







Easy Maintenance

# CONTAINER ENERGY STORAGE SYSTEM





## **Product Introduction**

The structural design is more compact and flexible. The product is green and environmentally friendly, with low noise, zero pollution and zero emissions. It can help customers cut peaks and valleys, adjust peaks and frequency, reduce dependence on the power grid, improve power supply quality, and ensure the normal operation of emergency loads in the event of power grid outages; The maximum energy storage capacity of the system can reach up to 645kWh, which can meet different power needs in different scenarios such as fixed locations, construction sites, hospitals, car charging piles, mines, emergency disaster relief, and noise-sensitive areas.

### **Product Features**

- Suitable for any hybrid renewable energy generation system
- Reduce dependence on the public power grid and can be used for emergency power supply in areas without electricity
- Energy storage systems can achieve fast charging and black start of microgrids
- To make up for the negative impact of the randomness of distributed output power on the security and economic operation of the power grid, it can participate in auxiliary services such as peak regulation, frequency regulation, and voltage regulation of the power grid.
- The container material is made of special weathering steel SPA-H. The design is compact, allowing overall transportation, easy installation and debugging, and low construction cost.
- Reduce noise pollution, less than 80dB at one meter, zero CO2 and NOx emissions
- IP54 outdoor cabinet and optional C4 and above anti-corrosion grade
- The liquid cooling system ensures higher system efficiency and cell cycling up to 10,000 cycles. The liquid cooling system reduces system energy consumption by 20% and extends battery life by 10%.



Easy to transport 2 forklift holes: 4 top rings; Can be transported as a whole.



LFP Battery Choose the top 3 battery cell brands in China; Excellent battery consistency; ≥10000 times@0.5C@D0D90%.

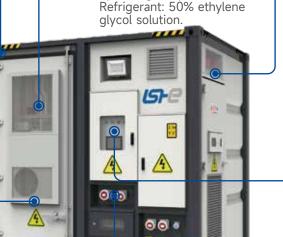
#### **BMS**

Temperature protection; Short circuit protection; Insulation protection; Over load protection; Over charge protection; Over discharge protection; Over and under voltage protection; Over current protection, etc.

100 cooling system; Real-time control of system operating temperature;

Temperature Control System Choose Chinese No. 1 brand; Intelligent operation of liquid

Refrigerant: 50% ethylene glycol solution.





External connection Plug and play (input/output); IP67 waterproof rating; Three-phase 100% unbalanced load: Strong impact resistance;

Suitable for various complex loads:

External power source: generator set/mains power.



Automatic fire extinguishing system Gas purity:>99.6%; Independent backup power supply; Perfluorohexanone clean fire extinguishing agent; Various combustible gas detection: Multiple early warning protection functions, safe and reliable.



EMS LCD screen: Minimalist UI for easy operation; No need to enter the device, external operation runs; One-stop platform monitoring: Web/Cloud Platform/Remote Control.



## **Technical Parameters**

Model	180M2P	240M3P	300M4P
Battery			
Battery Type		LiFePO4	
Rated Charge/Discharge Performance		≤0.5C	
Rated Voltage[v]		614.4	
Operating Voltage Range [V]		537.6-700.8	
Cell Rated Capacity [Ah]		280	
Rated Capacity [kWh]	344	516	688
Composition	(1P192S) *2P	(1P192S) *3P	(1P192S) *4P
AC Data(On-grid)			
Rated charge and discharge power[kw]	180	240	300
Max. AC Current [A]	286	381	476
Rated Output Voltage [V]		3/N/PE,230/400	
Rated Frequency [Hz]		50/60	
THDu		< 3% (linear load)	
Power Factor		1 (0.8 leading -0.8 lagging)	
THDi		<3% (@rated power)	
AC Data (Off Grid)			
Rated Output Power [kW]	180	240	300
Max. Output Current [A]	286	381	476
Rated Output Voltage [V]		3/N/PE, 230/400	
Rated Output Frequency [Hz]		50/60	
Unbalanced Load Capacity		100%	
General Data			
Ingress Protection		IP54	
Communication		CAN, RS485, Ethernet port	
Communication Protocol		Modbus, IEC104	
Working Environment Temperature[°C]		- 20-50	
Electrical Cabin Cooling Method		Air cooling	
Battery Compartment Cooling Method		Liquid cooling	
Fire Fighting System		1230 Fire Fighting System	
Relative Humidity		0-95%, no condensation	
Altitude[m]		5000 (> 2000 derating)	
Delivery Mode		Integral transportation	
Weight[T]	< 6.8	< 8	< 9.6
Dimension(W*D*H)[mm]		2991×2438×2896	
Application environment		Outdoor	
Noise[dB]		≤75	

\* In case of changes in product dimensions and parameters, the latest information from our company shall prevail without prior notice.



## **Application Scenarios**

Electricity Saving   Peak-Load Shifting.   Factory   Office Block   Data Center   Charging Station	Discharge Charge Charge Peak-Load Shifting Discharge Demand Control
Discharge when the distribution capacity cannot meet the load demand to achieve the effect of virtual capacity expansion.	1000kW 500kW t 100kW 180kW t 500kW 500kW t 500kW t 180kW t 500kW 500kW
Backup Power Supply   Discharge to secure electricity supply   in case of grid outage or limit on   electricity supply.   Factory   Construction Site   Shopping Mall	
Solar & Energy Microgrid Can realize electricity saving. Applica- tions such as backup power supply provide stable power in areas that cannot be connected to the grid, such as islands and mountainous areas. $\widehat{\text{Factory}} \qquad \widehat{\text{Charging Station}} \qquad \widehat{\text{Remote Area}}$	