



Residential Energy Storage System

——American Standard

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ABOUT JNTECH

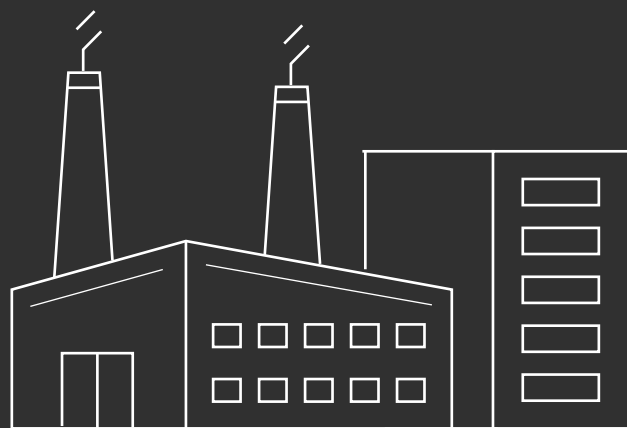
JNTECH is a global leader in advanced micro-grid solutions, committed to providing reliable and sustainable energy systems that address the unique challenges of diverse regions worldwide. Since our founding in 2006, we have focused on providing stable, affordable, and sustainable power through green energy for more people. To achieve this, we have developed a diverse portfolio of solutions that can adapt to different markets and needs.

As a leading manufacturer and provider of solar and new energy products, JNTECH specializes in innovative technologies to meet a wide range of energy requirements. Our solutions include home energy storage systems, solar water pumping systems, solar oil extraction systems, solar mining systems, solar irrigation systems, electric vehicle charging systems, and other micro-grid solutions. These solutions incorporate both our proprietary products and those from other providers, ensuring comprehensive support for agriculture, remote power, and carbon footprint reduction.

The company's R&D efforts have produced a range of photovoltaic products, including off-grid energy storage inverters, photovoltaic water pump inverters, and photovoltaic air conditioning systems, all of which have obtained relevant national and international market access certifications. These products have been widely adopted in over 100 countries worldwide.

As a key contributor to industry standards for photovoltaic water pump systems and inverters in China, the company has been included in the procurement lists and preferred brand selections of international organizations such as the World Bank, the United Nations, the Food and Agriculture Organization (FAO), and various NGOs. Over the years, the "JNTECH" brand has earned an outstanding reputation in the industry.

The company will provide global customers with more efficient, convenient and reliable energy solutions with better products and services, and contribute to promoting global energy transformation and sustainable development.



Qualifications and Honors

- ▶ National Standard Drafter
- ▶ United Nation Global Marketplace Supplier
- ▶ Specialized and New Enterprise
- ▶ National High-Tech Enterprise
- ▶ National Innovative SME
- ▶ Anhui Province Specialized in Special New Enterprises
- ▶ CE, TUV, ISO9001, ISO14001, and OHSAS18001 Certifications

