

DUTY

Let employees gain happiness,
make the world greener!

VISION

Become an outstanding service provider
in solar application field

VALUES

Integrity Friendly Customer First



Solar Energy Storage Solution

Power generation side, distribution side,
household side, industrial and commercial
energy storage microgrid system

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Jntech Renewable Energy Co.,Ltd
Professional solar energy storage system and service provider

About Us

Jntech Renewable Energy Co.,Ltd

JNTECH RENEWABLE ENERGY CO., LTD is an international high-tech enterprise, which integrate intelligent power electronics products' R&D, manufacture, sales and service, with branches at different countries and regions in Pakistan, Kenya, Sudan, Dubai, Phillipine, Morocco and Mexico.

Rely on Chinese famous technology university' s human resource and technical advantage, JNTECH upgrades products and technology through enterprise, university, research cooperation,owns more than 60 solar patents, participates to set China Solar Standards; JNTECH developed solar off grid inverter, solar pumping inverter, solar household energy storage inverter and related system are widely used in more than 60 countries . JNTECH has been listed in the bidding catalogue and preferred brand of international projects by IBRD, UN, FAO, NGOs, etc. Over the years, "JNTECH" brand enjoys a high reputation in the industry.



JNTECH exerts to become the outstanding international solar solution provider for intelligent solar energy products, solar irrigation and water treatment system, solar ecological treatment systems. Adhering to the idea of "Creating green energy future, Ensure the sustainable social development" , JNTECH takes scientific development view as guideline creating green eco-friendly new energy as duty, keeps serving society,people and the national.



APPLICATION SCENARIOS

Long-term energy storage power supply application

During the day, solar panel generate electricity, and at the same time as the load is used, it stores energy in the battery. At night, the load is powered by the battery for a long time to ensure that the load runs 24 hours a day without the power grid.

Solar power supply + voltage stabilization function application

When there is a grid but the power grid is unstable, the solar and the grid charge the battery at the same time, the solar takes priority, and the battery stores the electric energy and inverts it to supply power to the load;

The system automatically switches between the inverter and the mains, and can set the voltage regulation range, as well as the mains bypass or inverter priority control, to achieve solar energy saving or voltage regulation control functions; maximize the use of solar energy and achieve stable performance. The function of the voltage regulator fully guarantees the quality of output power and ensures that customers can use electricity normally without interruption.

Short-term energy storage power supply application

During the daytime, solar power generation is used for the load, and at the same time, the battery is stored for energy storage. When the power grid is powered off, the power supply is seamlessly switched to the battery power supply to ensure the stable operation of the load and uninterrupted power supply.

Safe Electricity Guarantee

In hospitals, military and other areas where power cannot be cut off, the solar energy storage system ensures the safety of electricity consumption, so as to respond to emergencies and protect people's lives and property.



Power plant



Wind-solar hybrid power generation



Substation



Areas without electricity



Areas with a lack of electricity and instability



Areas with expensive electricity prices and large differences in peak-to-valley electricity prices



Areas requiring safe power supply

The products are mainly used in areas without electricity, areas where electricity is lacking/unstable, areas where electricity prices are expensive/large difference between peak and valley electricity prices, and areas where power supply security is guaranteed. It has the functions of self-use, peak shaving and valley filling, and backup power supply.

Some specific application



Private Residence/ Villa Area



School/hospital/military



Holiday cottage / homestay



Remote areas without electricity

AC bus-type microgrid scheme

Program Features:

- ▶ Standard modular, large-scale parallel technology, the system can achieve 30 kW~30 MW power demand;
- ▶ One-time realization of peak shaving, load balancing, harmonic suppression, reactive power compensation, and backup power supply functions, saving users a lot of equipment and operating costs;
- ▶ The multi-branch design satisfies the refined management of battery packs and the access of multiple energy sources for enterprises, with longer battery life and more diversified energy sources, providing uninterrupted power supply for enterprises;

Application:

- ▶ Areas with power shortages or unstable grids, areas with weak grids;
- ▶ Industrial and commercial optical storage and charging applications;
- ▶ Applications of microgrids in isolated islands and areas without electricity.

Recommended Products:

Energy storage inverter products, integrated energy storage products and supporting system auxiliary equipment.

DC bus-type microgrid scheme

Program Features:

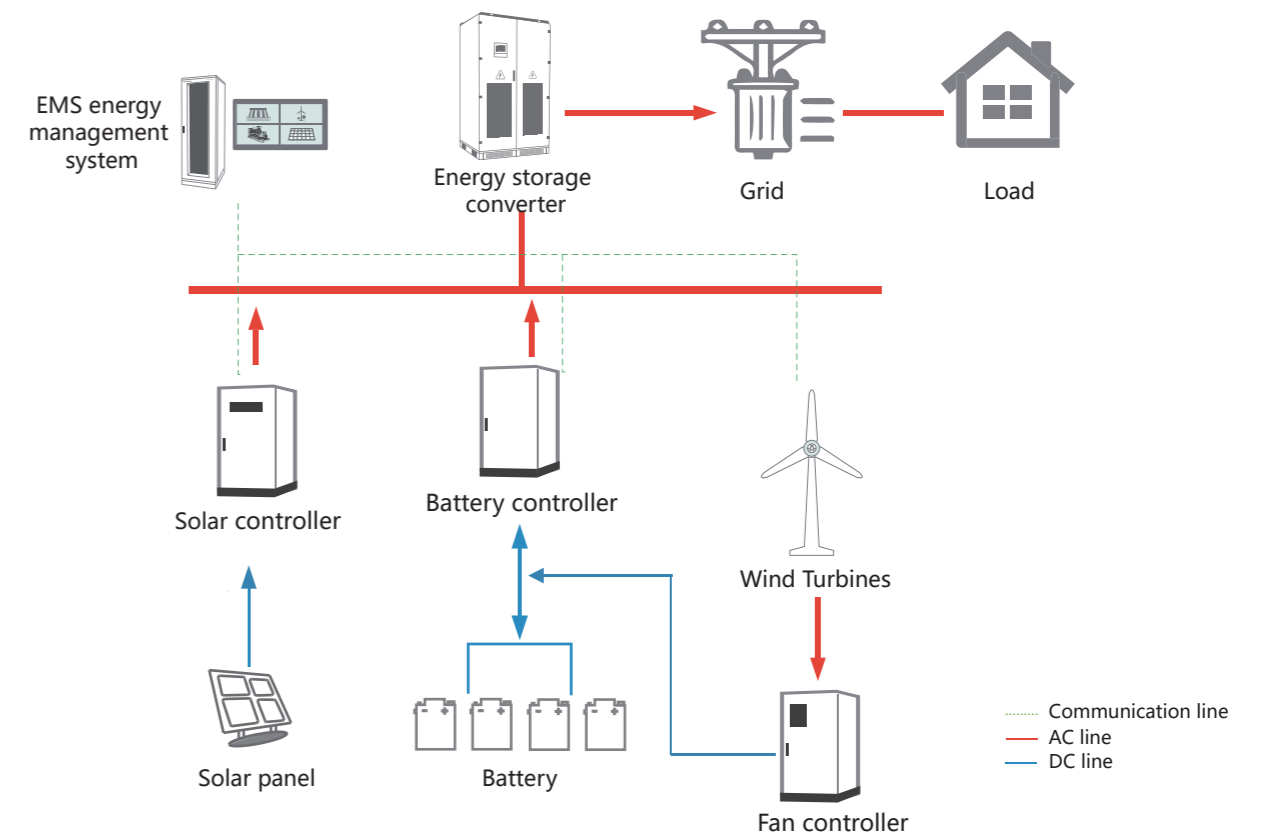
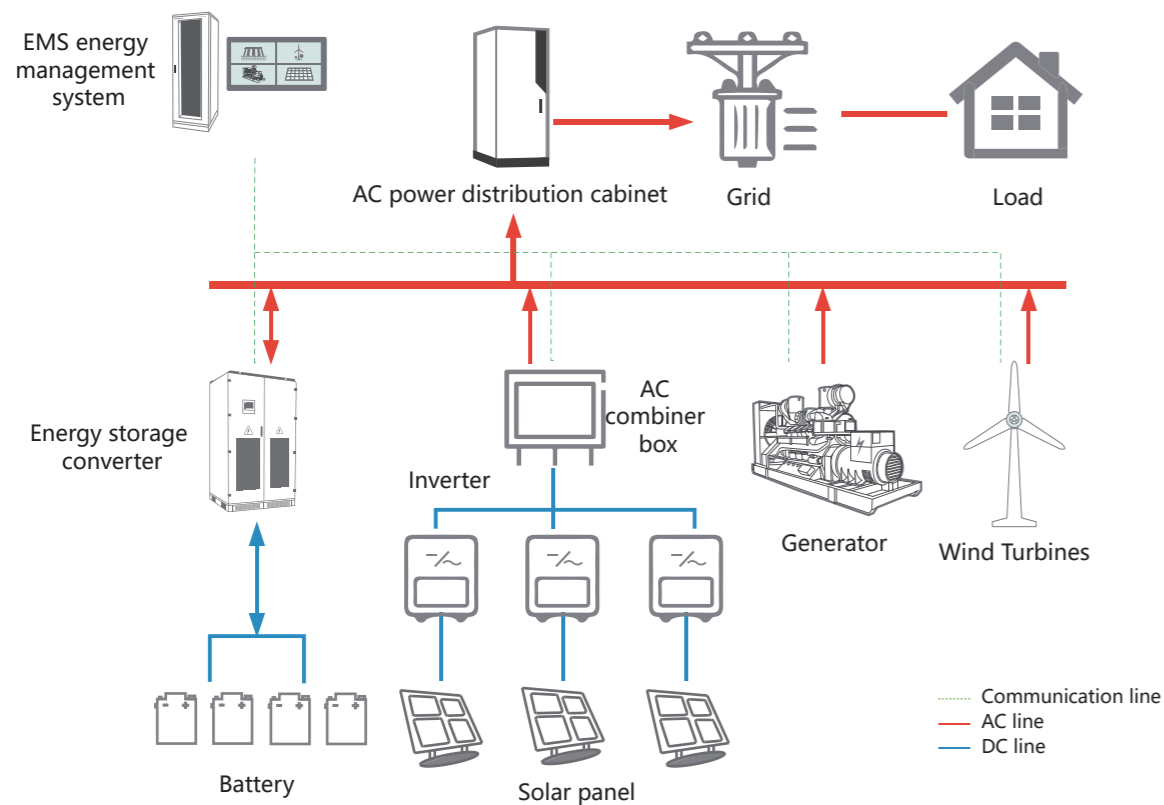
- ▶ Multi-channel DC channel design improves battery capacity and power utilization;
- ▶ Efficient mppt function to reduce power loss;
- ▶ Flexible and adjustable control strategy, suitable for a variety of application scenarios;
- ▶ Modular AC/DC system design, multiple redundant DC buses, single AC/DC fault, the system does not stop, which improves the power supply stability;
- ▶ Microsecond-level high-speed balance system design, compatible with multiple energy inputs, to ensure balanced power supply;
- ▶ Universal spare parts design for high maintainability and low operating costs.

Application::

- ▶ Wind, solar, traditional energy and other power generation areas;
- ▶ Areas with unstable power supply at the end of the power grid;
- ▶ Micro-grid energy storage application in areas with power shortage, low power and no power.

Recommended Products:

Energy storage inverter products, integrated energy storage products and supporting system auxiliary equipment.



Application of energy storage on power generation side - application of combined energy storage and frequency modulation of thermal power units

The electrochemical energy storage has fast frequency regulation speed and adjustable capacity. It cooperates with thermal power units to participate in the power auxiliary service market, improves the KP value of the overall performance of frequency regulation, reduces the frequent adjustment loss of the unit, and increases the operation flexibility of the unit.

