



## All in one household solar energy storage



**Jntech Renewable Energy Co.,Ltd**

Tel: +86 551 62930323

Email: [sales@jnnewenergy.com](mailto:sales@jnnewenergy.com)

Web: [www.jnnewenergy.com](http://www.jnnewenergy.com)

Add: NO.28 Taiyuan Road Hefei Anhui China



## Company Profile

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, Philippine, 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.



### Duty

Let employees gain happiness  
make the world greener!



### Vision

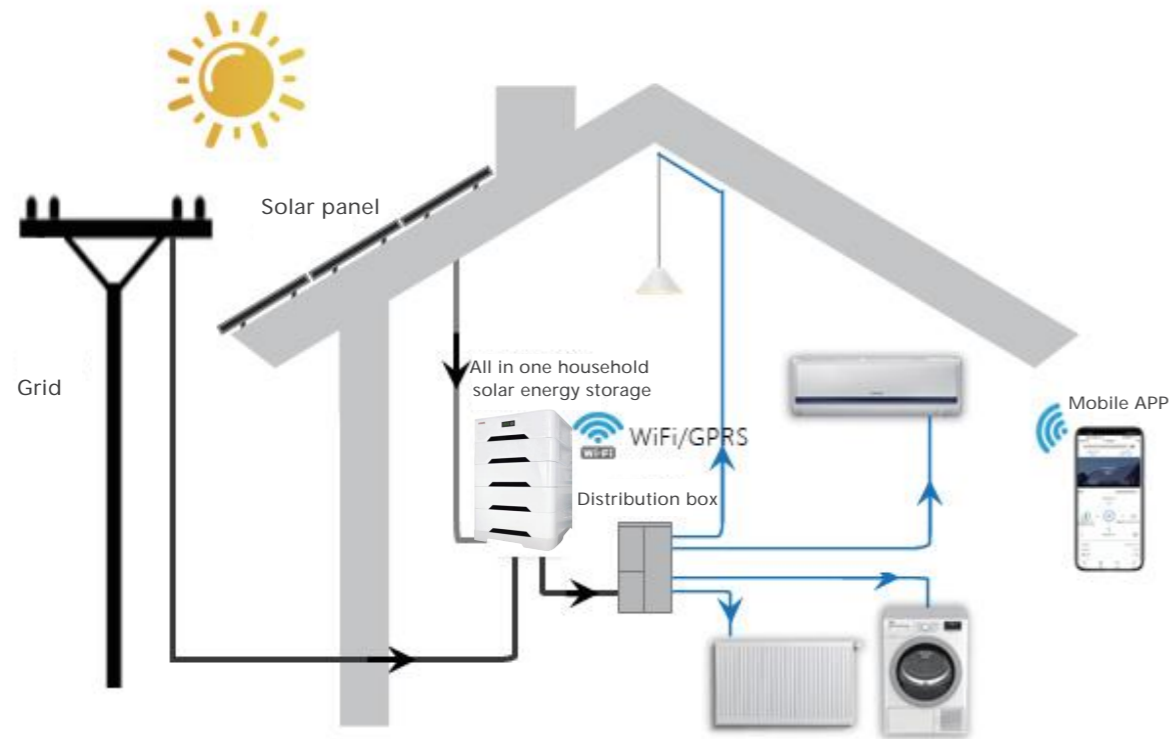
Become an outstanding service  
provider in solar application field



### Values

Integrity Friendly  
Customer First

## System diagram



## 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.

## Applications



Private house/villa area



School/hospital /military



Holiday cottage /homestay



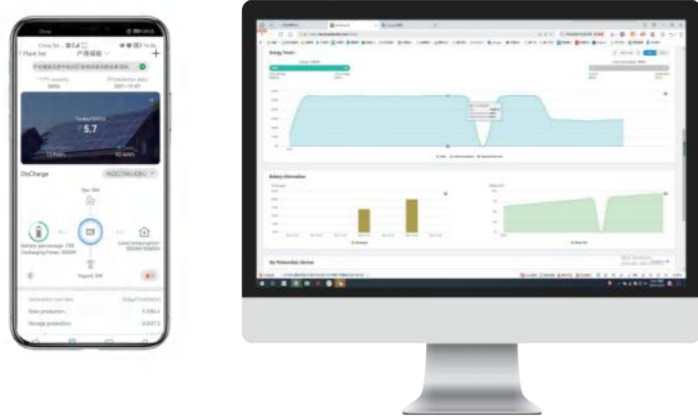
Remote areas without electricity

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.

## Product advantages

- 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/160A/240A, and the photovoltaic 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 photovoltaic system through mobile APP anytime and anywhere;
- Removable power supply.

### Smart control by mobile APP/Web



Real-time online understanding of project and equipment information on the mobile APP/PC terminal, fast, comprehensive. Through this software, you can easily understand the power generation, battery storage, online equipment, faulty equipment, fault information, solar energy storage output, charge and discharge data, etc.

### Intelligent battery management

1. The battery adopts BMS management system to improve the utilization rate of the battery, prevent the battery from overcharging and overdischarging, and prolong the service life of the battery.
2. The battery and the inverter use BMS communication to monitor the battery SOC at all times to ensure that the SOC is within a reasonable range. When the SOC of each battery group is found to be unbalanced, changing the inverter parameters can automatically balance the battery power.



## JNSG5KHF4820-V1 series 5kVA single phase



JNSG5KHF4810-V1



JNSG5KHF4815-V1



JNSG5KHF4820-V1

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

## JNSG10KHF4820-V1 series

10kVA single phase



JNSG10KHF4810-V1      JNSG10KHF4815-V1      JNSG10KHF4820-V1

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

## JNSG15KHF4820-V1 series

15kVA three phase



JNSG15KHF4815-V1      JNSG15KHF4820-V1

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