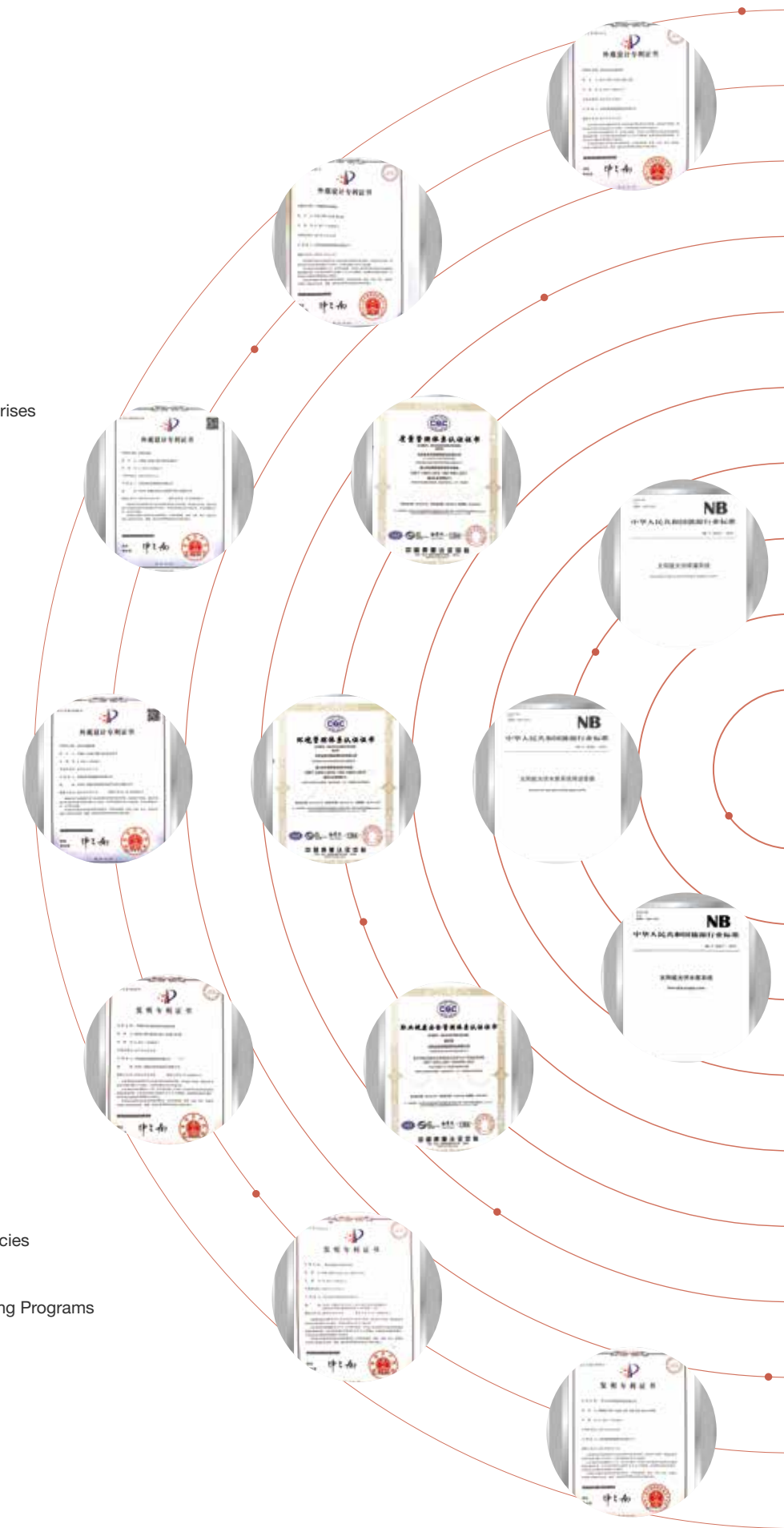
Service

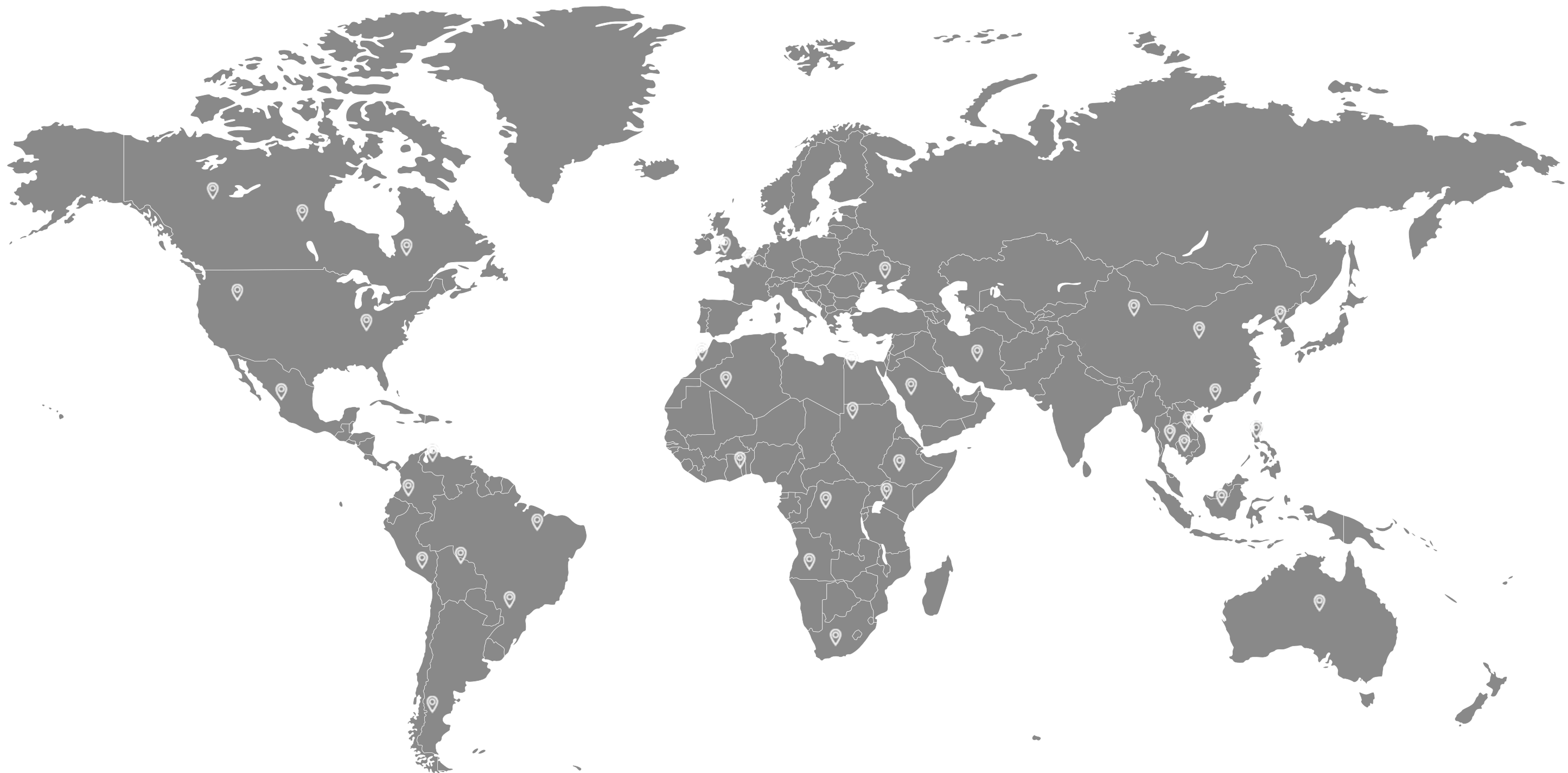
Pre-sales

- ▶ Investment Consultation
- ▶ Site Selection Assistance
- ▶ Customized Design Solutions
- ▶ Site Construction Support
- ▶ Operations and Maintenance Planning

