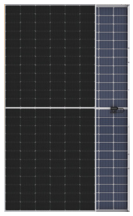



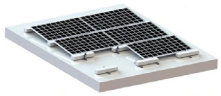

LITHIUM BATTERY
SOLAR ENERGY STORAGE SYSTEM
CATALOGUE 2025

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Shanghai Pvsys New Energy Co.,Ltd is the professional manufacturer of solar panel,solar storage system in the market for more than 13 years.

With our newest technology of Topcon,HJT, our customers can get higher efficiency with best performance through the lifespan of the solar panel.

Our solar storage system is with built in solar hybrid inverter,mppt controller and LifePO4 battery with BMS(Battery Management System), it can be used in No-power areas and it also helps our cusotmer to save their energy bill.We are offering the customization of our solar system based on different needs from our customers. We blieve that "a suitable one for you!"

We have acquired the certificates of CE,IEC61215-1-1:2021,IEC61730-1:2018,IEC 61730-2:2018 and Fire safety Class.

With high quality solar products and best service,we have customers from Italy,Germany,Sweden,Spain,England,Dubai,South Africa,New Zeland,Australian,Japan,Indonesia.etc more than 50 countries and areas.

We always seem "Quality is our life", without good quality,we can not go any further. We blieve with our effort,we will make the world better.


700KW in Japan


300KW in Japan


13KW in Japan


6KW in Tahiti


14.76KW in Sweden


39.6KW-15.12kWh in Iraq

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PV&BATTERY ENERGY STORAGE INTEGRATED

Lithium Iron Phosphate Battery PSL Series

Product introduction:
Lithium battery integrated machine, integrated lithium battery and photovoltaic inverter controller integrated machine, canrealize photovoltaic and mains power supply mode, battery or bypass priority can be set, with multiple protections, such as inputbattery over-voltage protection, under-voltage protection, over-current protection, output under-voltage protection, over-currentthree-level protection (peak high current, RMS current, peak over-current soft start).
Built-in lithium battery can store excess power to meet the uninterrupted use of small outdoor equipment

Performance characteristics:

- Modular structure design,easy to assemble and maintain, and the volume is half of that of conventional lead-acid batteries
- Pure sine wave output, perfect pretection function
- Optional fingerprint lock with anti-theft function
- High efficiency, low stadby loss
- Standard 60A MPPT photovoltaic controller, optional 10A charger

Model	PSL-0.5/1KVA-2.5KWh	PSL VII-5KW
Input		
Rated mains input voltage(VAC)	230 Single phase	
Mains input voltage range(VAC)	170-280(Computer); 90-280(Household appliances)	
Mains input frequency range(Hz)	50/60	
Output		
Inverter output voltage(VAC)	230±5% Single phase	
Maximum efficiency	90%~93%(Peak)	94%(Peak)
Output waveform	Pure sine wave	
Switching time(ms)	10(Computer);20(Household appliances)	≤10
Peak	3:1	
Battery		
Battery type	Lithium iron phosphate	
Battery capacity(kWh)	2.5	10/20/30
Rated voltage(VDC)	48	
Charging voltage(VDC)	52.5	
Mains charging+photovoltaic charging		
Maximum photovoltaic power(KW)	3	6
MPPT range(VDC)	70-256	120-450
Maximum photovoltaic open circuit voltage(VDC)	256	500
Maximum PV charging current(A)	60	100
Maximum AC charging current(A)	10(Optional)	60
Appearance		
Dimnsions(D*W*H)mm	210*510*695	301*693*(860/1325/1790)
Net weight(KG)	32	67/115/163
Communication interface	RS485	RS485 communication/mobile App(Wifi or GPRS)
Environment		
Humidity	0~95% No condensation	
Operating temperature(°C)	-10~40	
Storage temperature(°C)	-15~60	

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PV&BATTERY ENERGY STORAGE INTEGRATED

Lithium Iron Phosphate Battery PSL Series

Product introduction:
This series of product is a wheel type all-in-one machine that integrates hybrid inverters and energy storahge batteries. Multiple application modes; Beautiful appearance, flexible mobility, and circular arc design are widely used in small commercial and home energy storage.