Power generation side energy storage application -solution for curtailing wind and solar power/smooth output

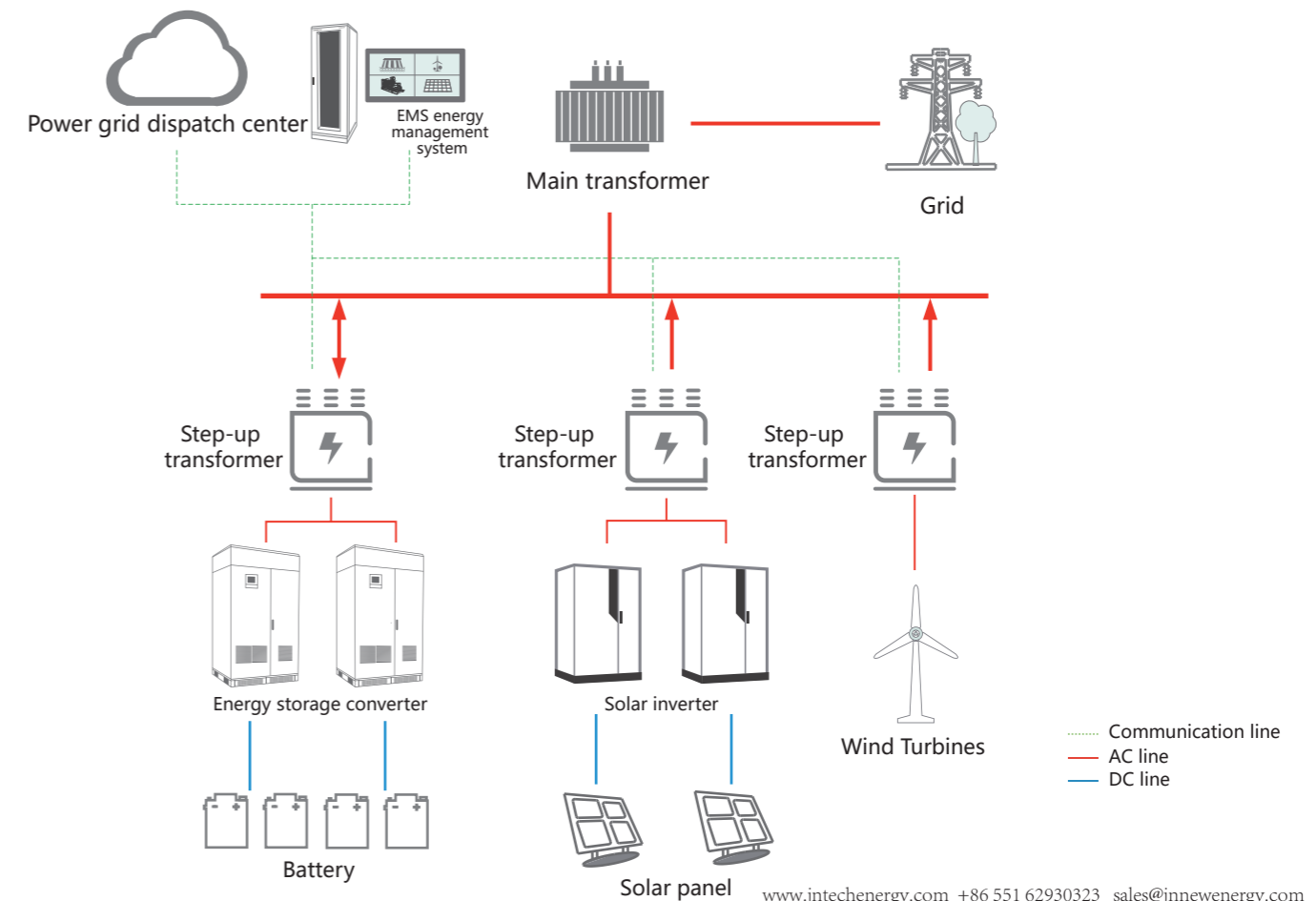
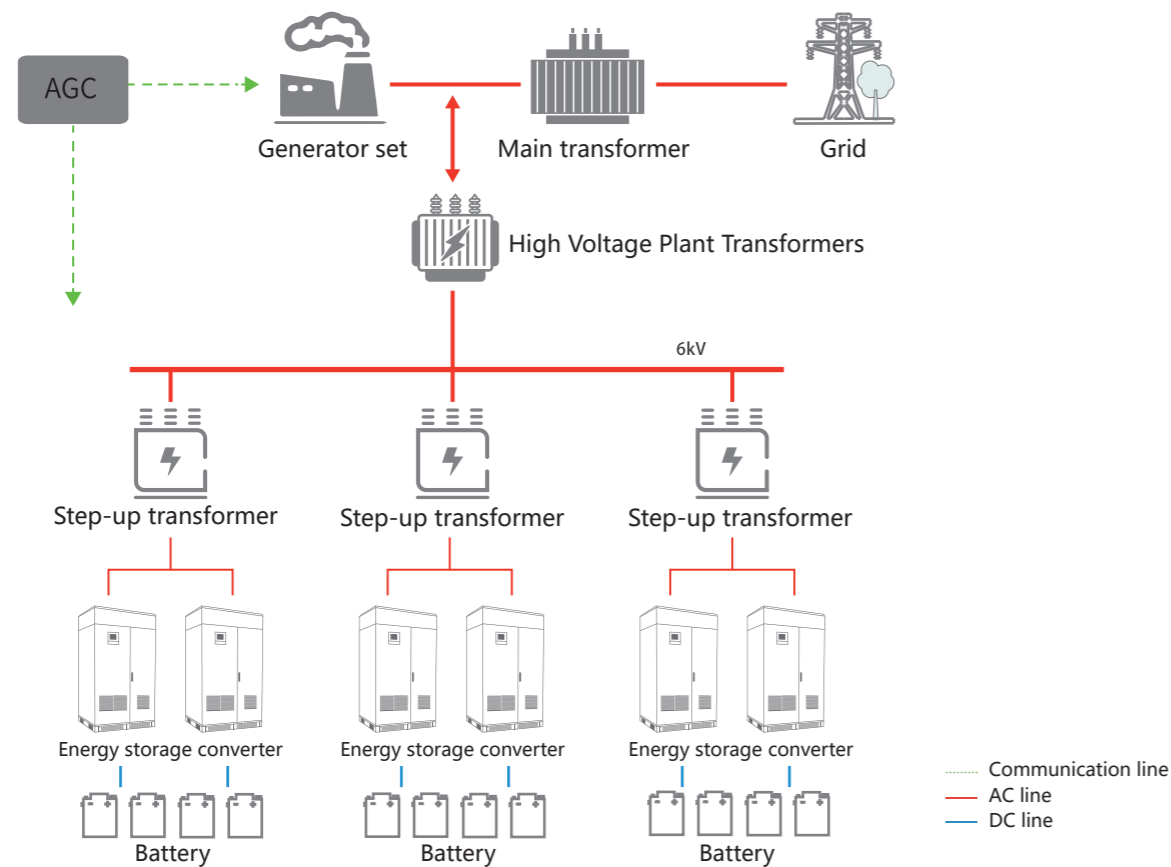
The seasonality and timing of wind and solar energy lead to intermittent, fluctuating and unpredictable power generation. Large-scale centralized access may cause various unbalanced problems. This solution is suitable for renewable energy (wind power and photovoltaics) Power-restricted areas.

Program Features:

- ▶ For existing wind power and photovoltaic power stations, which involve high-voltage grid-connected access, the original bay equipment needs to be transformed;
- ▶ Flexible scheduling, quick response to power grid commands, better participation in power grid deployment and auxiliary service market;
- ▶ Adapt to new wind and photovoltaic projects, as well as large-scale energy storage projects.

Recommended Products:

JNS 0500, JNS 0630 and JNS-MV series integrated with energy storage and booster (unit power level from 500 kW to 2500 kW coverage), integrated energy storage products and supporting system auxiliary equipment.



Distribution side energy storage application

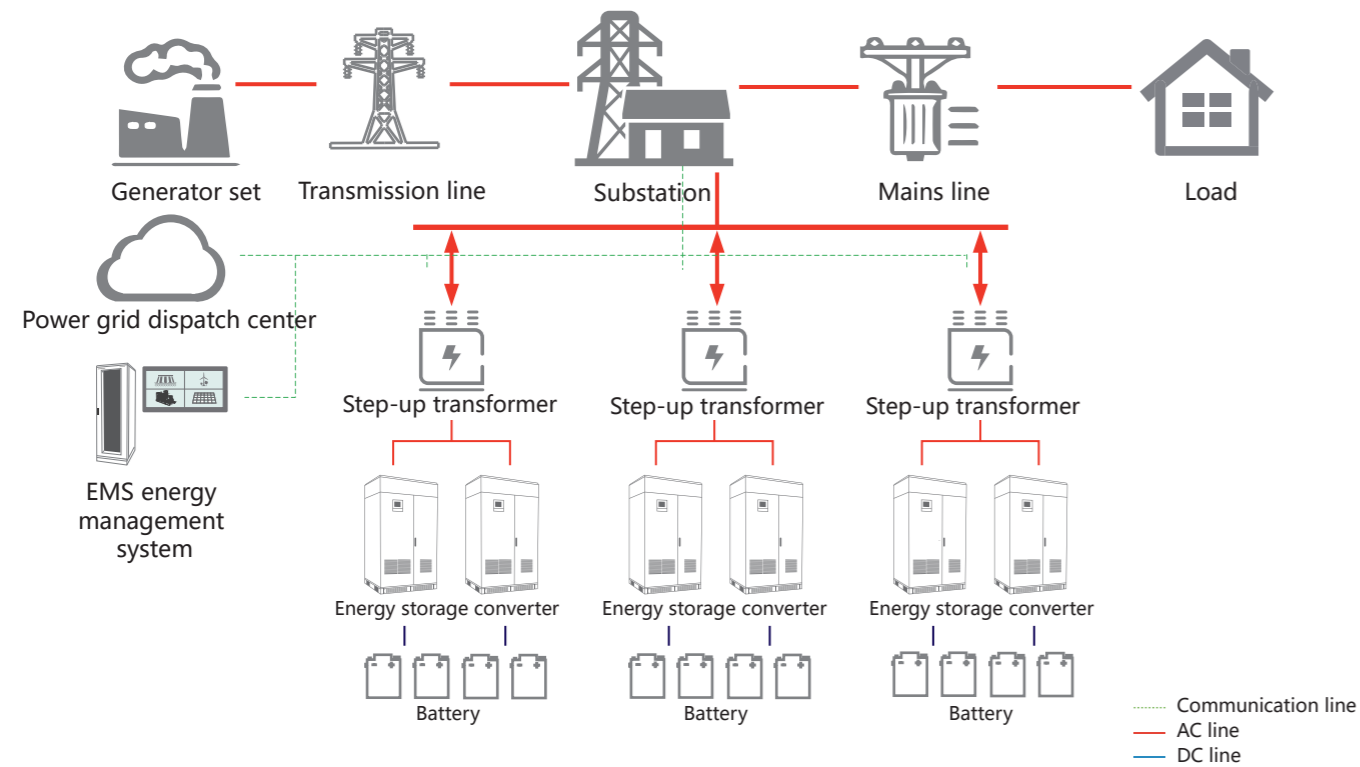
Grid-side energy storage applications can improve grid utilization efficiency, participate in auxiliary services in the power market, improve power supply reliability, and promote new energy consumption. The main planning is in the UHVDC near area, the new energy high penetration area and the load center area.

Program Features:

- ▶ Improve the utilization efficiency of the power grid, and delay the expansion of power distribution by adjusting the peak-to-valley difference of the power grid;
- ▶ In the event of a power failure in the power grid, the energy storage provides emergency power for users to avoid power interruption when the fault is repaired and ensure the reliability of power supply;
- ▶ Participate in power market auxiliary services such as frequency regulation, peak regulation, voltage stabilization, and black start, and obtain corresponding benefits;
- ▶ Promote new energy consumption, improve the credibility of new energy capacity, balance power fluctuations on the power supply side and load side, and improve grid stability.

Recommended Products:

JNS 0500, JNS 0630 and energy storage booster-body JNS-MV series (unit power level from 500 kW to 2500 kW coverage), integrated energy storage products and supporting system auxiliary equipment.



Application of multi-station integrated energy storage system

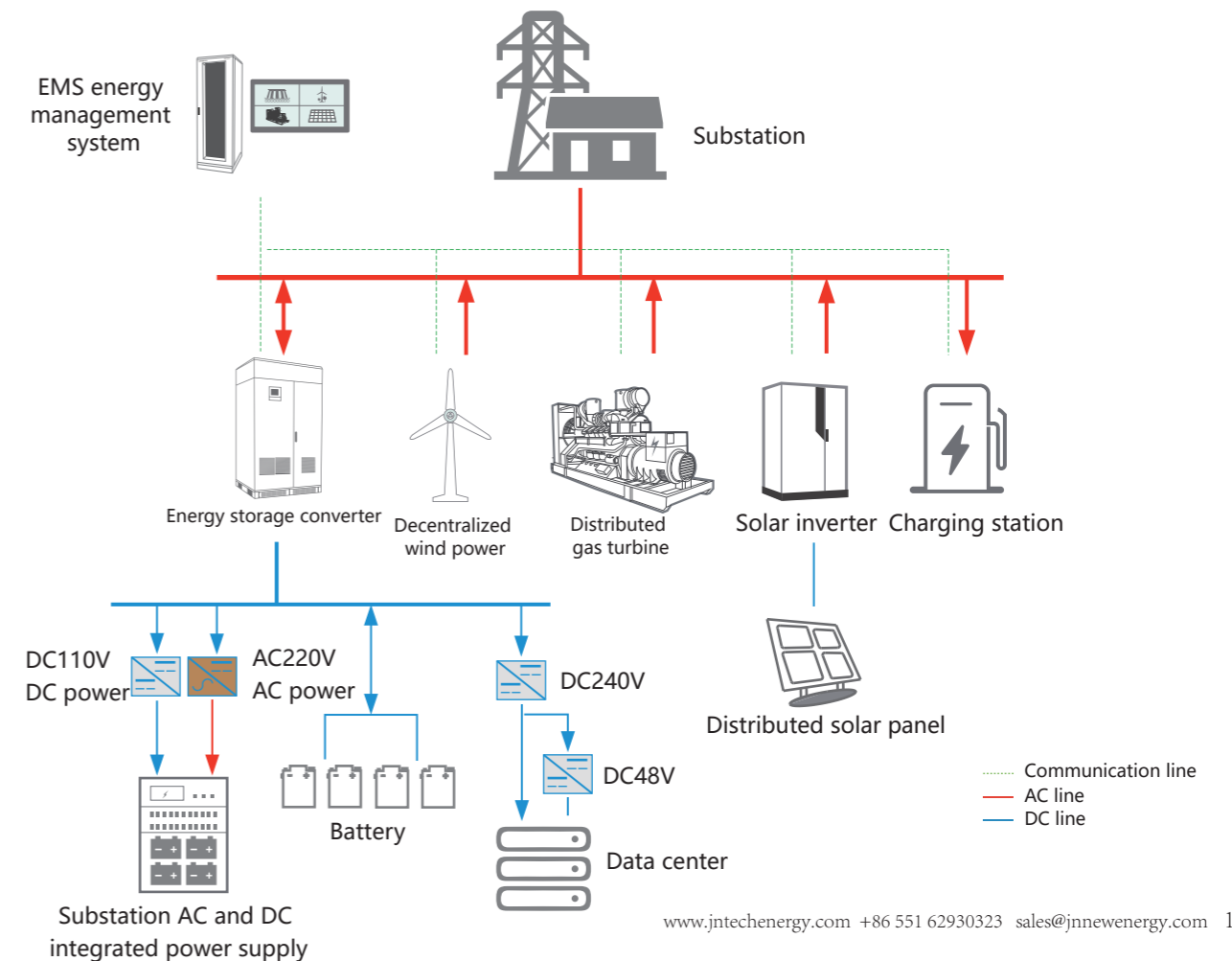
Multi-station integration Through the construction of distributed new energy power stations and energy storage stations, it can effectively promote the consumption of new energy, reduce the rate of curtailment of wind and light, increase the income of power generation companies from electricity sales, and reduce the transformation of power transmission and distribution networks and transformer capacity expansion of power grid companies. It can reduce the cost of energy consumption for users and achieve multiple benefits.