After-sales

- ▶ Standardization of Workflow, Operations, and Policies
- ▶ Technical Services, Marketing Support, and Training Programs
- ▶ Collaborative Platform for Technical Exchanges
- ▶ Creating Value through Win-Win Cooperation
- ▶ 24/7 Online Support and Service





**GLOBAL SALES
NETWORK**

15+

Years of Experience
in Solar Industry

40%+

R&D Employees

100+

Countries and Regions

10,000+

Global Clients

RESIDENTIAL ENERGY STORAGE SYSTEM

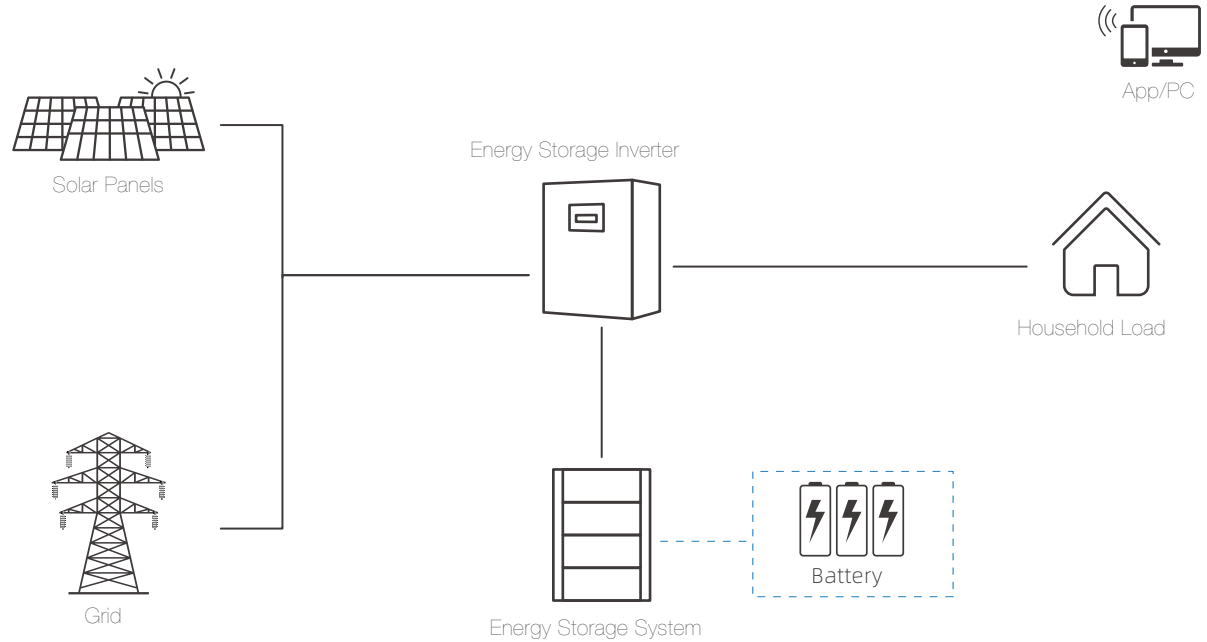
Overview of the Residential Energy Storage System

JNTech's Residential Energy Storage System is a cutting-edge solution designed to meet the growing demand for sustainable, stable, and reliable home energy management. This system integrates advanced battery technology with intelligent energy management software, offering homeowners the ability to store excess solar energy generated during the day and use it when needed, ensuring a stable and uninterrupted power supply while maximizing energy efficiency.

Key benefits:

- Stable Power Supply:**
 The system ensures continuous, reliable power even during grid outages or instability, offering peace of mind for homeowners.
- Cost Savings:**
 The system allows users to optimize energy usage by storing cheaper, off-peak electricity and utilizing it during peak periods, significantly lowering energy bills.
- Scalable Design:**
 The modular architecture of the system allows it to be tailored to the specific energy needs of any household, providing flexible capacity options for different usage scenarios.
- Energy Independence:**
 By storing excess energy, homeowners can reduce their reliance on the grid, particularly during peak hours or in the event of power disruptions.
- Eco-Friendly:**
 By maximizing the use of solar energy and minimizing dependence on fossil fuels, the system helps reduce the household's carbon footprint.
- Smart Energy Management:**
 Integrated with advanced energy monitoring and management software, the system enables real-time data tracking and remote control, giving users full visibility and control over their energy usage.

System Diagram



PRODUCTS AND SPECIFICATIONS

ENERGY STORAGE PRODUCTS LIST

Battery Module — Rack Design



Model:
JNB048100-H-V3
5.12kWh Lithium Battery
(Rack Design)



Model:
JNB048100-S-V1
5.12kWh Lithium Battery
(Rack Design)

Portable Products



Model:
JNSG1K-2KWH-V1
1000W/2000Wh

Wall-Mounted Battery



Model:
JNB025100-W-V2
2.56 kWh Lithium Battery

Wall-Mounted Battery



Model:
JNB051100-W-V2
5.12 kWh Lithium Battery



Model:
JNB051230-W-V2
11.776 kWh
Lithium Battery

Low-Voltage Mobile Batteries



Model:
JNB051314-P-V2
16.077 kWh Lithium Battery

Replace Lead with Lithium



Model:
JNB012100-Y
1.28kWh Lithium Battery



Model:
JNB012205-Y
2.624kWh Lithium Battery



Model:
JNB012280-Y
3.584kWh Lithium Battery

INVERTER PRODUCT LIST

US version single-phase off-grid inverter



Model:
JNF5KHF-A-V2
JNF6KHF-A-V2
JNF7KHF-A-V2
5/6/7 kW Inverter

US version single-phase/split-phase off-grid inverter



Model:
JNF5KHF-AS-V2
JNF6KHF-AS-V2
JNF7KHF-AS-V2
5/6/7 kW Inverter



Model:
JNF8KHF-AS-V2
JNF10KHF-AS-V2
JNF12KHF-AS-V2
8/10/12 kW Inverter

US version split-phase off-grid inverter (built-in switch)



