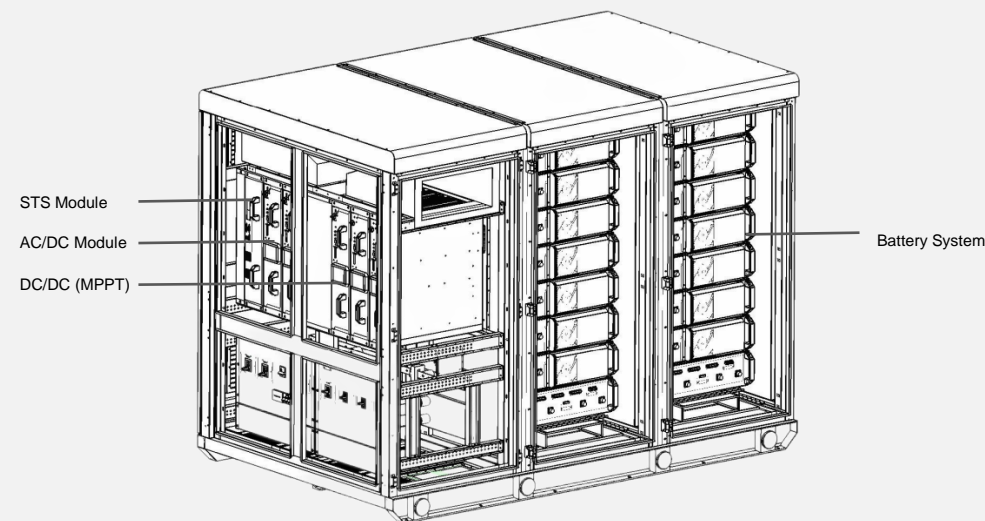


## Overview

This is an intelligent and modular power supply equipment integrating lithium battery and MPCs. According to different application scenarios, lithium battery, bidirectional DC / AC converter, bidirectional DC / DC converter, Static switch and Power management system can be arbitrarily combined to realize grid connected power supply, off grid power supply and off grid uninterrupted power supply power supply, static reactive power compensation, harmonic suppression and other functions. The system can have access to new energy, power grid, diesel generator and to reasonable configuration, scientific utilization, to provide users with green, environmental protection, noise free, high reliability and high security power services.



## Configuration



### PCS

Bidirectional AC / DC converter can realize the bidirectional conversion from DC to AC and AC to DC. It can not only convert AC to DC to charge battery, but also convert DC to AC to supply power to load or feed back to power grid.



### Battery System

The system mainly consists of safe, efficient and long-life lithium iron phosphate cells, which are connected in series to form battery modules, and multiple modules are connected in series to form battery clusters.



### HVAC

Air Conditioning (HVAC) system is configured to maintained an optimal temperature to maximize energy system operational life and reliability.



### Battery management system

The core components of the system can effectively protect the battery from overcharge, overdischarge and over-current. At the same time, the balanced management of the cells can ensure the safe, reliable and efficient operation of the whole system.



### Power Management System

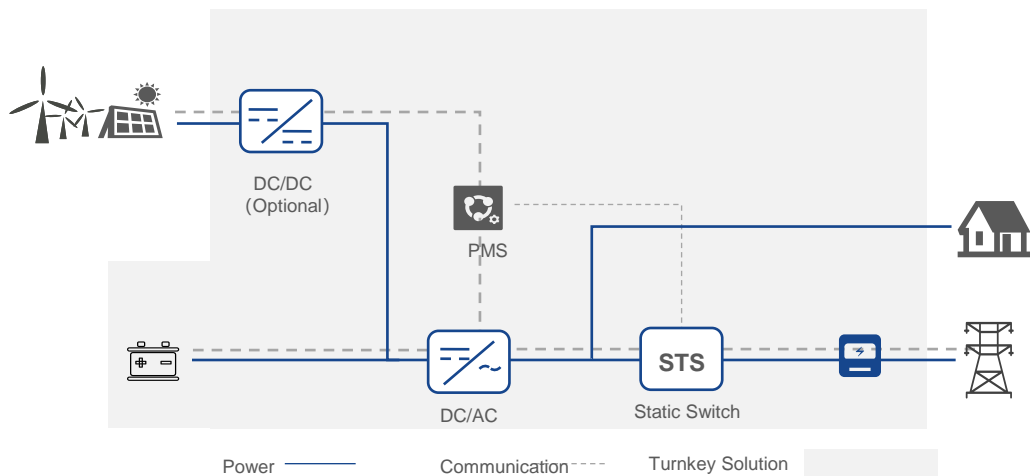
System operation data monitoring, operation strategy management, historical data record, system status record, etc.