Program Features:

- ▶ Factory pre-installed structure design, three stations in one shared energy storage battery system, improve battery capacity utilization and application reliability.

Recommended Products:

JNS 0500, JNS 0630 and energy storage booster-body JNS-MV series (unit power level from 500 kW to 2500 kW coverage), integrated energy storage products and supporting system auxiliary equipment.



Industrial and commercial energy storage applications

Program Features:

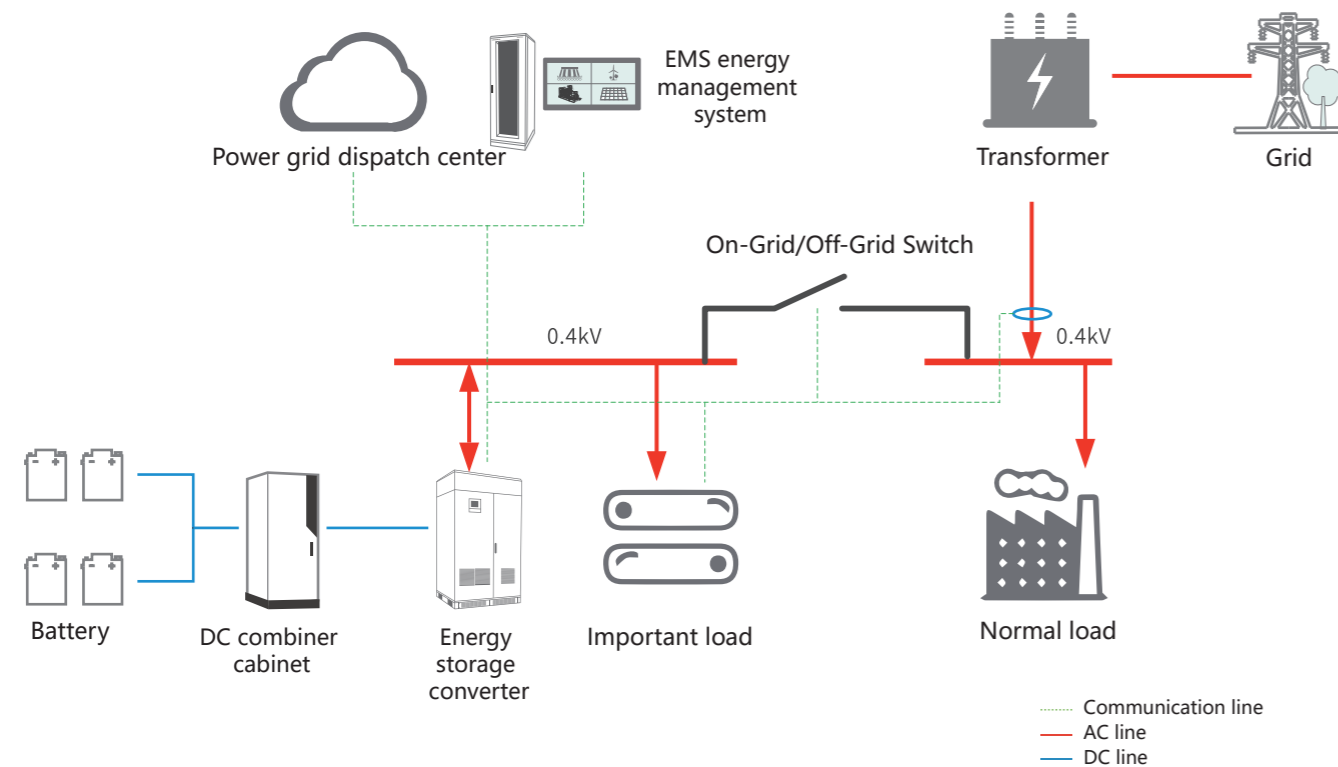
It is often used in places with large load fluctuation and inter-singing, and does not meet the changing trend of peak and valley electricity prices.

Application:

- ▶ Delay the expansion of the power distribution system, suitable for occasions where the original power distribution capacity is insufficient, such as urban villages or old urban areas with insufficient transformer capacity;
- ▶ Demand management bundles peak-valley arbitrage, which is suitable for places with peak-valley electricity price difference and large electricity consumption, such as large shopping malls, factories, enterprises and other places;
- ▶ Emergency power supply, suitable for occasions with different load levels or fire emergency power supply (such as finance, securities, shopping malls, factories, etc.);
- ▶ The smooth load curve is suitable for occasions where the electricity load is intermittent, seasonal and temporary, such as charging stations, sports centers, etc.

Recommended Products:

Isolated energy storage converter JNS-T series (unit power level from 50 kW to 500 kW coverage) and integrated energy storage products and supporting system auxiliary equipment.



Charging station combined with optical storage solution;

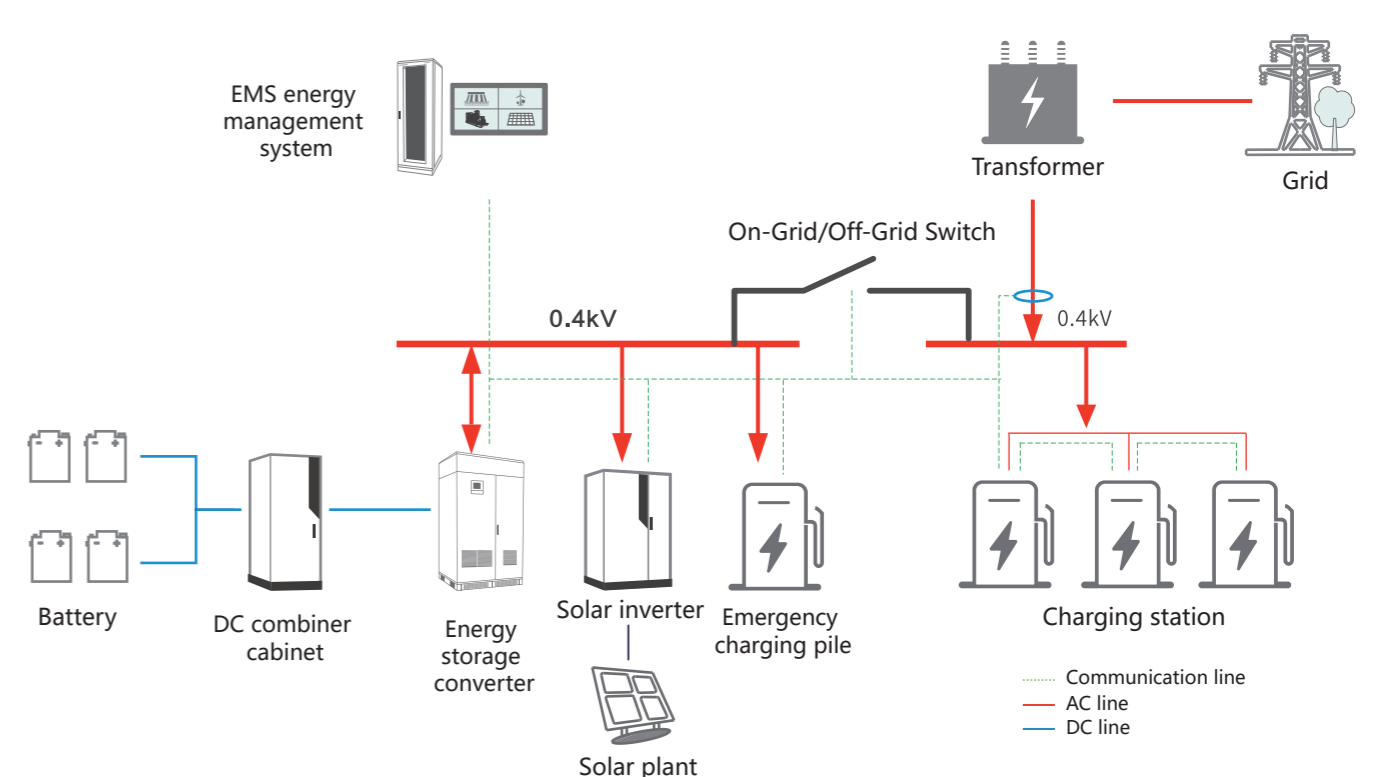
Expressway service stations, urban bus charging stations and other fields: there are idle roof carports, power distribution expansion just needs and other occasions.

Program Features:

- ▶ When the grid fails, the emergency charging pile, photovoltaic system and energy storage system form a micro-grid operation to ensure the continuous operation of the charging pile;
- ▶ The electricity price in the valley section at night charges the energy storage system to realize peak-valley arbitrage and increase revenue;
- ▶ During the daytime peak electricity price, the photovoltaic system is the main power supply, the energy storage system supplements the power supply during peak/normal times, and the mains electricity is used less or not during peak hours.

Recommended Products:

Isolated energy storage converter JNS-T series (unit power level from 50 kW to 500 kW coverage) and integrated energy storage products and supporting system auxiliary equipment.



Application of multi-branch energy storage system

The main difficulties in the cascade application of retired batteries are: the battery redistribution group capacity technology is difficult and complicated, the BMS control requirements are higher, and the overall application value of the battery system is reduced. The multi-branch energy storage system can be directly connected to a single energy storage converter. Entering batteries of different brands, types and SOCs can greatly reduce the cost of battery grouping in the energy storage system and achieve efficient utilization of retired batteries.

Recommended Products:

Isolated energy storage converter JNS-T series (unit power level from 50 kW to 500 kW coverage), integrated energy storage products and supporting system auxiliary equipment.

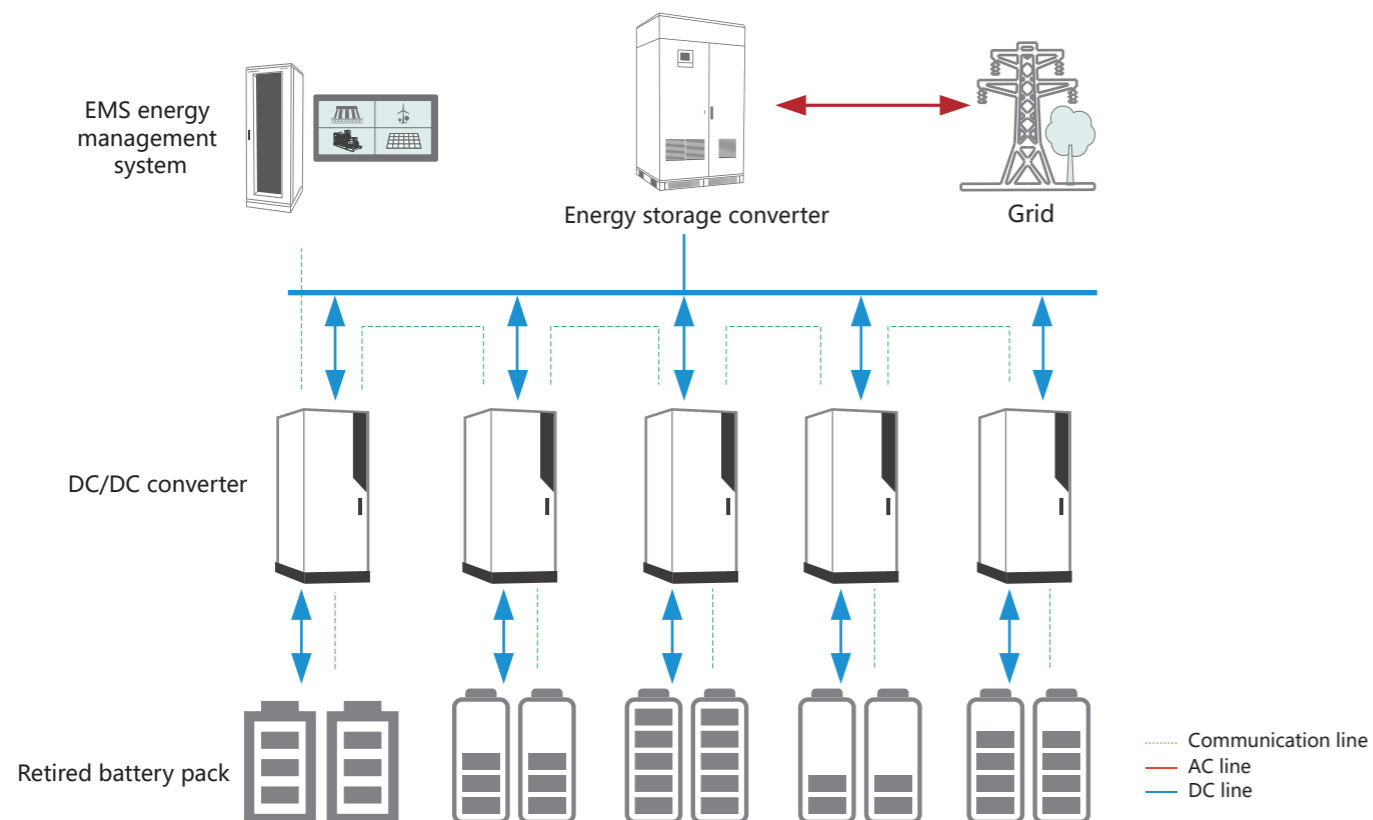
Application of multi-branch energy storage system