Model:
JNF8KHF-AS1-V2
JNF10KHF-AS1-V2
JNF12KHF-AS1-V2
JNF15KHF-AS1-V2
8/10/12/15 kW Inverter



Features:

- Uses lithium iron phosphate battery for increased safety and prolonged cycle life.

· Offers customized solutions for residential, commercial, and industrial energy storage systems.
- Advanced BMS with three-level protection for comprehensive security.

· Low-voltage design to meet safety and reliability requirements for household use.
- Modular design with automatic operation capabilities.

· Scales easily by connecting up to 16 units in parallel.

MODEL	JNB048100-H-V3	JNB048100-S-V1
Rated capacity	100Ah	
Rated voltage	51.2V	
Rated energy	5.12kWh	
Battery type	LiFePO4	
Max. continuous charge current	100A (1C)	
Max. continuous discharge current	100A (1C)	
Voltage range	40 ~ 60Vdc	
Operating temp	Charge 0~45°C, discharge -25~55°C	
Storage temperature	-20~60°C	
Size (W*D*Hmm)	490*580*162mm	485*600*167mm
Weight (Kg)	50Kg	48Kg
Cooling method	Natural air cooling	Forced cooling
Protection level	IP30	IP21
Functional protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit	
Installation method	Rack insert	
Cycle life	≥6000(80%DOD 25°C 0.5C/0.5C)	
Interface	RS485/CAN	
Elevation	≤3000m	

Features:

- Multiple charging modes: mains power & solar
 - Multiple voltage output modes: AC & DC
 - Compact and portable integrated design
 - Pure sine wave AC output
- Built-in large-capacity lithium battery for ultra-long battery life
 - Equipped with a power display screen and status indicator lights, making the status clear at a glance
 - Overload and short-circuit protection



MODEL	JNSG1K-2KWH-V1
PV INPUT	
Input voltage range	12-45Vdc
Maximum input power	450W
Maximum photovoltaic charging current	10A
BATTERY	
Rated voltage	6.4Vdc
Operating voltage range	6-7.3Vdc
Cell type	LiFePO4
Cell capacity	314Ah
Rated energy	2000Wh
Rated charge current	156A
Maximum charge current	233A
Cycle life	≥6000 (80% DOD 25℃, 0.5C/0.5C)
AC output	
Rated output power	1000W
Output voltage	220Vac-240Vac
Output frequency	50/60Hz
Output current	5A (Max.)
Maximum efficiency	93%
Output waveform	Pure Sine Wave
DC output	
DC	12V 3A (Max.) 1 group
	12V 10A (Max.) 1 group
USB	5V 3A (Max.) 1 group
USB-C	5V 3A (Max.) 1 group
AC INPUT	
Input voltage	220Vac-240Vac
Frequency range	50/60Hz
Rated charging current	4.3A
GENERAL PARAMETERS	
Packaging dimensions (W*D*Hmm)	280*250*280mm
Packaging weight(Kg)	~20kg
OTHER PARAMETERS	
Protection Level	IP21
Noise	≤65dB
Cooling Method	Forced air cooling
Operating Temperature	Charging temperature: 0-40℃
	Discharging temperature: -20-40℃
Storage Temperature	-20~40℃
Status indicator	LCD
Installation	Portable all-in-one



Features:

- Adopt lithium iron phosphate battery, which is highly safe and has a long charge and discharge cycle life.
- Built-in advanced BMS, three-level battery management system protection, and perfect protection function.
- Modular design supports automated operation.
- Can provide customized products for household energy storage, industrial and commercial energy storage.

MODEL	JNB025100-W-V2
Rated capacity	100Ah
Rated voltage	25.6V
Rated energy	2.56kWh
Battery type	LiFePO4
Max. continuous charge current	100A(1C)
Max. continuous discharge current	100A(1C)
Voltage range	43.2V~57.6V
Operating temp	Charge0~55℃, discharge-10~55℃, storage-20℃~60℃
Size (W*D*Hmm)	375*147*371mm
Cooling method	Natural air cooling
Weight(Kg)	~25kg
Communication interface	RS485/CAN
Protection level	IP20
Function protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit
Installation method	Wall Mounted
Cycle life	≥6000 (80%DOD 25℃ 0.5C/0.5C)
Elevation	≤3000m



Features:

- Adopt lithium iron phosphate battery, which is highly safe and has a long charge and discharge cycle life.
- Built-in advanced BMS, three-level battery management system protection, and perfect protection function.
- Modular design supports automated operation.
- Can provide customized products for household energy storage, industrial and commercial energy storage.

