

# **Polymer Lithium Battery Power Storage** **Household Grid-connected&Off-grid power storage system**

**PS6530B**

Solar system  
prepare household  
electricity  
ready at all times

**Electricity Power Storage**

**Simple Operation**



## Energy saving and environmental protection , create economic benefit for family Store electricity every day, ensure daily power continuously.

Solar energy is a clean energy, green and environmental protecting, it makes efficient use of limited resources and reduce CO2 emissions

The energy conservation and emissions reduction consciousness and demand is growing in the society.

It is the time of well storage and smart usage of household electricity.

POWEROAK household power storage system is not only a simple electricity storage, but also the combination of electricity system and solar power system, which realized the life of ICT new electricity power.

( ICT is short for Information and Communication Technology)



### Electricity Saving

In the daytime using the electricity stored in the night, energy saving.

Charge the power storage system in night time of less electricity consumption, and in the daytime use the electricity that stored in the night, contribute to restrain power waste.

Connected to solar power generation system , it can supply power directly to household appliances , or charge the power storage system with the redundant power, to reduce the use of electricity from Grid system.



### Reassurance

When there is a power failure, the stored electricity can be used as backup power, the product has the function of UPS.

When there is a power failure, the product act as an emergency power supply for LCD TV and LED lighting,

and other important electric application, to ensure continuous output power.



### Remote monitoring support

The battery system utilization can be showed on LCD screen, automatic management and alarm. Or you can use portable terminal and realize remote monitor through the internet, safe use.

POWEROAK household power generation and storage system is able to set different working mode according to household lifestyle.

## Household power generation and storage working mode.

### General Working Mode ( Suitable for areas without solar power generation, off-grid)

Store the electricity in the night when the electric prices are low for daytimeelectric use, to save the expense for electricity.

### Power Saving Mode ( Suitable for areas with solar power generation, off-grid)

Connect to solar power generation system, directly invert electricity generated from solar panel to AC electricity to supply household application. The storage battery can be charged with the extra solar electricity or in the night when the electricity price is low.

### Economic Benefit Mode ( Applicable to grid-connected district ):

when connected to solar power generation system, the product can invert the power generated from solar to AC electricity.

Household application is guaranteed prior, and the extra electricity is used to charge the power storage battery to the minimum requirement, then the next electricity is sold to the State Grid, to gain some economic benefit, and also relief the burden of Power Grid.

**Other working mode:** Customers can specify appropriate working mode according to their requirement.

### The use of storage battery system

**Case 1** Store the cheap electricity in the night, to reduce the consumption of electricity in the daytime. Based on power consumption within the family, in the daytime make use of the electricity that sored in the night , to use electricity economically .

**Case 2** Contribute to electric saving with power storage system  
When the use of the electricity exceed the seted household power consumption, the exceeded part can be supplemented from the storage battery, to reduce the burden of power grid.Family selling electricity to the Power Grid can be realized.

### The use of solar electricity generation function

**Case 1** Make prior use of the electricity generated from solar system to charge the storage battery system.

**Case 2** The electricity generated from solar system is used preferentially to supply power to daily household application, the rest electricity is used to charge the storage battery system. When the storage battery is charged full and there is still extra electricity left, we can use the solar electricity generation system to sell electricity.

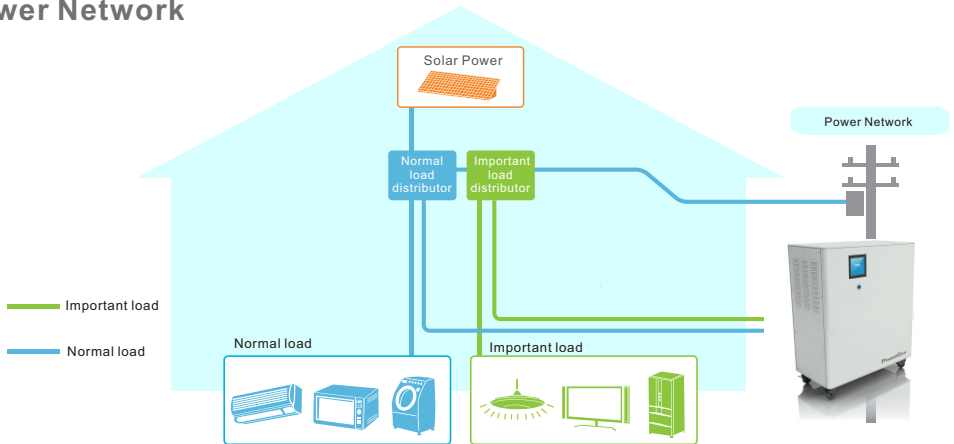
Shenzhen PowerOak company limited specializes in the R&D , production, promotion, installation, and service of Micro distributed power generation and storage system. The company has full set of Micro-grid system control system, core production, and complete solution, effectively guaranteeing the improvement and extend of technology and sustainable development of the enterprise. PowerOak products are mainly use in places such as industrial factory building, islet, back country, public buildings and house roofs



Polymer lithium battery developed specially for household power storage product, safe and secure.

KAYOMAXTAR is one company of POWEROAK company group. For years the company is dedicated to the development of lithium battery, and now the company masters the international advanced li-polymer battery manufacture technology and possesses national advanced fully automated production equipment. Since established, the company took advantage of mature management experience from Japan in Research , Development, Quality Control, and Sale, and passed ISO9001 quality management system certificate, passed ISO14001 environmental certificate in 2007. Our products comply with the UL, CE, FCC, PSE, KC certification and all our products comply with the EU RoHS testing requirements. The Polymer Lithium battery developed based on the features of power storage system has the advantage of high security , high capacity, small thickness, and more recycling time, etc.