Performance characteristics:
- Multiple application modes: Three output modes; Four charging modes
- High Safety: DSP control, advanced control algorithm; Multiple security warning and protection.
- Intelligent and Friendly: Intelligent battery management system; Real time monitoring of APP cloud

Model	PSL48-3.5K-5kWh
INVERTER OUTPUT	
Rated output power (W)	3500
Rated output power (VA)	3500
Maximum peak power (W)	6000
Rated AC output	230VAC (Can be set to 200/208/220/240VAC), 50/60Hz
Output voltage waveform	Pure sine wave
Switching time between inverter and bypass	10ms (Typical)
Maximum battery inverter efficiency	93%
Overload protection	102%-110%,5min; 110%-125%, 10s; >125%, 2s
BATTERY	
Capacity (kWh)	5
Rated battery voltage (VDC)	48/51.2
Battery voltage range (VDC)	42-54.75/44.8-58.4
Maximum MPPT charging current (A)	50
Maximum mains charging current (A)	50
Maximum mixed charging current (A)	50
PHOTOVOLTAIC CHARGING	
MPPT quantity	1
Maximum photovoltaic array power (W)	5500
Maximum photovoltaic input current (A)	22
Maximum open circuit voltage (DC)	500
MPPT scope of work (V)	70-450
MPPT tracking efficiency	99.9%
MAINS INPUT	
Input voltage range (VAC)	90-280/170-280
Frequency range (Hz)	50/60±0.3
SPECIFICATIONS	
Dimensions (D*W*H) mm	210*500*805
Weight (kg)	70
Waterproof level	IP20
Working temperature range (°C)	-1055
Storage temperature range (°C)	-25/60
Noise (dB)	<60
Cooling method	Forced air cooling

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LOW VOLTAGE SERIES LITHIUM BATTERY MODULE

GBP-L2 Power wall type lithium iron phosphate battery

Product introduction:

The product adopts modular design,higher integration, aves installation space; adopts high-performance lithium iron phosphate positive electrode material, the battery cell has good consistency, and the designed service life is more than 10 years. One-key switch machine, front operation, front wiring, easy installation convenient maintenance and operation. Various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection, over-charge and over-discharge protection, short-circuit protection; strong compatibility, seamless connection with UPS.

Performance characteristics:

- Wall-hanging installation, save space
- Multiple in parallel, easy for expand, Automatic addressing, no need to dial a code
- Standard configuration with LCD display, real time knowing battery status, Screen direct selection of inverter communication
- Environmentally friendly non-polluting materials, free of heavy metals, green and environmentally friendly
- Standard cycle life is more than 5000 times
- Remote viesing of errors and online software upgrades

Model	GBP48V-100AH-W (optional 51.2V)	GBP48V-200AH-W(Optional 51.2V)
Nominal voltage (V)	48	
Nominal capacity (AH)	105	210
Nominal energy capacity(kWh)	5	10
Operating voltage range (V)	42-52.5	
Recommended charging voltage (V)	52.5	
Recommended discharge cut-off voltage (V)	45	
Standard charging current (A)	50	100
Maximum continuous charging current (A)	100	200
Standard discharge current (A)	50	100
Maximum discharge current (A)	100	200
Applicable temperature (°C)	-30 ~ 60 （Recommended 10~35)	
Humidity range (%rh)	0 ~ 95% No condensation	
Storage temperature (°C)	20 ~ 65 (Recommended 10~35)	
Protection level	IP20	
Cooling method	Natural air cooling	
Life cycles	5000+ times at 80% DOD	
Maximum size (D*W*H) mm	628*410*186	682*465*276
Weight (KG)	45.7	89.6

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GBP-L SERIES WHEEL TYPE LIFEPO4 BATTERIES

Low-Voltage Series Lithium Battery Modeuls

Product introduction:

The produc adopts wheel design, beautiful shape, and convenient movement; including the mainstream market inverter protocol, directly communicates; adopts a comprehensive and multi-level battery protection strategy and fault isolation measures to ensure the safe operation of the system. Widely used in small commercial and family energy storage.

Performance characteristics:

- Wheeled design, easy to move
- Embedded wiring, safe and reliable.
- Standard configuration with LCD display screen, understand battery status in real time and directly select the inverter communication protocol
- Environmentally friendly and pollution-free materials, no heavy metals, green and environmentally friendly.
- Standard cycle life over 5,000 times.