MODEL	JNB051100-W-V2
Rated capacity	100Ah
Rated voltage	51.2V
Rated energy	5.12kWh
Battery type	LiFePO4
Max. continuous charge current	100A(1C)
Max. continuous discharge current	100A(1C)
Voltage range	43.2V~57.6V
Operating temp	Charge0~55℃, discharge-10~55℃, storage-20℃~60℃
Size (W*D*Hmm)	600*465*245mm
Cooling method	Natural air cooling
Weight(Kg)	~45kg
Communication interface	RS485/CAN
Protection level	IP21
Function protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit
Installation method	Wall Mounted
Cycle life	≥6000（80%DOD 25℃ 0.5C/0.5C）
Elevation	≤3000m



Features:

- Adopt lithium iron phosphate battery, which is highly safe and has a long charge and discharge cycle life.
- Built-in advanced BMS, three-level battery management system protection, and perfect protection function.
- Modular design supports automated operation.
- Can provide customized products for household energy storage, industrial and commercial energy storage.

MODEL	JNB051230-W-V2
Rated capacity	230Ah
Rated voltage	51.2V
Rated energy	11.776kWh
Battery type	LiFePO4
Max. continuous charge current	200A(0.87C)
Max. continuous discharge current	200A(0.87C)
Voltage range	43.2V ~ 57.6V
Operating temp	Charge0 ~ 55 ℃ , discharge-10 ~ 55 ℃ , storage-20 ℃ ~ 60 ℃
Size (W*D*Hmm)	550*450*215mm
Cooling method	Natural air cooling
Weight(Kg)	~85kg
Communication interface	RS485/CAN
Protection level	IP21
Function protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit
Installation method	Wall Mounted
Cycle life	≥6000 (80%DOD 25 ℃ 0.5C/0.5C)
Elevation	≤3000m



Features:

- Adopt lithium iron phosphate battery, which is highly safe and has a long charge and discharge cycle life.
- Built-in advanced BMS, three-level battery management system protection, and perfect protection function.
- Modular design supports automated operation.
- Can provide customized products for household energy storage, industrial and commercial energy storage.

MODEL	JNB051314-P-V2
Rated capacity	314Ah
Rated voltage	51.2V
Rated energy	16.077kWh
Battery type	LiFePO4
Max. continuous charge current	200A(0.64C)
Max. continuous discharge current	200A(0.64C)
Voltage range	43.2V～57.6V
Operating temp	Charge0～55℃, discharge-10～55℃, storage-20℃～60℃
Size (W*D*Hmm)	460*240*837mm
Cooling method	Natural air cooling
Weight(Kg)	~120kg
Communication interface	RS485/CAN
Protection level	IP21
Function protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit
Installation method	Mobile Powe
Cycle life	≥6000 (80%DOD 25℃ 0.5C/0.5C)
Elevation	≤3000m



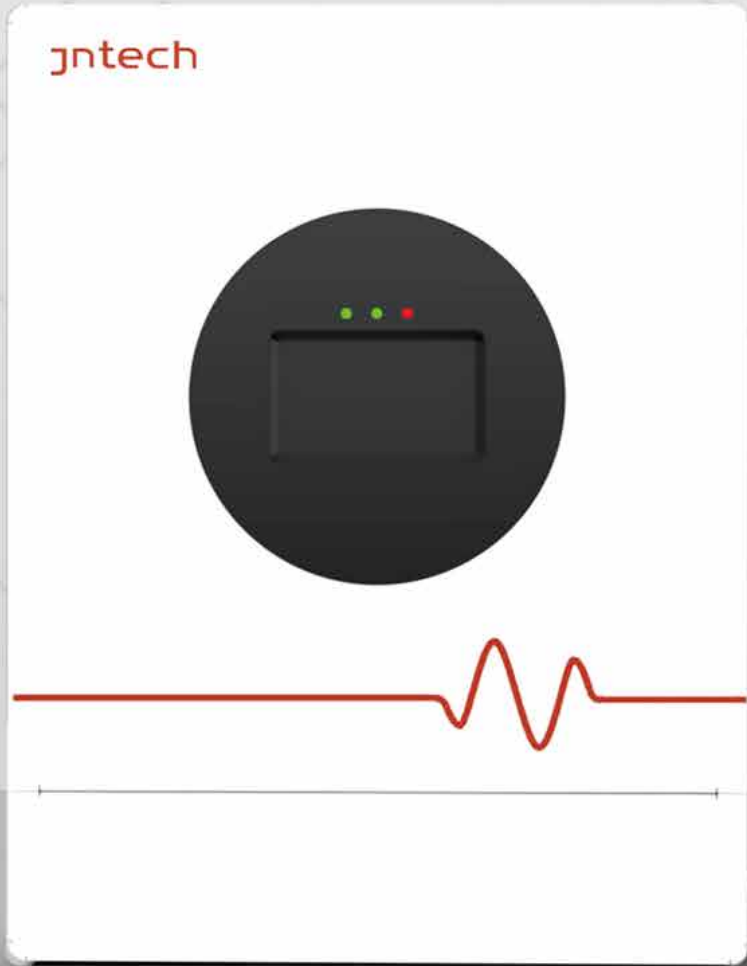
Features:

- Uses lithium iron phosphate batteries, offering high safety and long cycle life.
- Equipped with an advanced BMS and a three-tier battery management system for comprehensive protection.
- Modular design, supporting automated operations.
- Customizable products available for home energy storage and industrial/commercial energy storage systems.