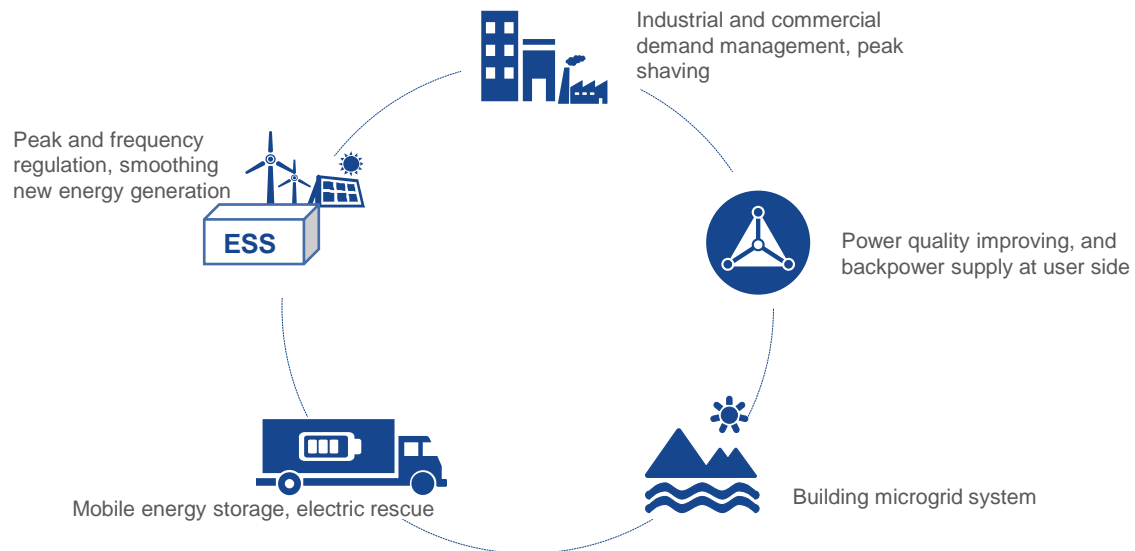
### IP54 Enclosure

IP54 design to adapt to more application scenarios.

### System topology



### Applications



### Key product features and benefits

#### | Safe and reliable |

- High quality li-ion cell for mobile use
- Laser welding connection with high strength and low impedance
- Cells is designed with PC holders and reinforce steel structure to guarantee the highest safety of the system in transportation, installation and operation
- Damping pad design to improve the impact resistance of the system
- IP54, safe and reliable operation in outdoor environment
- Serially designed PCS and battery pack eliminates circulating current and improve system reliability.
- Integrated BMS,DC, AC multi-layer protection, maximum safety performance design

#### | Efficient and Convenient |

- Integrated system, standard modular power module and battery module, easy for installation, maintenance and capacity expansion
- Easy access to PV and diesel generator, intelligent multi-energy management.
- Fixed on the ground or mounted on vehicle, can be loaded and unloaded by forklift and hoisted by lifting ring
- Multi systems could be connected in parallel

#### | Cost optimization |

- One investment, multiple benefits:Peak shaving, backup power supply, microgrid building,power quality improving and energy storage,etc.
- Small size, light weight, less space and installation cost
- Long cycle life, low failure rate, reduce operation and maintenance investment
- Maximize green energy utilization.

## Parameters



**PAC-75-50**  
50KW/75kWh



**PAC-150-100**  
100KW/150kWh



**PAC-225-150**  
150KW/225kWh



**PAC-300-200**  
200KW/300kWh

Parameter	PAC-75-50	PAC-150-100	PAC-225-150	PAC-300-200
<b>AC parameters (grid connected)</b>				
Rated output power (kW)	50	100	150	200
Max output power (kW)	55	110	165	220
Rated grid voltage (V)	3W+N+PE, 380			
Grid voltage range	-15%~+10%			
Rated grid frequency (Hz)	50/60			
Grid frequency range (Hz)	±2			
Current waveform distortion rate	<3%(Rated voltage)			
DC component	<0.5%In			
Power factor	>0.99(Rated voltage)			
Power factor adjustable range	1(lead) ~ 1(lag)			
Overload capacity	105%]: continuous operation; (105% ~ 120%]: 10min; 120%]; stop operation			

Parameter	PAC-75-50	PAC-150-100	PAC-225-150	PAC-300-200
<b>AC parameters (off grid)</b>				
Rated output power (kW)	50	100	150	200
Max output power (kW)	55	110	165	220
Rated grid voltage (V)	3W+N+PE, 380			
Current waveform distortion rate	<3%(Linear Load)			
Rated frequency (Hz)	50/60			
Overload capacity	105%]: continuous operation; (105% ~ 120%]: 10min; 120%]; stop operation			
<b>Battery</b>				
Battery type	Lithium iron phosphate			
Energy of each module(kWh)	5.12			
Module qty	15	30	45	60
Total power (kWh)	76.8	153.6	230.4	307.2
Running Time (h)	1.5(Optional by Changing module qty)			
Cyclelife	25°C0.5C/0.5C100%DODEOL80%≥4000s			
<b>System efficiency</b>				
Max efficiency	95%			
<b>Protection</b>				
DC Switch	YES			
AC switch	YES			
Grid monitoring	YES			
Surge protection	DC /AC 2nd level			
<b>Basic Parameters</b>				
Dimension (W*D*H) (mm)	1680*1500*1700	1680*2270*1700	1680*3050*1700	1680*3830*2300
Weight (kg)	1395	2470	3545	4620
Isolated transformer	NO			
On/off grid switching	STS			
Protection	Outdoor IP54			
Working temperature	-20 ~ 55°C(>45°Cderating)			
Relative humidity	0 ~ 95% ( (no condensing)			
Cooling	Intelligent air cooling (intelligent heating optional )			
Max working altitude(m)	4000(>2000 derating)			
Display	Touch screen			
Communication	RS485、 CAN、 LAN			
Communication Protocol	Modbus-RTU、 Modbus-TCP、 CAN2.0B			