Product parameter:

Model	GBP48-300L	GBP51.2-300L	GBP48-600L	GBP51.2-600L
Nominal Volt (V)	48	51.2	48	51.2
Nominal capacity (Ah)	300	300	600	600
Working volt range (V)	42~54.75	44.8~58.4	42~54.75	44.8~58.4
Recommended charging volt (V)	51.75	55.2	51.75	55.2
Recommended discharging cut-off volt (V)	45	48	45	48
Standard charging current (A)	100	100	100	100
Maximum continuous charging current (A)	150	150	200	200
Standard discharging current (A)	100	100	100	100
Maximum discharging current (A)	150	150	200	200
Proper temperature (℃)	-30~60 (Recommended 10~35)			
Allowable humidity range (%RH)	<85			
Storage temperature (℃)	-20~65 (Recommended 10~35)			
Protection level	IP20			
Cooling method	Natural cooling			
Maximum size (D*W*H) mm	248*680*880		890*350*1060	
Net weight (kg)	144	147	295	300

Note: The above data is for reference and subject to change without prior notice.
Communicate with engineers for special customization requirements.

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LOW VOLTAGE SERIES LITHIUM BATTERY MODULE

GBP-L1 RACK Type Lithium Iron Phosphate Battery

Product introduction:

This product is composed of high-quality lithium iron phosphate cells (by series and parallel) and advanced BMS management system. It can be used as an independent DC power supply or as a "basic unit" to form a variety of energy storage lithium battery power system. High reliability and longer life. It can be used as backup power supply of communication base station, backup power supply of digital center, household energy storage power supply, industrial energy storage power supply, etc. It can be seamlessly connected with main equipment such as UPS and photovoltaic power generation.

Performance characteristics:

- Small size and light weight
- Screen direct selection of inverter communication
- Standard cycle life is more than 5000 times
- Accurately estimate the state of charge of the battery pack, that is the remaining power of the battery, to ensure that the power of the battery pack is maintained within a reasonable range
- Multiple in parllel, easy for expand, Automatic addressing, no need to dial a code
- Easy for installation and maintenance

Model	GBP24V-200AH	GBP48V-100AH-R (optional 51.2V)	GBP48V-200AH-R(Optional 51.2V)
Nominal voltage (V)	25.6	48	
Nominal capacity (AH)	210	105	210
Nominal energy capacity(kWh)	5.3	5	10
Operating voltage range (V)	22.4-29.2	52.5	
Recommended charging voltage (V)	28		
Recommended discharge cut-off voltage (V)	24	45	
Standard charging current (A)	100	50	100
Maximum continuous charging current (A)	200	100	200
Standard discharge current (A)	100	50	100
Maximum discharge current (A)	200	100	200
Applicable temperature (°C)	-30 ~ 60 (Recommended 10 ~ 35)		
Humidity range (%rh)	0~95% no condensation		
Storage temperature (°C)	20 ~ 65 (Recommended 10 ~ 35)		
Protection level	IP20		
Cooling method	Natural air cooling		
Life cycles	5000+ times at 80% DOD		
Maximum size (D*W*H) mm	596*545*155	540*545*155	610*510*246
Weight (KG)	48	44.5	88.3

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GHV1 SERIES HIGH VOLTAGE LITHIUM BATTERY STACK SYSTEM

Product introduction:

The product is mainly composed of high-quality lithium iron phosphate battery and smart energy storage inverter. When the sunlight is sufficient during the day, the excess power generation of the rooftop potovoltaic system is stored in the energy storage system, and the energy of the energy storage system is released at night to supply power for houshold loads, so as to achieve self-sufficiency in household energy management and greatly improve the economical performance of the new energy system. At the same time, in the event of sudden power outage/power failure of the power grid, the energy storage system can take over the electricity demand of the whole house in time. The capacity of a single battery is 5.32kWh, and the total capacity of the largest battery stack is 26.6kWh, providing a stable power supply for the family

Battery pack performance indicators

Performance	Item	Parameter	Remarks
Battery pack	Standard capacity (Ah)	52	25±2°C 0.5C, New battery state
	Rated working volt (V)	102.4	
	Power (kWh)	86.4 ~ 116.8	Temperature T>0°C, Theoretical value
	Packing size (D*W*H) mm	420*625*175	
	Weight (KG)	45	
	Self-discharging	≤3%/month	25, 50% SOC
	Battery pack internal resistance (mΩ)	19.2-38.4	New battery state 25°C±2°C
	Staticvolt difference (mV)	30	25°C, 30% ≤ SOC ≤ 80%

GLV1 SERIES LOW-VOLTAGE LITHIUM BATTERY STACK SYSTEM

Product introduction:

This product is mainly composed of high-quality lithium iron phosphate battery module and intelligent PDU. When there is sufficient sunlight during the day, the excess power generated by the rooftop photovoltaic system will be stored in the energy storage system, and the energy from the battery is released at night to supply power for household loads, so as to achieve self-sufficiency in household energy management, the economy of the new energy system is greatly improved. At the same time, in case of sudden power outage/power failure of the power grid the energy storage system can take over the electricity demand of the whole house in time. With a single battery capacity of 5kWh/10kWh and a maximum stacked capacity of 20kWh/40kWh , the system can be used seamlessly with mains equipment such as photovoltaic power generation, as well as with a UPS to provide a table power supply for home.