MODEL	JNB012100-Y	JNB012205-Y	JNB012280-Y
Rated capacity	100Ah	205Ah	280Ah
Rated voltage	12.8V		
Rated energy	1.28kWh	2.624kWh	3.584kWh
Battery type	LiFePO4		
Max. continuous charge current	50A(0.5C)	50A(0.25C)	50A(0.18C)
Max. continuous discharge current	100A(1C)	100A(0.5C)	100A(0.35C)
Voltage range	10.8V ~ 14.6V		
Operating temp	Charge0 ~ 50 ℃		
	Discharge-15 ~ 55 ℃		
	Storage-20 ℃ ~ 55 ℃		
Size (W*D*Hmm)	332*176*226mm	345*190*272mm	345*190*272mm
Cooling method	Natural air cooling		
Weight(Kg)	10kg	22kg	28kg
Communication interface	/		
Protection level	IP67		
Function protection	Undervoltage, overvoltage, overcurrent, temperature, short circuit		
Installation method	/		
Cycle life	≥6000 (80%DOD 25 ℃ 0.5C/0.5C)		
Elevation	≤3000m		

Features:

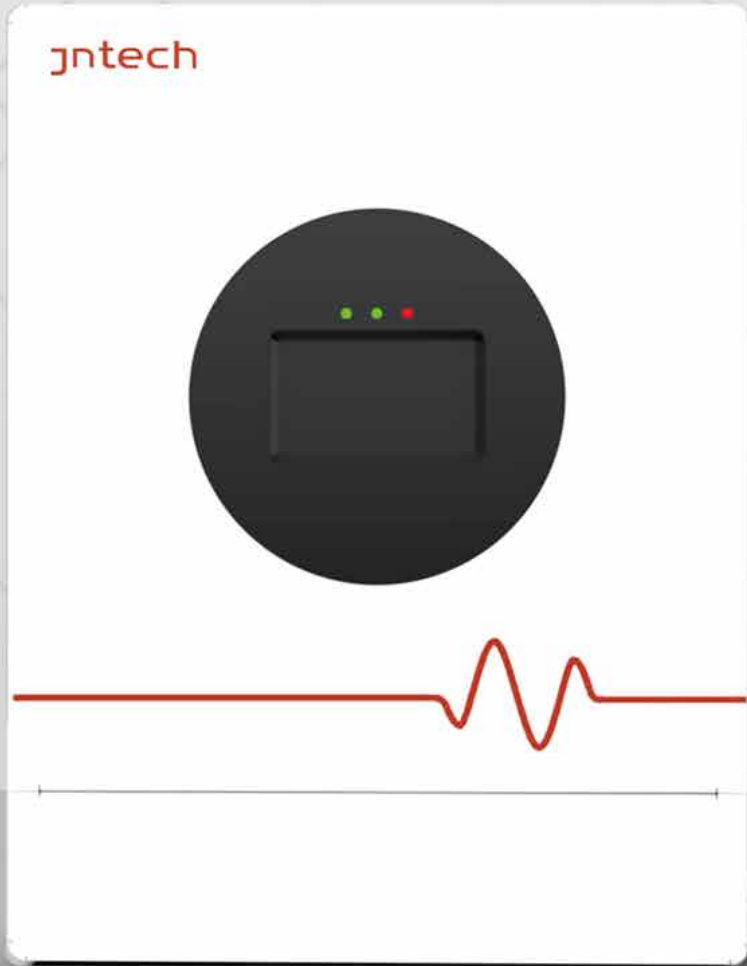
- IP20, meeting the needs of various scenarios.
 - Supports up to 6 units in parallel.
 - MPPT tracking efficiency reaches up to 99.9%.
- Beautiful appearance, simple installation, and easy use.
 - Provides comprehensive security protection from software to hardware.



MODEL	JNF5KHF-A-V2	JNF6KHF-A-V2	JNF7KHF-A-V2
Inverter output			
Rated output power	5000W	6000W	7000W
Maximum peak power	10000W	12000W	14000W
Rated output voltage	120 V, single phase		
Motor load capacity	4.8 HP		
Rated frequency	60 Hz		
Output waveform	Pure sine wave		
Switching time	10 ms (typical) Single unit maximum 20 ms, parallel unit maximum 30 ms		
Number of parallel units	6		
BATTER			
Battery Type	Lead-acid / lithium-ion batteries		
Rated Battery Voltage	48V		
Voltage Range	40~60V		
Maximum PV Charge Current	120A	120A	120A
Maximum Mains/Generator Charge Current	100A	100A	100A
Maximum Hybrid Charge Current	120A	120A	120A
PV Input			
MPPT circuits	1		
Maximum input power	7500W	9000W	10500W
Maximum input current	27A		
Maximum open circuit voltage	500V		
MPPT operating voltage range	125~425V		
Mains Power, Generator Input			
Input voltage range	90V~140V		
Input frequency range	60/55~65Hz		
Bypass overload current	40A	50A	50A
Efficiency			
MPPT tracking efficiency	99.90%		
Battery inverter maximum efficiency	93%		
General			
Dimensions (W*H*D)	472*365*130mm		
Weight (Kg)	15kg		
Protection Rating	IP20		
Ambient Temperature	-10~55 C		
Noise	≤45dB		
Heat Dissipation	Intelligent air cooling		
Warranty	3 Years		
Communication			
Communication methods	RS485/CAN/GPRS/WIFI/Bluetooth/4G/LAN (Optional)		
Certification			
Overview	CE		

Features:

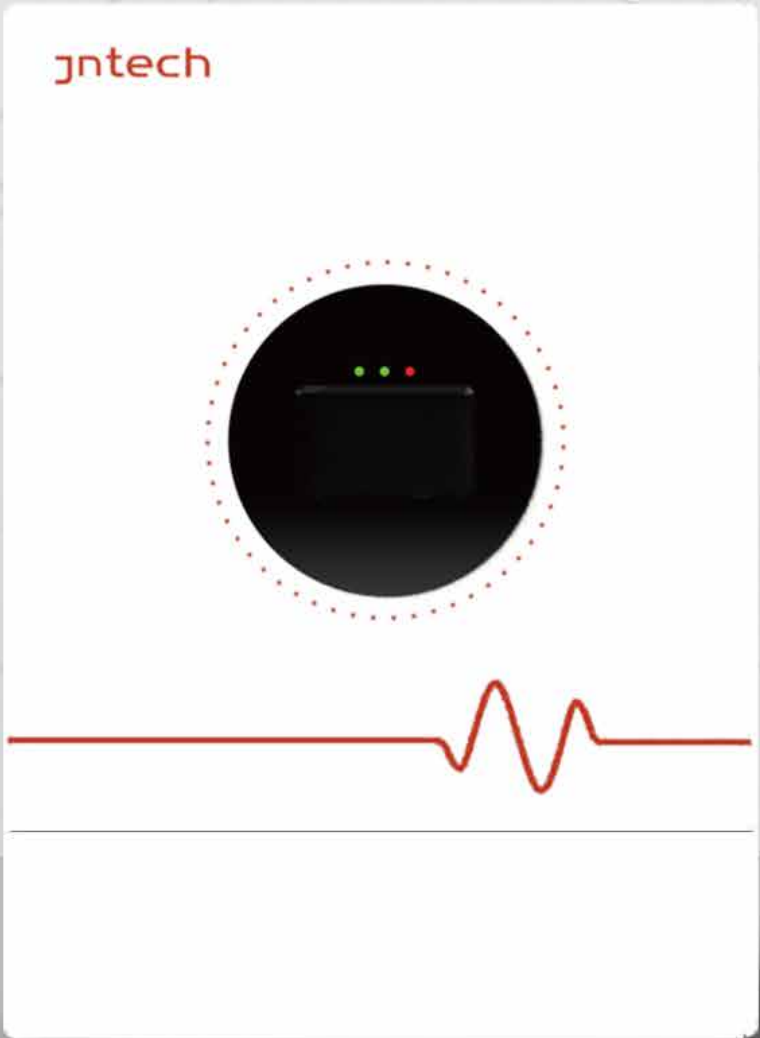
- IP20, meeting the needs of various scenarios.
 - Supports up to 6 units in parallel.
 - MPPT tracking efficiency reaches up to 99.9%.
- Beautiful appearance, simple installation, and easy use.
 - Provides comprehensive security protection from software to hardware.



MODEL	JNF5KHF-AS-V2	JNF6KHF-AS-V2	JNF7KHF-AS-V2
Inverter output			
Rated output power	5000W	6000W	7000W
Maximum peak power	10000W	12000W	14000W
Rated output voltage	120 V, single phase / 240 V, split phase		
Motor load capacity	4.8 HP		
Rated frequency	60 Hz		
Output waveform	Pure sine wave		
Switching time	10 ms (typical) Single unit maximum 20 ms, parallel unit maximum 30 ms		
Number of parallel units	6		
BATTER			
Battery Type	Lead-acid / lithium-ion batteries		
Rated Battery Voltage	48V		
Voltage Range	40~60V		
Maximum PV Charge Current	120A	120A	120A
Maximum Mains/Generator Charge Current	100A	100A	100A
Maximum Hybrid Charge Current	120A	120A	120A
PV Input			
MPPT circuits	1		
Maximum input power	7500W	9000W	10500W
Maximum input current	27A		
Maximum open circuit voltage	500V		
MPPT operating voltage range	125~425V		
Mains Power, Generator Input			
Input voltage range	90V~140V		
Input frequency range	60/55~65Hz		
Bypass overload current	40A	50A	50A
Efficiency			
MPPT tracking efficiency	99.90%		
Battery inverter maximum efficiency	93%		
General			
Dimensions (W*H*D)	472*365*130mm		
Weight (Kg)	15kg		
Protection Rating	IP20		
Ambient Temperature	-10~55 C		
Noise	≤45dB		
Heat Dissipation	Intelligent air cooling		
Warranty	3 Years		
Communication			
Communication methods	RS485/CAN/GPRS/WIFI/Bluetooth/4G/LAN (Optional)		
Certification			
Overview	CE		

Features:

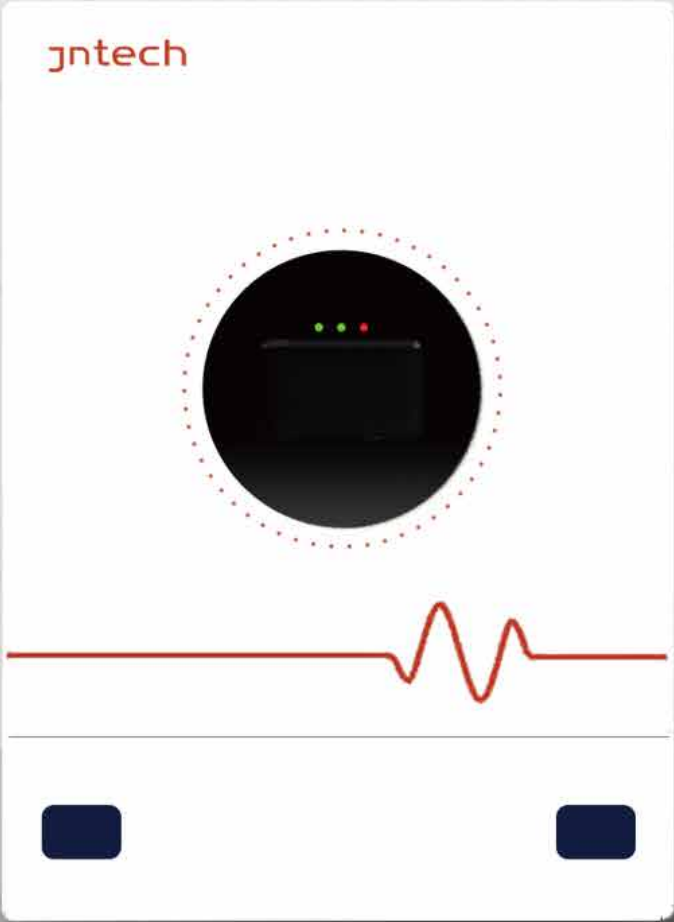
- IP20/IP54 (optional) meets the needs of different scenarios.
 - Supports up to 6 units in parallel, off-grid operation, and multiple batteries in parallel.
 - Dual MPPT with efficiency up to 99.9%
- Supports deep customization
 - BMS communication protocol is open



MODEL	JNF8KHF-AS-V2	JNF10KHF-AS-V2	JNF12KHF-AS-V2
Inverter output			
Rated output power	8000W	10000W	12000W
Maximum peak power	16000W	20000W	24000W
Rated output voltage	120 V, single phase / 240 V, split phase		
Motor load capacity	5 HP	6 HP	6 HP
Rated frequency	50/60 Hz		
Output waveform	Pure sine wave		
Switching time	10 ms		
Number of parallel units	1~6		
Overload protection	Adopt anti-delay overload protection algorithm		
BATTER			
Battery Type	Lithium-ion battery/lead-acid battery/user-defined		
Rated Battery Voltage	48V		
Voltage Range	40~60V		
Maximum PV Charge Current	180A	200A	220A
Maximum Mains/Generator Charge Current	100A	120A	140A
Maximum Hybrid Charge Current	180A	200A	220A
PV Input			
MPPT circuits	2		
Maximum input power	7,500W+7,500W	7,500W+7,500W	9,000W+9,000W
Maximum input current	22A+22A		
Maximum open circuit voltage	500V+500V		
MPPT operating voltage range	125 ~ 425V		
Mains Power, Generator Input			
Input voltage range	90 ~ 275V		
Input frequency range	50/60Hz		
Bypass overload current	63A		
Efficiency			
MPPT tracking efficiency	99.90%		
Battery inverter maximum efficiency	92%		
General			
Dimensions (W*H*D)	450W x 620H x 142D mm		
Weight (Kg)	27kg		
Protection Rating	IP20/IP54		
Ambient Temperature	-10~55°C, derating above 45°C		
Noise	<60dB		
Heat Dissipation	Intelligent air cooling		
Warranty	3 years		
Communication			
Communication methods	Wi-Fi / Bluetooth / RS 485 / CAN / USB / Dry Contact		
Certification			
Overview	CE		

Features:

- Built-in circuit breaker
 - Optimized insulation resistance detection technology
 - MPPT tracking efficiency up to 99.9%
- Supports deep customization
 - CE certification



MODEL	JNF8KHF-AS1-V2	JNF10KHF-AS1-V2	JNF12KHF-AS1-V2	JNF15KHF-AS1-V2
Inverter output				
Rated output power	8000W	10000W	12000W	15000W
Maximum peak power	16000W	20000W	24000W	30000W
Rated output voltage	120 V, single phase / 240 V, split phase			
Motor load capacity	5HP	6HP	6HP	6HP
Rated frequency	50/60Hz			
Output waveform	Pure sine wave			
Switching time	10ms			
Number of parallel units	1-6			
Overload protection	Adopt anti-delay overload protection algorithm			
BATTER				
Battery Type	Lithium-ion battery/lead-acid battery/user-defined			
Rated Battery Voltage	48V			
Voltage Range	40~60V			
Maximum PV Charge Current	180A	200A	220A	240A
Maximum Mains/Generator Charge Current	100A	120A	140A	160A
Maximum Hybrid Charge Current	180A	200A	220A	240A
PV Input				
MPPT circuits	2			
Maximum input power	12000W	15000W	18000W	22500W
Maximum input current	22A+22A			
Maximum open circuit voltage	500V+500V			
MPPT operating voltage range	125 ~ 425V			
Mains Power, Generator Input				
Input voltage range	90 ~ 275V			
Input frequency range	50/60Hz			
Bypass overload current	63A			
Efficiency				
MPPT tracking efficiency	99.9%			
Battery inverter maximum efficiency	92%			
General				
Dimensions (W*H*D)	520*650*142mm			
Weight (Kg)	29.5kg			
Protection Rating	IP20/IP54			
Ambient Temperature	-10~55°C, derating above 45°C			
Noise	<60dB			
Heat Dissipation	Intelligent air cooling			
Warranty	3 years			
Communication				
Communication methods	Wi-Fi / Bluetooth / RS 485 / CAN / USB / Dry Contact			
External module (optional)	4G			
Certification				
Overview	CE			