power : 500 kW Nominal Capacity : 2063~2888 kWh	Nominal Voltage : AC 400 V Nominal Frequency : 50 Hz / 60 Hz
	45-foot Container	Nominal Power : 1 MW Nominal Capacity : 3302 kWh	Nominal Voltage : AC 400 V Nominal Frequency : 50 Hz / 60 Hz

Residential Energy Storage System

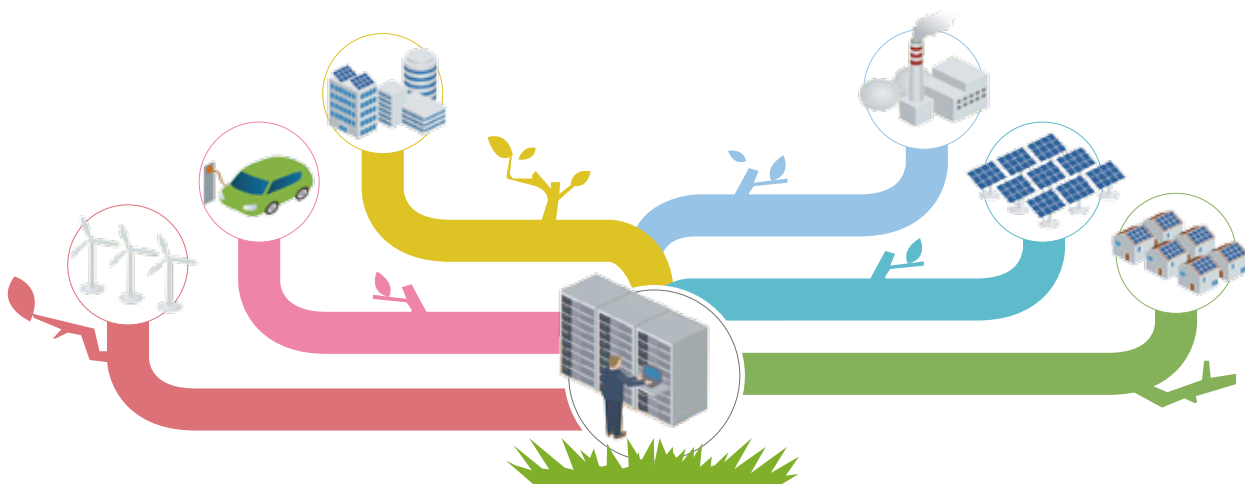
- Optimize household energy use structure, reduce energy consumption and carbon emission.
- Available in elegant appearance design.
- Modular design allows multiple energy storage units to be flexibly connected in serial and parallel.
- Simple and practical use experience. Maximized energy storage and utilization.
- Safer and more economical energy enabled by smart storage technology.



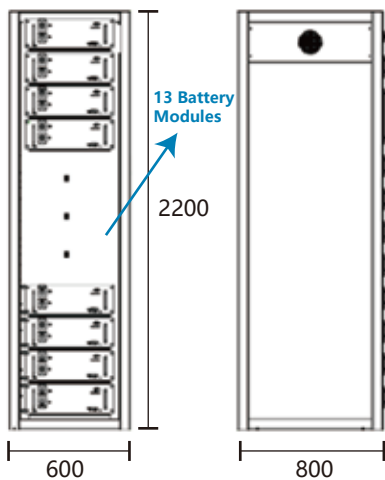
48V Residential ESS Specification:



Category	Item	NCM Spec.	LFP Spec.
Basic Parameters	Nominal Voltage	50.4V	51.2V
	Work Voltage	42-58.8V	44.8-58.4V
	Nominal Capacity	135Ah	99Ah
	Energy	6.8kWh	5.0kWh
	Nominal Output Power	4.0kW	4.0kW
	Peak Output Power	5.0kW	5.0kW
	Cell Spec	NCM 3.7V/4500mAh	LFP 3.2V/3300mAh
	Cycle (80% Dod 25c°)	4000	6000
	Max. Constant Charge Current	70A	70A
	Max. Constant Discharge Current	80A	80A
	Charge Temperature	0-45°C	0-45°C
	Discharge Temperature	-10-60°C	-10-60°C
	Communication Interface	CAN2.0/RS485/RS232/Modbus	CAN2.0/RS485/RS232/Modbus
	Protections	Over charge/discharge/temperature/current and short-circuit protection	Over charge/discharge/temperature/current and short-circuit protection
Pre-charge Control	Optional	Optional	
Others	Dimension	490*730*166mm	490*730*166mm
	Weight	63kg	67kg
	Installation Type	Wall mounted / landing	Wall mounted / landing
	Life Span	10 years	10 years
	Storage Time (-20°C~35°C)	3 months	3 months
	Operation Temperature	0-40°C	0-40°C
	Storage Temperature	0-35°C	0-35°C
	Shipment Standard	UN 38.3	UN 38.3
	Emc Standard	IEC 61000	IEC 61000
	Warranty	5 years	10 years
	IP Grade	IP21	IP21
	Extensibility	Max. 3 in parallel	Max. 3 in parallel
Compatibility	SMA/SolaX/GoodWe/SofaSolar	SMA/SolaX/GoodWe/SofaSolar	



Industrial/Commercial ESS Specification



No.	Item	LFP Spec.	NCM Spec.
19" Rack Module			
1	Cell	LFP 26650 3.0Ah	NCM 26650 4.5Ah
2	Configuration	16S30P	14S30P
3	Nominal Voltage	51.2V	50.4V
4	Voltage Range	44.8-58.4V	39.2-58.8V
5	Module Capacity	90Ah	135Ah
6	Module Energy	4.6kWh	6.8kWh
7	Constant Discharge Current	90A	135A
8	Module Weight	55kg	60kg
9	Module Dimension	483*158*650mm	483*158*650mm
Cabinet			
1	Module Quantity	13	13
2	Configuration	Series connection	Series connection
3	Nominal Voltage	665.6V	655.2V
4	Voltage Range	582-759V	510-764V
5	Total Energy	60kWh	88kWh
6	Cabinet Dimension	600*800*2200	600*800*2200
7	Cabinet Weight	840kg	910kg