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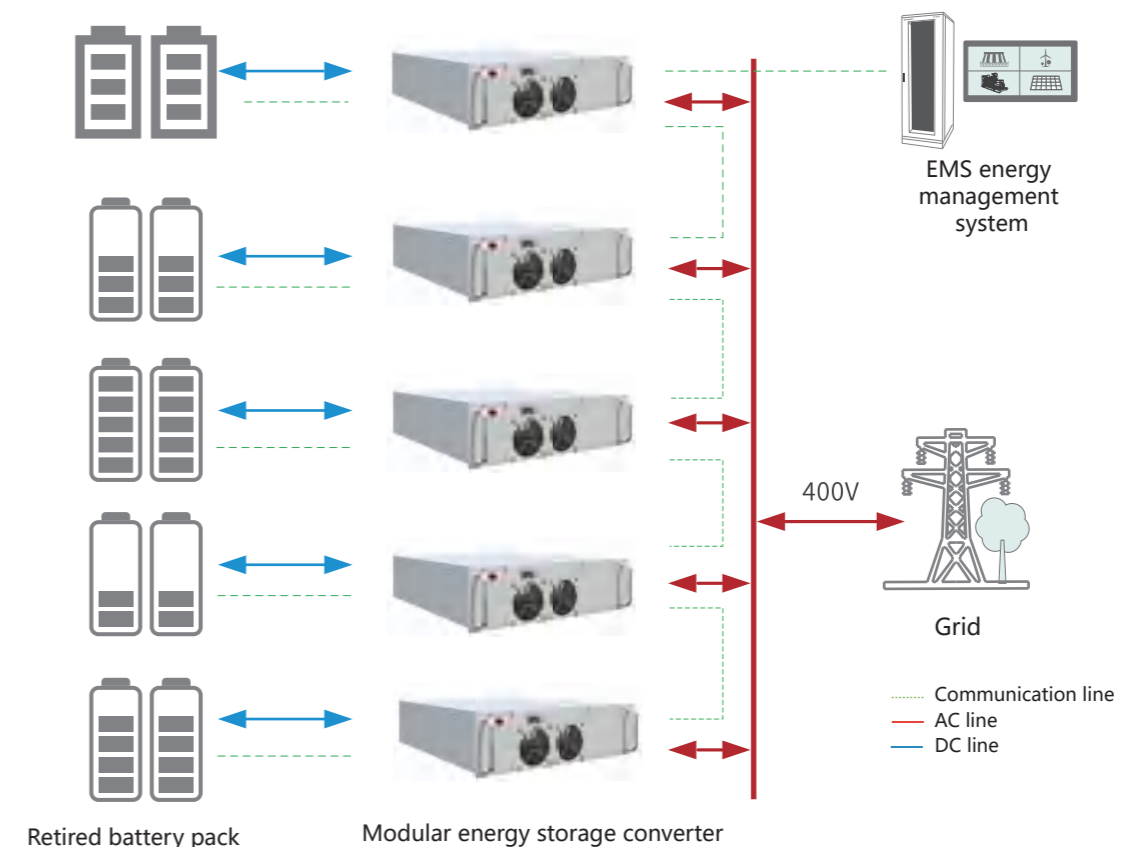
Recommended Products:

Isolated energy storage converter JNS-T series (unit power level from 50 kW to 500 kW coverage), integrated energy storage products and supporting system auxiliary equipment.

DC bus type




AC bus type



**Energy storage inverter/
all-in-one machine series**



Solar off-grid inverter
with hybrid controller
3kVA~5kVA



Solar off-grid inverter
with hybrid controller
(high frequency)
5kVA



All in one household
solar energy storage
5kVA series
10kWh/15kWh/20kWh



All in one household
solar energy storage
10kVA series
10kWh/15kWh/20kWh



All in one household
solar energy storage
15kVA series
10kWh/15kWh/20kWh



JNSx-A series solar
on-grid and off-grid
integrated machine
20kVA~120kVA



JNSxT series Isolated
energy storage
bidirectional converter
50kVA~500kVA




JNS series
non-isolated energy storage
bidirectional converter
500kVA~630kVA

Energy storage battery series



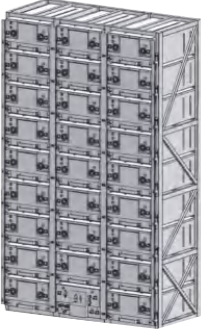
Wall Mounted
Battery Module
1.3kWh~5.2kWh



Plug-in battery
module
11.52kWh



Battery cabinet
69.12kWh~115.2kWh

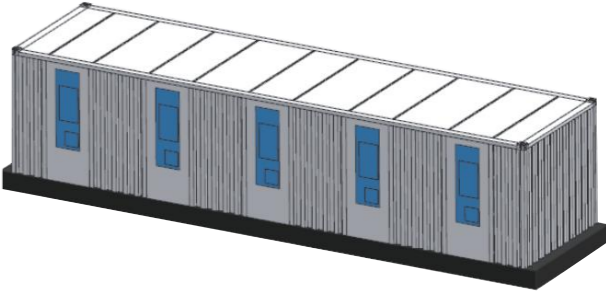


Battery cluster
299.52kWh

Container energy storage system



Container energy storage system 3.7MWh



Container energy storage system 5MWh



Outdoor cabinet scheme
69KWh/115KWh/172KWh/207KWh

Solar off-grid inverter with hybrid controller

3kVA-5kVA

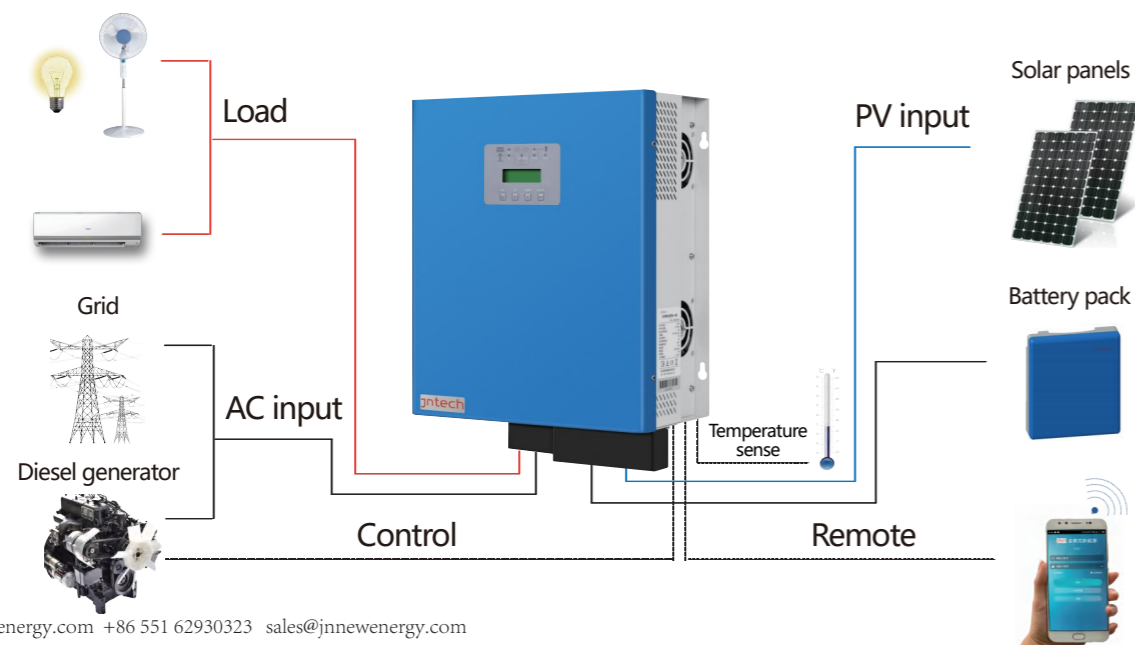


Product introduction

The solar inverter is a solar hybrid off grid inverter, which integrates solar charging, AC charging, inverter output, battery management and AC bypass switching.

- It has an intelligent energy management system (EMS) with mains (AC)/diesel engine (DG) input, solar input charging and battery charge and discharge control.
- With power saving mode (ECO) and backup power supply (UPS) mode, to meet the energy demand of different scenarios.
- Pure sine wave output, seamless switching between bypass power supply and inverter output.
- Built-in MPPT charge controller, MPPT efficiency > 99%.
- LCD+LED display, visually display the operating status of the machine, easy to operate.
- Using low frequency isolation design, strong overload capacity, wide load practicability.
- The max.solar charging current is 80A, and the photovoltaic configuration capacity is large.
- Various battery configurations, gel batteries or lithium batteries are optional.

The product is mainly used for short-term and long-term power supply for households in areas where there is no electricity or lack of electricity.



Model	JNF3KLF24V-V2	JNF3KLF48V-V2	JNF4KLF48V-V2	JNF5KLF48V-V2
PV Input				
Max. PV array input voltage	180Vdc			
Recommended input power	3500W	5000W	7000W	7000W
MPPT voltage range	35-145Vdc			
Battery				
Rated voltage	24Vdc	48Vdc		
Max. charge current	80A	80A	80A	80A
Efficiency	≥97%			
Type	Gel/Lithium			
Inverter Output				
Rated output capacitor	3000VA	3000VA	4000VA	5000VA
Peak output capacity	9000VA	9000VA	12000VA	15000VA
Rated output power (linear load)	3000W	3000W	4000W	5000W
Output voltage	220Vac or 230Vac/115Vac or 240Vac/120Vac			
Rated frequency	50/60Hz (±3%)			
Standby loss	≤10W			
Max. efficiency	93%			
Total harmonic distortion (THD)	<3%			
Rated current	13.5A	13.5A	18A	22.5A
Current peak factor	3:1			
Overload	125%@rated power, 70s;150%@rated, 20s; 200%@rated, 5s;over 300%@rated,0s.			
AC Input				
Voltage and frequency	230Vac±20%,50/60Hz (±3%)			
Max. charge current	30A	40A	40A	40A
Grid pass-by				
Input voltage	230Vac±20%	230Vac±20%	230Vac±20%	230Vac±20%
Switching time	0ms			
Mechanical data				
Dimension(W*D*H)(mm)	440*370*190mm			
Weight	28kg	28kg	30kg	33kg
Other				
Protection level	IP21			
Autible noise	<60dB			
Cooling method	Forced cooling			
Operate temp.	-20 ~ +50°C			
Storage temp.	-25 ~ +70°C			
Status indicator	LCD+LED			
Interface	GPRS/RS485/CAN(optional)			
Elevation	2000m(>2000m derating operate)			

Solar off-grid inverter with hybrid controller (high frequency)

JNF5KHF48V-V1series

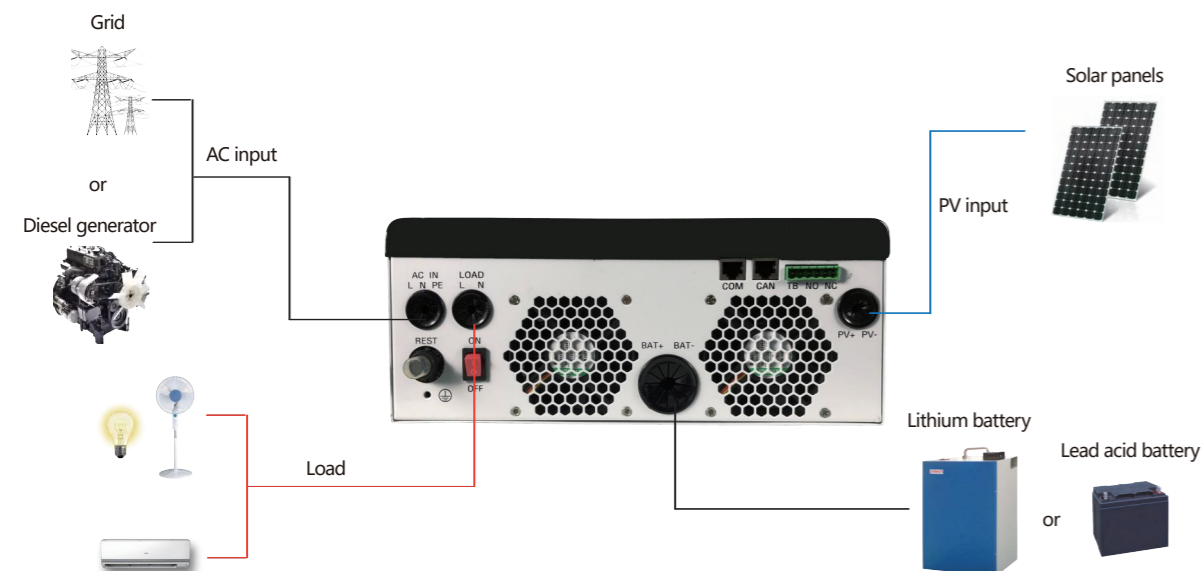


Product introduction

The solar off-grid inverter with hybrid controller (high frequency) integrates solar charging, AC charging, inverter output, battery management and AC bypass switching.