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MODULAR OUTDOOR INTEGRATED CABINET

PSO Series Modular outdoor integrated cabinet

Product introduction:

The air cooling outdoor cabinet-on/off grid machine integrates energy storage batteries, PCS, EMS, DCDC, air conditioning and fire protection systems. Suitable for various application scenarios, and can be widely applied in small-scale commercial and industrial enterprises, hospital buildings, residential energy storage, etc. Equipped with features such as peak shaving, self-consumption, dynamic scaling, and planned curve response.

Performance characteristics:

- Highly integrated. All in one, factory prefabricated design. Flexible deployment, plug and play
- Safe and efficient. High efficient neutral point clamped topological structure. Support EMS and BMS system linkage
- Intelligent and friendly. Programmable working mode, touch screen control. Support photovoltaic AC coupling, DC coupling access
- Grid friendly. Equipped with four-quadrant adjustment function for active and reactive power. Equipped with LVRT and HVRT functions

Model	PSO50-100	PSO63-120	PSO80-160	PSO105-200	PSO105-225	PSO125-250
On grid parameter						
Rated power(KW)	50	63	80	105	105	125
Maximum output(KW)	55	69	88	116	116	138
Rated grid Voltage(V)	400					
Rated current (A)	72	90	115	167	167	200
Rated grid frequency (Hz)	50±5					
Power factor	0.99					
THDI	<3% (Rated power)					
Overload capacity	110% Long term					
Off grid parameter						
Rated output voltage(V)	400V					
Rated output power(KW)	50	62.5	80	100	100	125
Rate grid frequency (Hz)	50±5					
THDU	<3% (Linear power)					
Unbalanced load capacity	100%					
Overlad capacity	110% Long term					
Battery parameter						
Cell type	150Ah	150Ah	230Ah	280Ah	314Ah	320Ah
Rated voltage(V)	716.8	806.4	716.8	716.8	716.8	761.6
Operation voltage(V)	650-796	730-895	650-796	650-796	650-796	690-845
Battery capacity(kWh)	108	121	165	201	225	244
PV parameter						
PV voltage range(V)	500-620	500-700	500-620	500-620	500-620	500-660
Maximum input power(KWp)	50			100		
Maximum efficiency	≥99%					
Number of MPPT tracker	1			2		
General parameter						
System efficiency	PCS(≥98%); System(>90%); Battery charge and discharge rate (≤0.5C)					
Protection	Battery reverse connection, overcurrent and overvoltage protection, Surge protection,Fire protection					
Dimensions(D*W*H) mm	1400*1400*2200		1400*1950*2200			
Weight (t)	2.5	2.8	3	3.3	3.7	4
Ambient temperature (°C)	-20/50 (De-rating power from 45°C)					
Charging temperature (°C)	0/50					
Discharging temperature (°C)	-10/60					
Ambient humidity (%RH)	<95% RH, non-condensing					
Working altitude (m)	5000 (De-rating power from 2000m)					
Cooling method	Industrial air conditioning (battery compartment)/forced air cooling (electrical compartment)					
Communication interface	CAN/RS485/Ethernet					
Communication Protocol	RTU/MODBUS-TCP					

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LOW VOLTAGE SERIES LITHIUM BATTERY MODULE

GBP-L1 RACK Type Lithium Iron Phosphate Battery

Product features:

- Equipped with a touchable screen to visually display the operating status of the battery pack
- Modular convenient installation
- Cycle life of over 5000 cycles
- With low power consumption mode, one-key restart is guaranteed within 5000 hours duing standby, and data is retained
- Full life cycle fault and data recording, remote viewing of error reports, online software upgrades and GPS positioning.