## Power Network



Conjunctive use of household power generation system , electric grid system and solar power generation system leads the family to flexible use of energy.

Connect important load to power storage system, at the time of emergency power outages, the system will supply uninterrupted power . In usual time, store the electricity in the night when the electricity price is low, and use the stored electricity in daytime, to save electricity cost.

The time interval for power storage can be selected, every night the grid will automatically charge the power storage system The product is connected to electric grid system, at the time of peak load in the day, the system is switched to inverter output from power storage system, to reduce the consumption of electric power system power, and contribute to the alleviation of peak power consumption.

Used as emergency power supply when there is power failure for family use.

At the time of power outage, the product is switched automatically to power storage system to supply power to important loads such as TV, LED lighting, and computer.

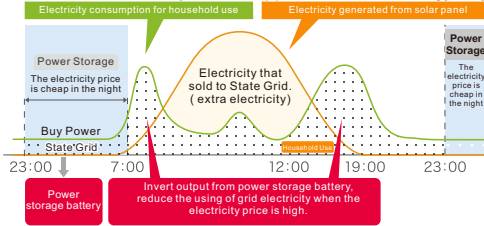
If the product is connected to solar power generation system, it will directly invert electricity generated from solar panel to AC electricity to supply household application, and the extra solar energy can be used to charge the power storage battery.



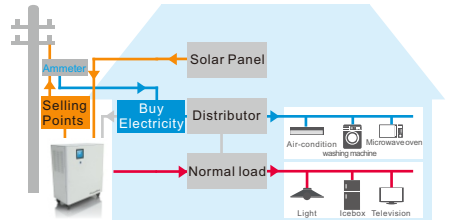
## Flexible use during the daytime and multiplication effect by using the system in conjunction with solar energy

### Multiplication effect = Increase selling power

In the case that the power of the solar panel is big enough, household electricity can be supplied from solar energy only.



### Storage battery and solar panel supply power independently or connect to Grid and supply power at the same time



Combined utilization with solar panel electricity generation system can be more economical. In the daytime use the electricity from solar panel and power storage battery inverter output, to reduce the use of Grid electricity and save electricity cost.

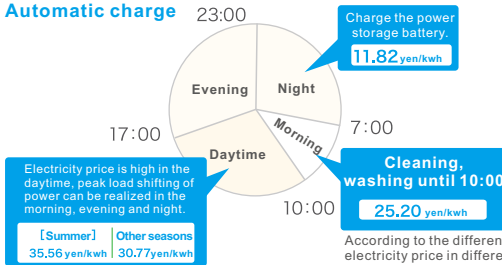
When the solar panel is not able to generate power, use the electricity from power storage battery output, to reduce the use of Grid electricity and save electricity cost.



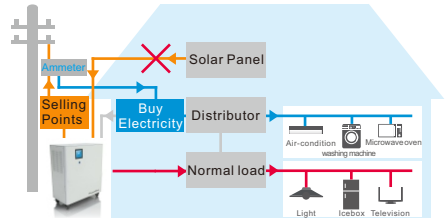
## Electric Outage Supply Power

Store power when the electricity price is low, to realize the peak load shifting of power.

### Set the time Automatic charge



### save electricity cost, economical and practical



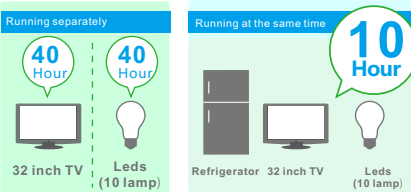
In countries that electricity price is different at different time period of the day, we can set the time of charge mode to the period that electricity is low, to save the electricity cost.



## Electric Outage Supply Power

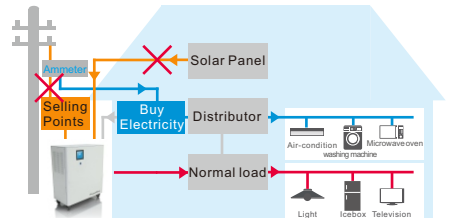
Store power when the electricity price is low, to realize the peak load shifting of power.

When there is a sudden power outage, use the stored electricity at-ease.



Speculation of service time for different electric appliance. (take general use for reference)

When power outage, switch to storage battery supply instantly.



When there is a sudden power outage, the built in UPS function will realize instant switch from Grid system to power storage system. With storage battery of 6.63KW (maximum 11.68KW), you can use electricity at ease when there is power outage. Conjunctive utilization with solar panel power generation system, to charge the power storage battery.

## Product Specification

Model	PS6530B-P1	PS6530B-P2	PS6530B-P3	
Output Feature	Capacity	6.63kWh		
	Output system	1 System		
	Output Voltage	AC110/110/120V	AC200/230/240V	2System Signal phase 2 wire AC100/200V
	Output Power	2.0KW	3.0KW	
	Output Frequency	50/60HZ		
Isolation Method	High frequency output.			
Electric System	electric voltage	AC90-264V		
	Input Frequency	50 Hz/60Hz±1%		
	electric charging power	1600W	2400W	
	electric charging time	About 4.5 ~ 5.5h	About 3.5 ~ 4.5h	
PV Input	PV Input voltage	DC70V-150V		
	PV Input Power	1500W	2000W	
	MPPT Efficiency	99.5%		
	PV Charging time	About 5 ~ 6h	About 3.5 ~ 4h	
Running Mode	General working mode Energy saving mode Economic mode			
System Running	Grid-connected&OFF-grid			
Operation Place	Operation temperature-10 ~ 40°C			
	Humidity 10-90%			
	Environmental temperature			
External Dimension	L710*W350*H895			
Weight	About108Kg			

External Dimension