- It has an intelligent energy management system (EMS) with mains (AC)/diesel engine (DG) input, solar input charging and battery charge and discharge control.
- With power saving mode (ECO) and backup power supply (UPS) mode, to meet the energy demand of different scenarios.
- Pure sine wave output, seamless switching between bypass power supply and inverter output.
- Built-in MPPT charge controller, MPPT efficiency >99%.
- LCD+LED display, visually display the operating status of the machine, easy to operate.
- Using high frequency isolation design, strong overload capacity, wide load practicability.
- The max.solar charging current is 80A, and the photovoltaic configuration capacity is large.
- Various battery configurations, gel batteries or lithium batteries are optional.

The product is mainly used for short-term and long-term power supply for households in areas where there is no electricity or lack of electricity.



Model	JNF5KHF48V-V1
PV Input	
Max. PV array input voltage	480Vdc
Recommended input power	7000W
MPPT voltage range	150~450Vdc
Battery	
Rated voltage	48Vdc
Rated charge current	80A
Efficiency	≥97%
Type	Gel/Lithium
Inverter Output	
Rated output capacitor	5000VA
Peak output capacity	15000VA
Rated output power (linear load)	5000W
Output voltage	220Vac or 230Vac
Rated frequency	50/60Hz (±3%)
Standby loss	≤10W
Max. efficiency	93%
Total harmonic distortion (THD)	<3%
Overload	125%@rated power, 70s;150%@rated ,20s; 200%@rated ,5s;over 300%@rated,0s.
AC Input & Grid pass-by	
Voltage and frequency	230Vac±20%,50/60Hz (±3%)
Max. charge current	60A
Switching time	≤10ms
Mechanical data	
Dimension(W*D*H)(mm)	315mm*430mm*120mm
Weight	10kg
Other	
Protection level	IP21
Autible noise	<60dB
Cooling method	Forced cooling
Operate temp.	-20 ~ +50°C
Storage temp.	-25 ~ +70°C
Status indicator	LCD+LED
Interface	RS485
Elevation	2000m(> 2000m derating operate)

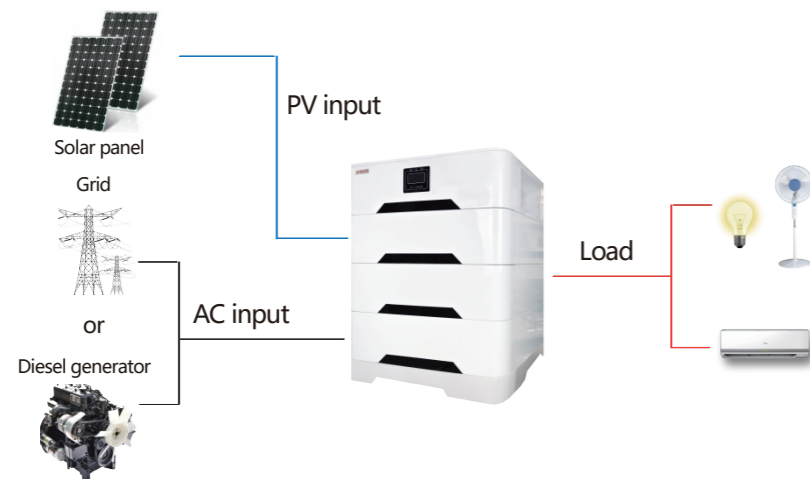
All in one household solar energy storage JNSG5KHF4820-V1 series 5kVA single phase



Product introduction:

All in one household solar energy storage is a multifunctional intelligent energy storage inverter cabinet integrating inverter, AC charger, photovoltaic charge controller and AC bypass. It has optional AC sources, an intelligent management system for AC chargers and solar charge controllers, and an energy management system for AC output, which guarantees customers' normal electricity consumption to the greatest extent and reduces the cost of customers' electricity consumption.

- pure sine wave inverter;
- AC input source is compatible with grid and diesel engine, intelligent control;
- Advanced energy management system, adapt to different application scenarios;
- There are power saving mode (ECO) and backup power supply (UPS) mode;
- The switching time between bypass and inverter is less than 10ms, realizing fast switching;
- Wide PV input voltage range (120~450Vdc/);
- Built-in MPPT charge controller, MPPT efficiency>99%;
- The maximum photovoltaic charging current is 80A, and the solar utilization rate is higher;
- The charging current can be set to protect the battery and prolong the service life of the battery;
- Various battery configurations, 10kWh\15kWh\20kWh optional;
- The equipment is equipped with WiFi / GPRS module, users can monitor the status of solar system through mobile APP anytime and anywhere;
- Removable power supply.



Model	JNSG5KHF4810-V1	JNSG5KHF4815-V1	JNSG5KHF4820-V1
PV Input			
Max. PV array input voltage	450Vdc		
Recommended input power	7000W		
MPPT voltage range	120~430Vdc		
Battery			
Rated voltage	48Vdc		
Max.charge current	80A		
Max.charge efficiency	≥97%		
Type	Gel/Lithium		
Rated power	10kWh	15kWh	20kWh
Inverter Output			
Rated output capacitor	5000VA		
Rated output power (linear load)	5000W		
Output voltage	220Vac or 230Vac		
Rated frequency	50/60Hz (±3%)		
Standby loss	≤10W		
Max. efficiency	93%		
Total harmonic distortion (THD)	<3%		
Output voltage harmonic distortion	Linear load output voltage distortion <3%, non-linear load <5%		
Overload	5s@ ≥150% load;10s@ 110%~150% load		
AC Input, Grid pass-by			
Voltage and frequency	230Vac±20%,50/60Hz (±3%)		
Max. charge current	60A		
Switching time	≤10ms		
Mechanical data			
Dimension(W/H/D)(mm)	674*698*480mm	674*895*480mm	674*1093*480mm
Weight	143kg	202kg	260kg
Other			
Protection level	IP21		
Autible noise	<60dB		
Cooling method	Forced cooling		
Operate temp.	-20 ~ +50°C		
Storage temp.	-25 ~ +70°C		
Status indicator	LCD+LED		
Interface	RS485/WIFI		
Elevation	2000m(>2000m derating operate)		

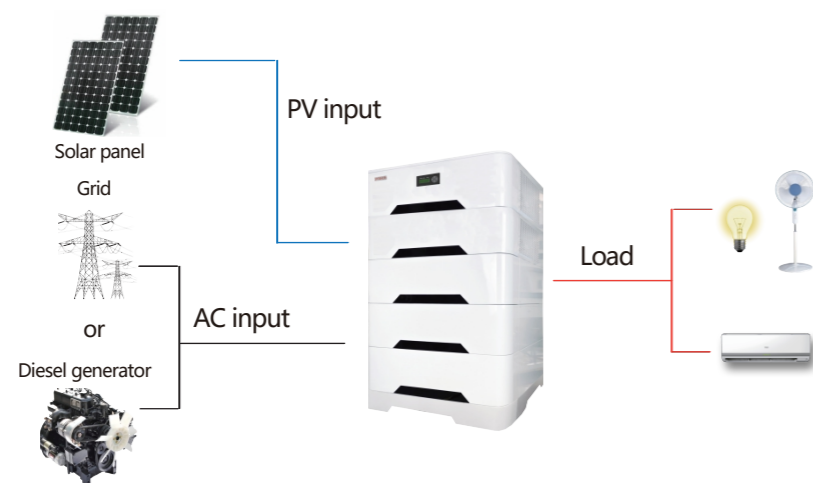
All in one household solar energy storage JNSG10KHF4820-V1 series 10kVA single phase



Product introduction:

All in one household solar energy storage is a multifunctional intelligent energy storage inverter cabinet integrating inverter, AC charger, photovoltaic charge controller and AC bypass. It has optional AC sources, an intelligent management system for AC chargers and solar charge controllers, and an energy management system for AC output, which guarantees customers' normal electricity consumption to the greatest extent and reduces the cost of customers' electricity consumption.

- pure sine wave inverter;
- AC input source is compatible with grid and diesel engine, intelligent control;
- Advanced energy management system, adapt to different application scenarios;
- There are power saving mode (ECO) and backup power supply (UPS) mode;
- The switching time between bypass and inverter is less than 10ms, realizing fast switching;
- Wide PV input voltage range (120~450Vdc/);
- Built-in MPPT charge controller, MPPT efficiency>99%;
- The maximum photovoltaic charging current is 160A, and the solar utilization rate is higher;
- The charging current can be set to protect the battery and prolong the service life of the battery;
- Various battery configurations, 10kWh\15kWh\20kWh optional;
- The equipment is equipped with WiFi / GPRS module, users can monitor the status of solar system through mobile APP anytime and anywhere;
- Removable power supply.



Model	JNSG10KHF4810-V1	JNSG10KHF4815-V1	JNSG10KHF4820-V1
PV Input			
Max. PV array input voltage	450Vdc		
Recommended input power	14000W		
MPPT voltage range	120~430Vdc		
Battery			
Rated voltage	48Vdc		
Max.charge current	160A		
Max.charge efficiency	≥97%		
Type	Gel/Lithium		
Rated power	10kWh	15kWh	20kWh
Inverter Output			
Rated output capacitor	10000VA		
Rated output power (linear load)	10000W		
Output voltage	L-N 220Vac or 230Vac		
Rated frequency	50/60Hz (±3%)		
Standby loss	≤20W		
Max. efficiency	93%		
Total harmonic distortion (THD)	<3%		
Output voltage harmonic distortion	Linear load output voltage distortion <3%, non-linear load <5%		
Overload	5s@ ≥150% load;10s@ 110%~150% load		
AC Input, Grid pass-by			
Voltage and frequency	230Vac±20%,50/60Hz (±3%)		
Max. charge current	120A		
Switching time	≤10ms		
Mechanical data			
Dimension(W/H/D)(mm)	674*895*480mm	674*1093*480mm	674*1291*480mm
Weight	172kg	201kg	230kg
Other			
Protection level	IP21		
Autible noise	<60dB		
Cooling method	Forced cooling		
Operate temp.	-20 ~ +50°C		
Storage temp.	-25 ~ +70°C		
Status indicator	LCD+LED		
Interface	RS485/WIFI		
Elevation	2000m(>2000m derating operate)		

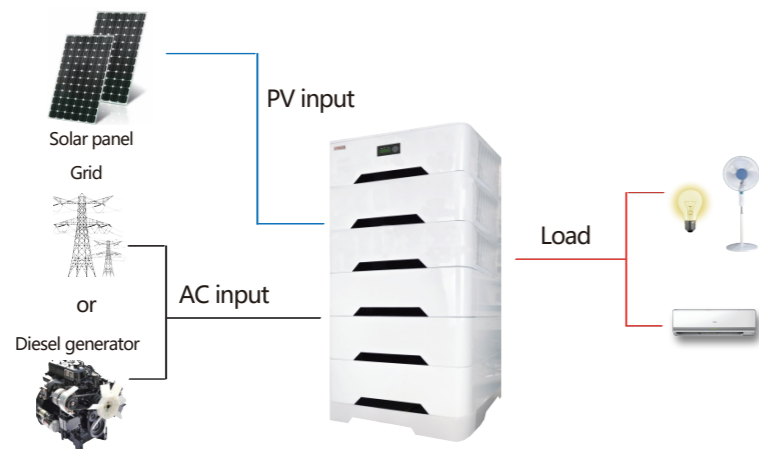
All in one household solar energy storage
JNSG15KHF4820-V1 series
 15kVA three phase



Product introduction:

All in one household solar energy storage is a multifunctional intelligent energy storage inverter cabinet integrating inverter, AC charger, photovoltaic charge controller and AC bypass. It has optional AC sources, an intelligent management system for AC chargers and solar charge controllers, and an energy management system for AC output, which guarantees customers' normal electricity consumption to the greatest extent and reduces the cost of customers' electricity consumption.