Product advantage:

- Modular design, higher integration, saving installation space
- High-performance lithium iron phosphate cathode material, with good consistency of the core and a design life of more than 10 years
- One-touch switching, front operation, front wiring, eae of installation, maintenance and operation
- Various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection
- Highly compatible, seamlessly interfacing with mains equipment such as UPS and photovoltaic power generation, various forms of communication interfaces, CAN/RS485 etc. can be customized according to customer.
- Requirements, easy for remote monitoring. Flexible using range, can be used as a stand-alone DC power supply
- Spcification of energy storage power supply systems and container energy storage systems

Model Number	GBP9650	GBP48100	GBP32150	GBP96100	GBP48200	GBP32300
Cell version (Ah)	52			105		
Nominal power(kWh)	5	5	5	10	10	10
Nominal capacity(Ah)	52	104	156	105	210	315
Operating voltage range (VDC)	96	48	32	96	48	32
Operating temperature(°C)	87-106.5	43.5-53.2	29-35.5	87-106.5	43.5-53.2	29-35.5
IP grade	IP21					
Reference weight (KG)	47.1			86.6		
Reference size (D*W*H) mm	630*475*162			640*510*252		
Note: Battery pack is used in a system, cycle life≥5000, under working condition of 25°C 80% DOD						

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CONTAINER ENERGY STORAGE SYSTEM

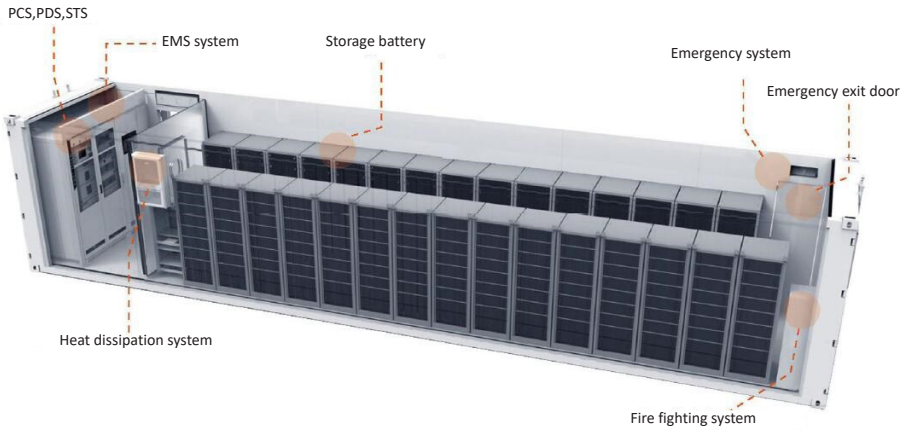
20FT AND 40FT CONTAINERS

Product introduction:

The containerized energy storage system includes :Battery management system (BMS), Power conversion system(PCS), Power distribution system(PDS), Micro-grid switching system(STS), Energy management system(EMS), and Auxiliary power distribution system, air conditioning system, fire protection system. It is widely used in scenarios such as power security, peak shaving and valley filling, new energy consumption and grid load smoothing.

Performance characteristics:

- Flexible configuration of battery system types and capacities according to customer requirements
- The PCS has a modular architecture, simple maintenance and flexible configuration, allowing for myltiple parallel machines support parallel and off-grid operation mode, seamless switching
- Black start support
- EMS unattended system, locally controlled, cloud-monitored operation, with highly customized features
- Various modes including peak and valley reduction, demand response, backflow prevention, back-up power, command response, etc
- Complete gas fire extinguishing system and automatic fire monitoring and alarm system with audible and visual alarm and fault uploading
- Complete thermal and temperature control system to ensure that the battery compartment temperature is within the optimum operating range
- Access control system with remote control and local operation



Model	20ft	40ft
Output volt (V)	380/400 ±15%	
Gird frequency (Hz)	50/60 (±2.5)	
Output power (KW)	50-300	250-630
Battery capacity (kWh)	200-600	600-2000
LiFePO4		
Size (m)	Inside size (D*W*H) : 2.352*5.898*2.385 Outside size (D*W*H): 2.438*6.058*2.591	Inside size (D*W*H) : 2.352*12.032*2.385 Outside size (D*W*H) : 2.438*12.192*2.591
Protection level	IP54	
Humidity (% rh)	0-95	
Altitude (m)	3000	
Working temperature (°C)	-25 ~ 50	
Battery volt range (V)	500 -850	
Max. DC current (A)	500	1000
Connect method	3P 4W	
Power factor	-1 ~ 1	
Communication method	RS485, CAN, Ethernet	
Isolation method	Low frequency isolation with transformer	

Japan 700KW

Japan 300KW

Japan 224KW

Japan 76KW

Japan 13KW

Japan 100KW

Japan 250KW

Italy 900KW

Tahiti 6KW

New Zealand 10KW

Sweden 14.76KW

Sweden 15.58KW

Sweden 15.99KW

Sweden 85.28KW

Iraq 39.6KW-15.12kWh

Indonesia 5KW-10.24kWh

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