- pure sine wave inverter;
- AC input source is compatible with grid and diesel engine, intelligent control;
- Advanced energy management system, adapt to different application scenarios;
- There are power saving mode (ECO) and backup power supply (UPS) mode;
- The switching time between bypass and inverter is less than 10ms, realizing fast switching;
- Wide PV input voltage range (120~450Vdc/);
- Built-in MPPT charge controller, MPPT efficiency>99%;
- The maximum photovoltaic charging current is 240A, and the solar utilization rate is higher;
- The charging current can be set to protect the battery and prolong the service life of the battery;
- Various battery configurations, 10kWh\15kWh\20kWh optional;
- The equipment is equipped with WiFi / GPRS module, users can monitor the status of solar system through mobile APP anytime and anywhere;
- Removable power supply.



Model	JNSG15KHF4815-V1	JNSG15KHF4820-V1
PV Input		
Max. PV array input voltage	450Vdc	
Recommended input power	21000W	
MPPT voltage range	120~430Vdc	
Battery		
Rated voltage	48Vdc	
Max.charge current	240A	
Max.charge efficiency	≥97%	
Type	Gel/Lithium	
Rated power	15kWh	20kWh
Inverter Output		
Rated output capacitor	15000VA	
Rated output power (linear load)	15000W	
Output voltage	220Vac or 380Vac	
Rated frequency	50/60Hz (±3%)	
Standby loss	≤30W	
Max. efficiency	93%	
Total harmonic distortion (THD)	<3%	
Output voltage harmonic distortion	Linear load output voltage distortion <3%, non-linear load <5%	
Overload	5s@ ≥150% load;10s@ 110%~150% load	
AC Input, Grid pass-by		
Voltage and frequency	380Vac±20%,50/60Hz (±3%)	
Max. charge current	180A	
Switching time	≤10ms	
Mechanical data		
Dimension(W/H/D)(mm)	674*1291*480mm	674*1498*480mm
Weight	281kg	350kg
Other		
Protection level	IP21	
Autible noise	<60dB	
Cooling method	Forced cooling	
Operate temp.	-20 ~ +50°C	
Storage temp.	-25 ~ +70°C	
Status indicator	LCD+LED	
Interface	RS485/WIFI	
Elevation	2000m(>2000m derating operate)	

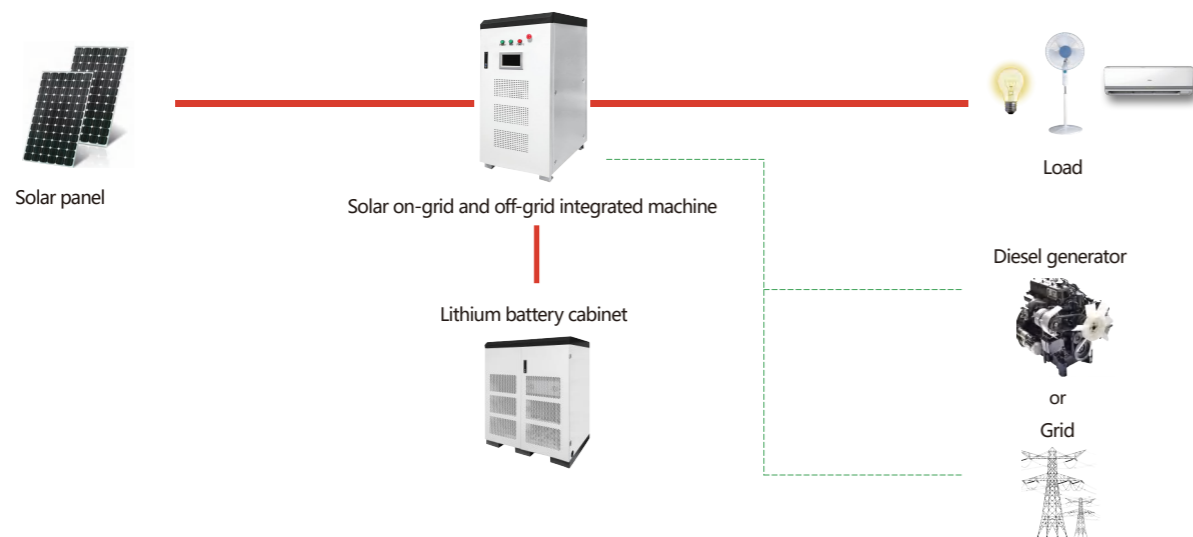
JNSx-A series solar on-grid and off-grid integrated machine



Features:

- Wide battery voltage range
- Supports multiple battery inputs
- Support MPPT function
- Supports seamless switching between on-grid and off-grid
- Integrated EMS, easy to set peak and valley time
- Redundant Design of AC and DC Dual Auxiliary Power Supply

application



Model	JNS20K-A-V1	JNS30K-A-V1	JNS60K-A-V1	JNS120K-A-V1
PV Input				
Max. PV array input voltage	800Vdc			
Recommended PV Module Configuration	2 channels, each channel 4 in parallel and 13 in series 330Wp, total 34320W	2 channels, each channel 4 in parallel and 13 in series 330Wp, total 34320W	2channels, each channel 8 in parallel and 13 in series 330Wp,total 68640W	4channels, each channel 8 in parallel and 13 in series 330Wp,total 137280W
MPPT voltage range	250~750Vdc	250~750Vdc	404~750Vdc	404~750Vdc
Battery				
Rated voltage	230Vdc	230Vdc	384Vdc	384Vdc
Type	Gel/lithium			
Max. charge current	150A	150A	150A	300A
AC output parameters (on grid)				
Grid voltage range	304Vac~485Vac	304Vac~485Vac	304Vac~485Vac	304Vac~485Vac
Grid voltage frequency	50/60Hz (±5%)	50/60Hz (±5%)	50/60Hz (±5%)	50/60Hz (±5%)
Voltage standard	3-phase 4-wire, 3W+1PE	3-phase 4-wire, 3W+1PE	3-phase 4-wire, 3W+1PE	3-phase 4-wire, 3W+1PE
Rated voltage	400Vac(380/400/415Vaccan be set)			
Rated power	20kW	30kW	60kW	120kW
Total harmonic distortion (Ithd)	< 3%			
Power factor	>0.99			
DC output parameters (off grid)				
Rated output capacitor	20000VA	30000VA	60000VA	120000VA
Rated output power (linear load)	20000W	30000W	60000W	120000W
Rated voltage	400Vac(380/400/415Vac can be set)			
Grid voltage frequency	50/60Hz (±5%)			
Voltage standard	Three-phase five-wire, 3W+1N+1PE, single-phase output capacity :30% rated power			
Total Harmonic Distortion (Vthd)	<3%			
Overload	1min@≥120% load;10min@ 110%load			
Other				
Autible noise	<62dB			
Protection level	IP21			
Cooling method	Forced cooling			
Operate temp.	-20 ~ +55°C			
Storage temp.	-25 ~ +70°C			
Status indicator	LCD+LED			
Interface	RS485			
Elevation	2000m(>2000m derating operate)			
Dimension(W*D*H)(mm)	600*781*1300	600*781*1300	600*781*1600	600*781*2000
Weight (kg)	240Kg	240Kg	290Kg	360Kg

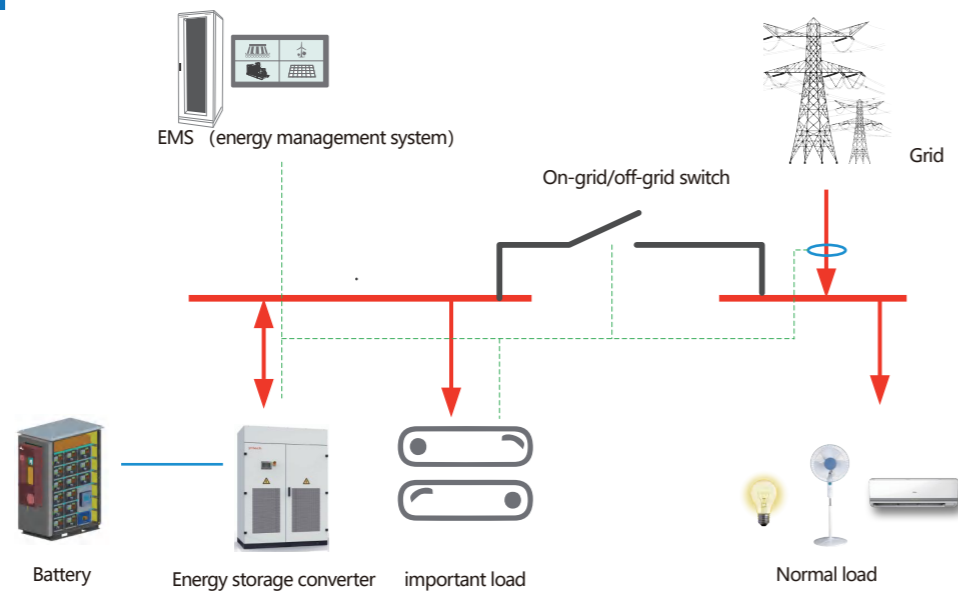
Isolated energy storage bidirectional converter JNSxT series



Features:

- Wide battery voltage range
- High and low pressure ride-through capability
- Supports multiple battery access levels
- Advanced active island protection technology
- Active & reactive power can be adjusted and dispatched
- Integrated EMS. Easy to set peak and valley periods
- Flow soft start to prevent battery shock
- With PQ, VF, VSG, black start function
- Redundant design of AC and DC dual auxiliary power supply

Circuit diagram



Model	JNS0050T	JNS0100T	JNS0150T	JNS0250T	JNS0500T
DC side					
Max. DC voltage	1000V				
Min. DC voltage	400Vdc	400Vdc	460Vdc	460Vdc	460Vdc
Battery voltage range	400Vdc~850Vdc	400Vdc~850Vdc	460Vdc~850Vdc	460Vdc~850Vdc	460Vdc~850Vdc
Max. DC current	142A	283A	370A	614A	1226A
Max. DC power	55kW	110kW	165kW	275kW	550kW
AC side (on grid)					
Rated output power	50kW	100kW	150kW	250kW	500kW
max. output power	55kW	110kW	165kW	275kW	550kW
Max. output current	80A	160A	240A	400A	794A
Rated voltage	400Vac, 3W+N+PE				
Voltage range	400Vac (-20%~+15%)				
Rated frequency	50/60Hz(±5Hz)				
Total harmonic distortion (THD)	< 3% (rated power)				
Power factor	>0.99				
Power factor adjustment range	1 (leading) ~ 1 (lag)				
AC output (off grid)					
Rated voltage	400Vac				
Output voltage distortion	< 3% (Linear load)				
Rated frequency	50Hz/60Hz				
With unbalanced load capacity	100%				
Overload	110%~normal operation, 120%~1 minute				
Efficiency					
Max. efficiency	>96.8%	>97.1%	>97.2%	>97.3%	>97.5%
Protective function					
DC input protection	included				
AC input protection	included				
Oversvoltage protection	DC Type II/ DC Type II				
Island protection	included				
Overheating protection	included				
Other					
Max. working altitude (m)	5000m				
Protection level	IP21				
Status indicator	7-inch touch screen				
Operate temp.	-30 ~ +65°C(>55°C derating operate)				
Cooling method	Intelligent cooling				
Relative humidity	0~95% (No condensation)				
Isolation mode	Built in transformer				
Interface	RS485/CAN2.0/Ethernet				
Dimension (W*H*D) (mm)	750*700*1850	800*935*2000	800*935*2000	1200*935*2000	1200*935*2000
Weight (kg)	550	850	930	1350	2200

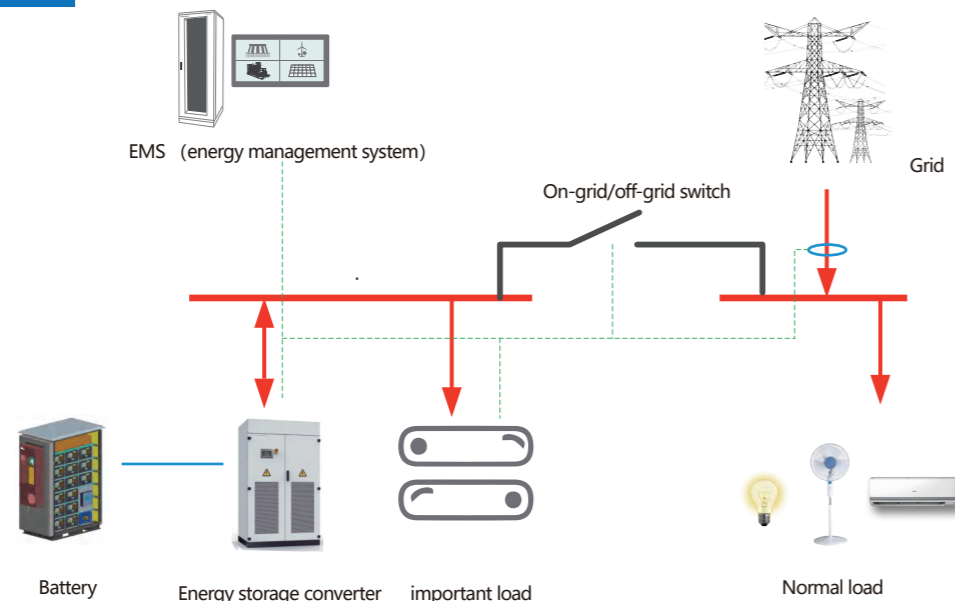
Non-isolated energy storage bidirectional converter JNS series



Features:

- Wide battery voltage range
- High and low pressure ride-through capability
- Supports multiple battery access levels
- Advanced active island protection technology
- Active & reactive power can be adjusted and dispatched
- Integrated EMS. Easy to set peak and valley periods
- Flow soft start to prevent battery shock
- With PQ, VF, VSG, black start function
- Redundant design of AC and DC dual auxiliary power supply

Circuit diagram



Model	JNS0500	JNS0630
DC side		
Max. DC voltage	1000V	
Min. DC voltage	460Vdc	580Vdc
DC voltage range	460Vdc~850Vdc	580Vdc~850Vdc
Max. DC current	1220A	1220A
Max. DC power	550kW	693kW
AC side (on grid)		
Rated output power	500kW	630kW
max. output power	550kVA	693kVA
Max. output current	1008A	1111A
Rated voltage	315Vac/400Vac, 3W+PE	
Voltage range	315Vac/400Vac (-20%~+15%)	
Rated frequency	50/60Hz(±5Hz)	
Total harmonic distortion (THD)	< 3% (rated power)	
Power factor	> 0.99	
Power factor adjustment range	1 (leading) ~ 1 (lag)	
AC output (off grid)		
Rated voltage	315Vac/400Vac	360Vac/400Vac
Output voltage distortion	< 3% (Linear load)	
Rated frequency	50Hz/60Hz	
With unbalanced load capacity	100%	
Overload	110%~normal operation, 120%~1 minute	
Other		
Max. working altitude (m)	5000m	
Protection level	IP21	
Status indicator	7-inch touch screen	8V
Operate temp.	-30 ~ +60°C(>55°Cderating operate)	
Cooling method	Intelligent cooling	
Relative humidity	0~95% (No condensation)	
Isolation mode	External transformer	
Interface	RS485/CAN/Ethernet	
Dimension (W*H*D) (mm)	1200*750*2000	1200*750*2000
Weight (kg)	1100	1300

Wall mounted battery module



Product introduction:

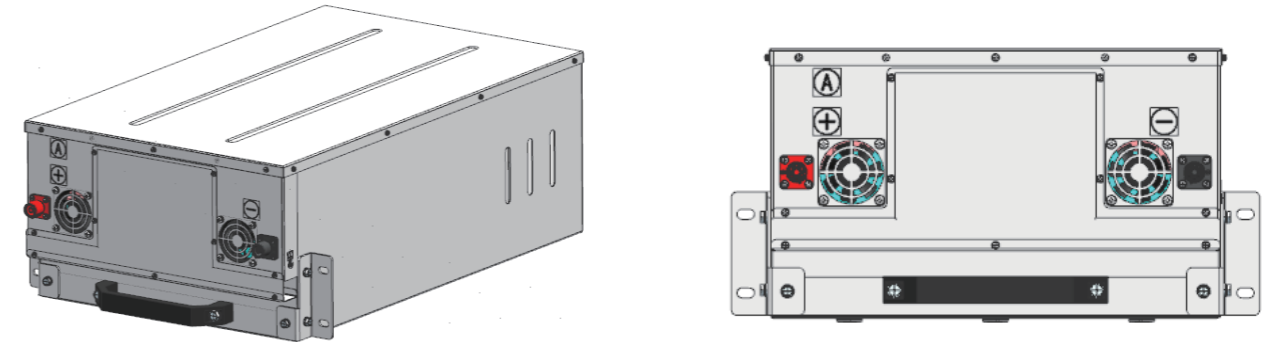
This product is an energy storage battery that integrates lithium iron phosphate battery cells, BMS, temperature detection, etc. A perfect replacement for traditional lead-acid batteries, it can exchange information with various photovoltaic energy storage PCS, and is widely used in photovoltaic energy storage systems such as off-grid and grid-connected; Can be used for home backup power.

- Customized design for photovoltaic energy storage system, small size and light weight;
- Service life > 10 years, cycle times > 6000 times@25°C;
- Expandable application, 6 units can be connected in parallel.

Wall mounted battery module parameters

Model	JNB024050-H-V1	JNB024100-H-V2	JNB048050-H1-V2	JNB048075-H-V1	JNB048100-H-V2
Rated Capacity	50Ah	100Ah	50Ah	75Ah	100Ah
Rated voltage	25.6V	25.6V	51.2V	51.2V	51.2V
Rated energy	1.3kWh	2.6kWh	2.6kWh	2.6kWh	5.2kWh
Battery type	LiFePO4				
Max. continuous charge current	25A	50A	25A	40A	50A
Max. continuous discharge current	50A	100A	50A	70A	100A
Voltage range	24V-29.2V		40V-60V		
Operating temperature	0°C~+60°C				
storage temperature	-20°C~70°C				
Box size	410*290*95mm	410*290*150mm	405*360*157mm	610*360*130mm	540*360*157mm
Weight	15kg	28kg	35kg	45kg	50kg
Interface	IP30				
Protection level	Undervoltage, overvoltage, overcurrent, temperature, short circuit				
Functional protection	Wall mounted				
Installation method	>6000 times (80%DOD)				
Cycle life	RS485/CAN				
Elevation	≤3000m				

Plug-in battery module



Product introduction:

- Long cycle life and high safety;
- Complete certification, through TUV and other international certification;
- The domestic and foreign markets have broad prospects and large demand;
- Modular design to support automated operations;
- Customized products for household energy storage machines can be provided.

Plug-in battery module parameters

Model	JNB048100-H-V3	JNB384300-V1
Rated Capacity	100Ah	300Ah
Rated voltage	51.2V	38.4V
Rated energy	5.2kWh	11.52kWh
Battery type	LiFePO4	
Max. continuous charge current	50A	180A
Max. continuous discharge current	100A	150A
Voltage range	40 ~ 60VDC	30 ~ 43.8VDC
Operating temperature	Charge 0~45°C, discharge -25~55°C	
storage temperature	-20~60°C	
Box size	500*380*162mm	670*400*243.5mm
Weight	45kg	103kg
Interface	RS485/CAN	CAN
Protection level	IP30	IP21
Functional protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit	
Installation method	Rack Insert	
Cycle life	>6000 times (70%DOD)	
Elevation	≤3000m	

Battery cabinet



Product introduction:

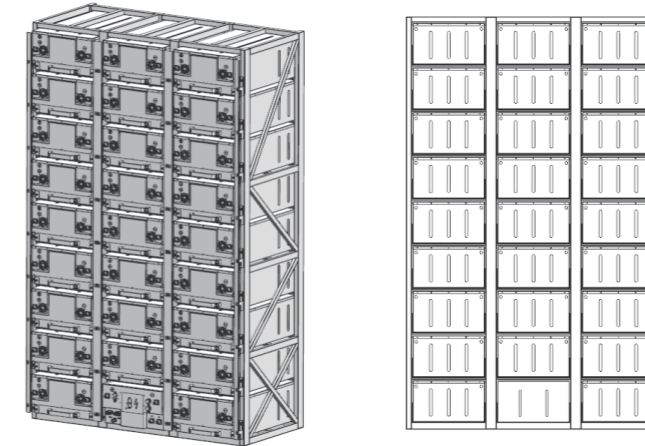
- Complete electrical protection functions, fault alarm, fault protection, safety protection and other functions;
- Emergency braking function, emergency stop function and function that can disconnect the system step by step during maintenance;
- High-altitude design, the special DC switch considers the influence of high-altitude on the switch interruption and withstand voltage;
- Long service life, service life > 10 years, cycle times > 6000 times @ 25°C.

This product consists of multiple battery modules and a high voltage box. The battery module is an energy storage battery that integrates lithium iron phosphate battery cells, BMS, and temperature detection.

Battery Cabinet Parameters

Model	JNBC230300-V1	JNBC384300-V1	JNBC384600-V1	JNB384300-V1
Rated Capacity	300Ah	300Ah	600Ah	1200Ah
Rated voltage	230V	384V	384V	384V
Rated energy	69.12kWh	115.2kWh	230.4kWh	460.8kWh
Battery type	LiFePO4			
Max. continuous charge current	180A	180A	360A	720A
Max. continuous discharge current	150A	150A	300A	720A
Voltage range	180~262.8VDC	300~438VDC	300~438VDC	300~438VDC
Operating temperature	Charge 0~45°C, discharge -25~55°C			
storage temperature	-20~60°C			
Box size	1012*785*1300mm	1012*785*1800mm	2pcs, 1012*785*1800mm	4pcs, 1012*785*1800mm
Weight	720kg	1380kg	2700kg	3400kg
Interface	CAN			
Protection level	IP21			
Functional protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit			
Installation method	Rack Insert			
Cycle life	>6000 times (70%DOD)			
Elevation	≤3000m			

Battery cluster



Product introduction:

This product consists of multiple battery modules and a high voltage box. The battery module is an energy storage battery that integrates lithium iron phosphate battery cells, BMS, and temperature detection. The high-voltage box of the battery cluster composed of multiple battery modules is carefully designed for the number of connected battery modules, and has control devices, fuses and obvious power-off devices.

- Complete electrical protection functions, fault alarm, fault protection, safety protection and other functions;
- Emergency braking function, emergency stop function and function that can disconnect the system step by step during maintenance;
- High-altitude design, the special DC switch considers the influence of high-altitude on the switch interruption and withstand voltage;
- Long service life, service life > 10 years, cycle times > 6000 times @ 25°C.

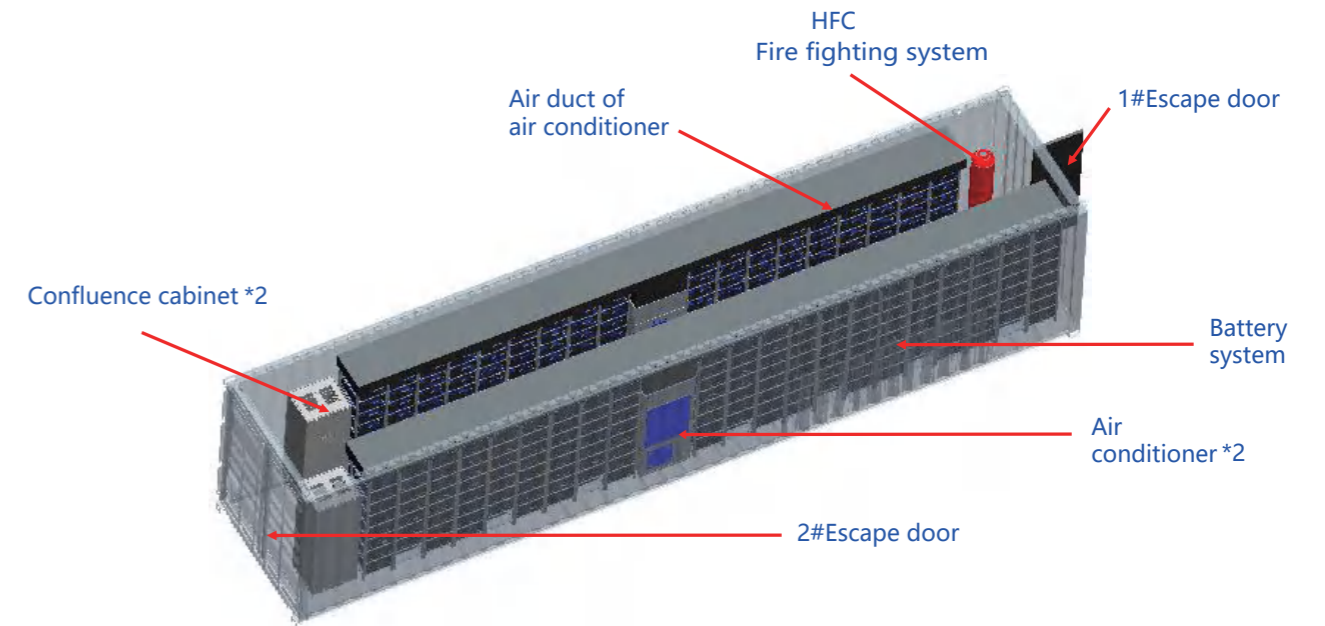
Battery cluster Parameters

Model	JNBC998300-V1
Rated Capacity	300Ah
Rated voltage	998.4V
Rated energy	299.52kWh
Battery type	LiFePO4
Max. continuous charge current	180A
Max. continuous discharge current	150A
Voltage range	780~1139VDC
Operating temperature	Charge 0~45°C, discharge -25~55°C
storage temperature	-20~60°C
Box size	2400*1440*710mm
Weight	2850kg
Interface	CAN
Protection level	IP21
Functional protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit
Installation method	Rack Insert
Cycle life	>6000 times (70%DOD)
Elevation	≤3000m

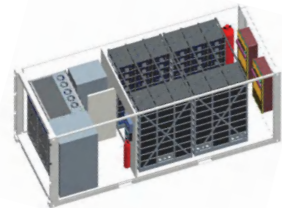
Container energy storage system



Max.3.7MWh Partial installation diagram of container

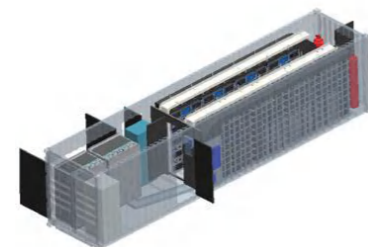


20HC



Inner passage

40HC

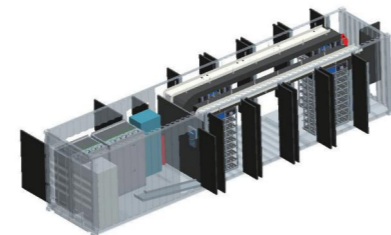


Outer passage

1MWh/500kW energy storage system scheme



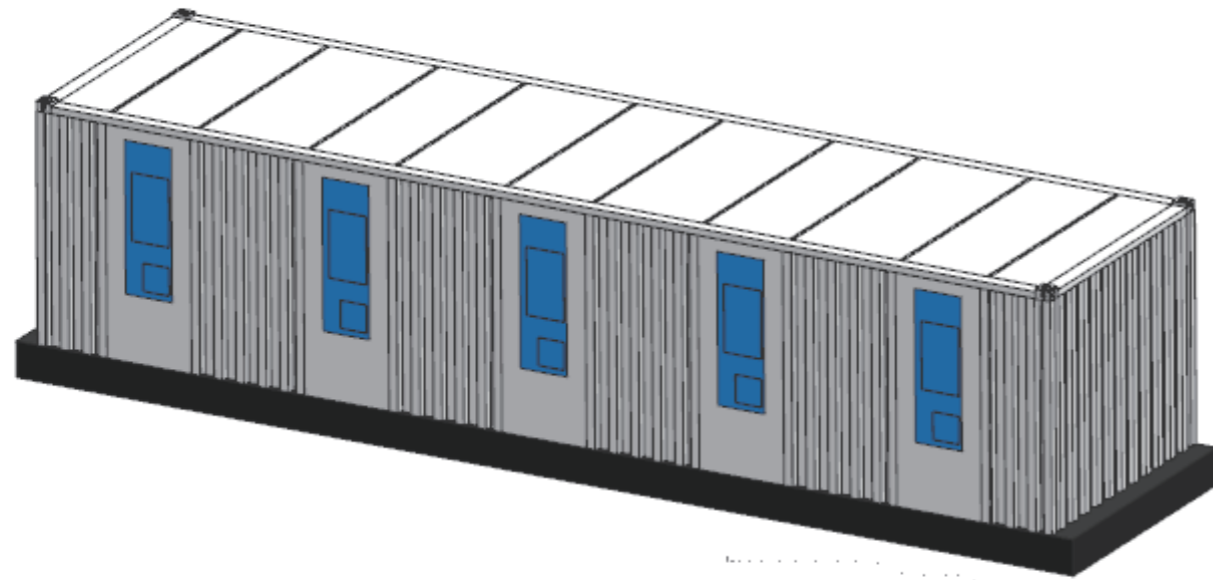
2MWh/1MW energy storage system scheme



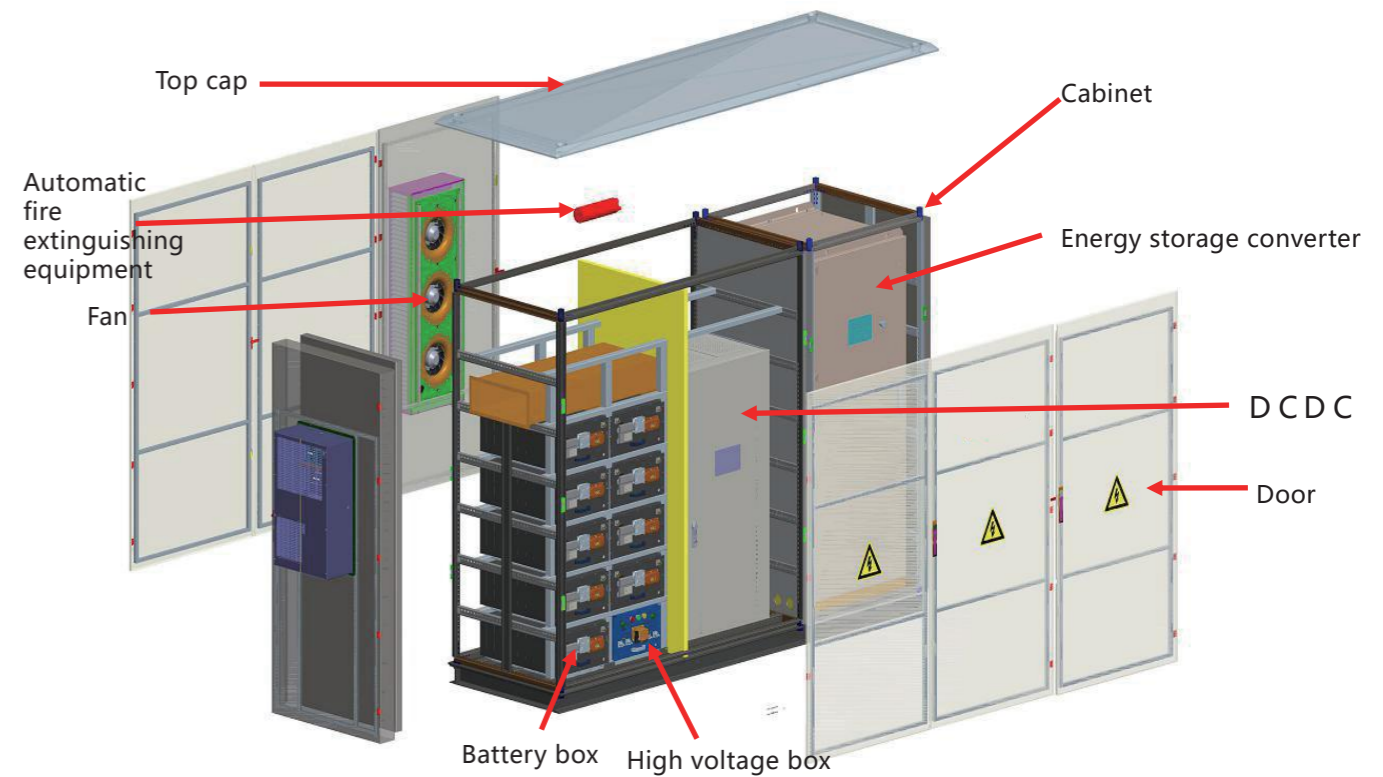
system parameter

Model	PH-ESS-1.05Mwh
电池类型	LiFePO4
Battery type	1057kwh
Rated capacity	1620Ah
Rated voltage	DC652.8V
Voltage range	571.2~744.6V
Charge /discharge current	810A
Battery operating temperature	-20~55°C/0~55°C
Converter	500kw 315V~400Vac
Communication type	RS485 Modbus
Color	RAL7035 Industrial grey
Dimension	L6058*W2438*H2896mm
Weight	23000kg
Protection grade	IP54
Certification	CE/ IEC62619/TUV PPP59044a

5MWH container energy storage system



5MWH battery container, 40ft high cabinet, 1500V system.
High energy density, advanced thermal management design, redundant fire protection design, battery active balance technology.

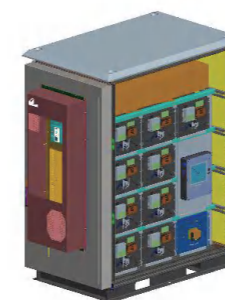


Types of outdoor energy storage schemes

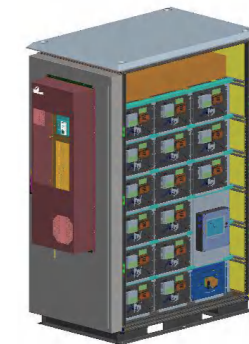
Outdoor Cabinet Solution



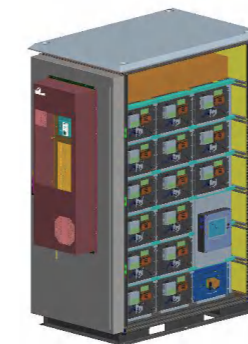
Outdoor hybrid energy storage system



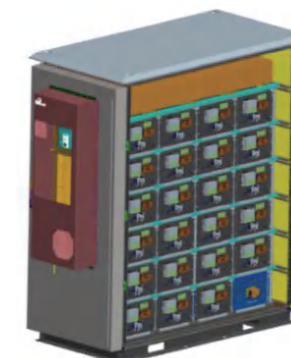
Model 70
Actually 69KWh



Model 100
Actually 115KWh



Model 170
Actually 172KWh



Model 200
Actually 207KW



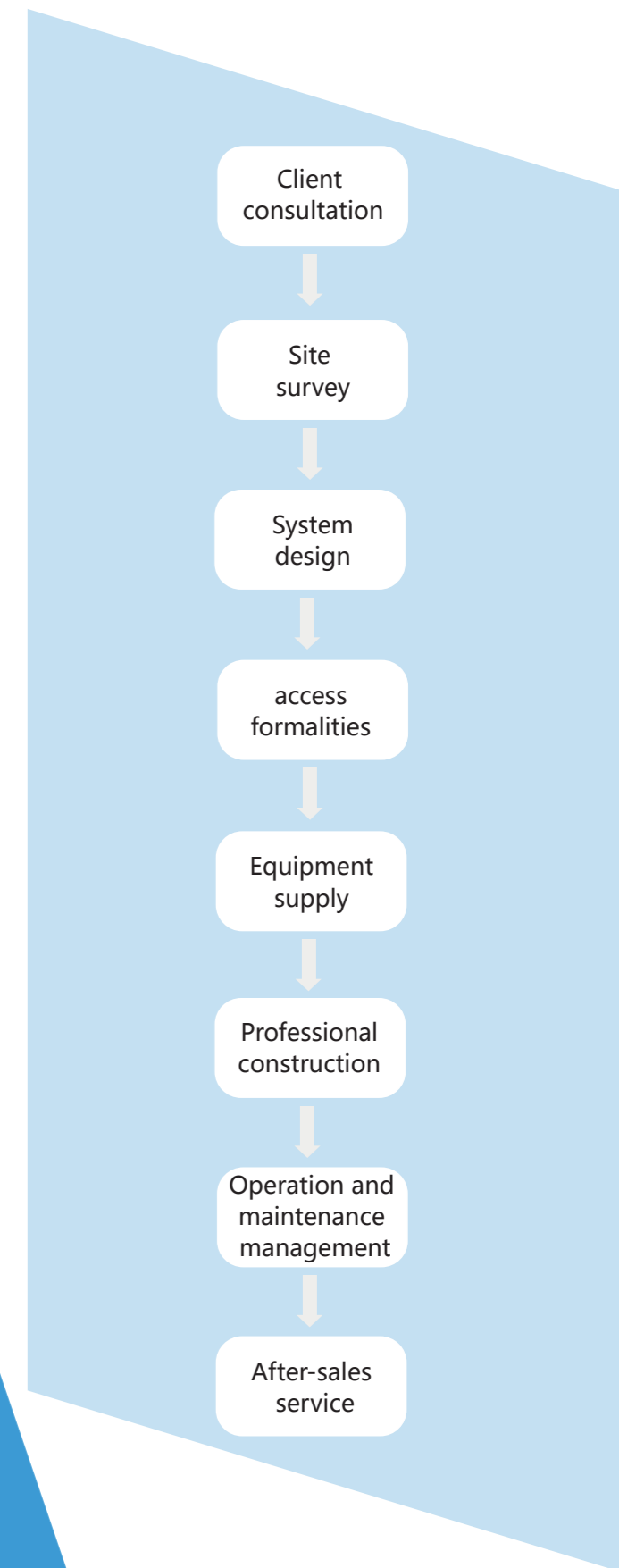
Our service

Intimate butler service

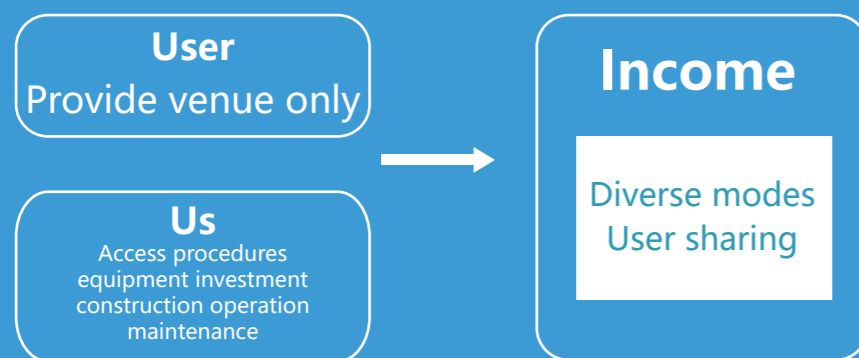
Jntech not only provides customers with cost-effective products, but also is on call 7*24 hours to provide customers with intimate butler services.

Professional team service

A service team with many years of rich experience, to provide you with intimate services, a professional PC project design, construction and management team, a professional project operation and maintenance team to ensure project quality and progress, and to provide high-quality after-sales service to avoid worries.



User "zero investment"



User "full investment"

