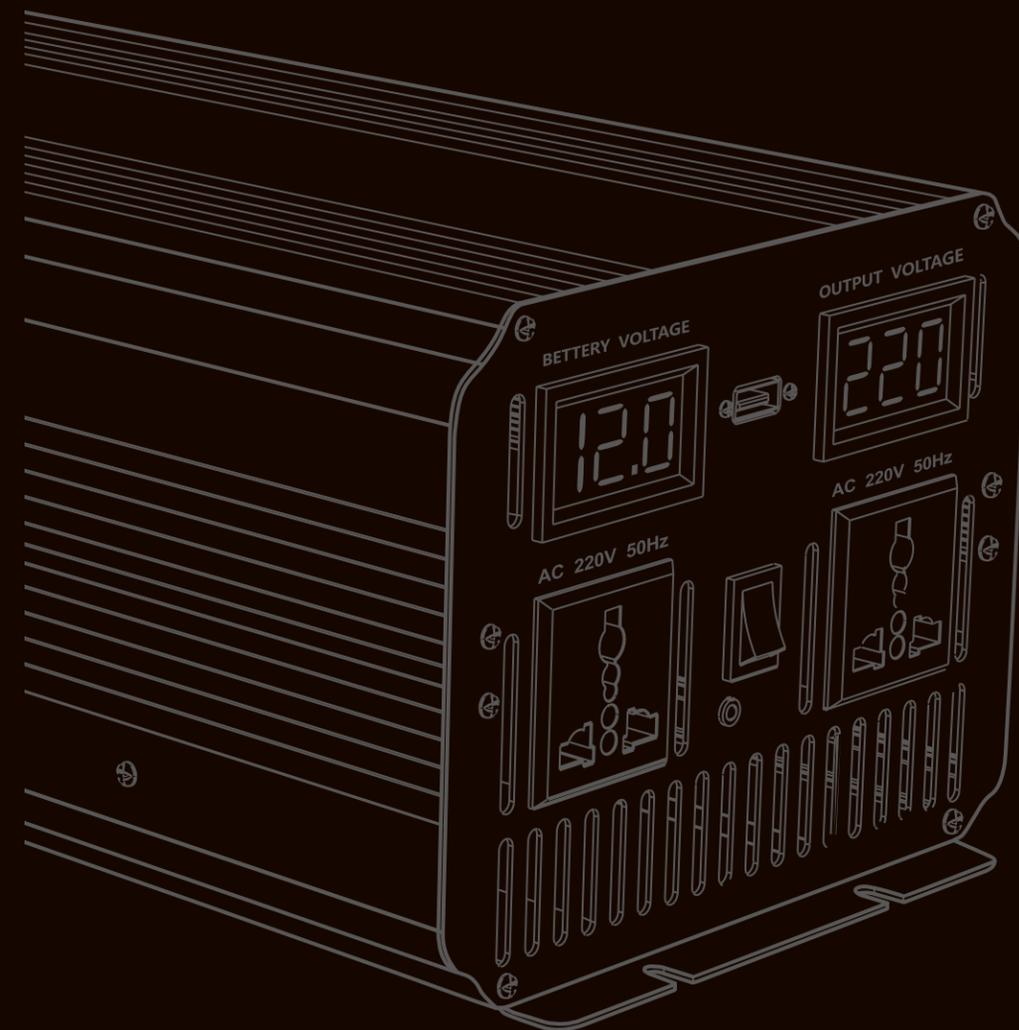


# BELTTT<sup>®</sup>

Power Inverter  
Solar Power Generation System



**BELTTT<sup>®</sup>** Power Inverter  
Solar Power Generation System

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## ABOUT US

Guangzhou City Poojin Electronic Technology Co., Ltd. has entered the inverter power supply industry for more than ten years. After years of development, it has grown into an integrated design, research and production of inverters and solar off-grid power generation equipment. And can provide continuously innovative high-tech enterprises according to customer needs. With strong technical strength advanced equipment and standardized management, we are specialized in providing customers with products that are more competitive and conform to the market trend value. From inverters to smart chargers, from solar controllers to inverter combined with controller, we have always maintained the same quality. Years of industry experience have made us more technologically advanced.

The company has a series of automated production equipment, professional technical team, using high quality raw materials to ensure our products can be through all kinds of testing standard, we provides the high-quality service for the customers with professional knowledge.

Over the years, Poojin Electronics has recruited talented people and established a professional and technical team with high quality. With a serious, responsible, practical and hard work style, it has established a corporate image full of vitality and creativity. Since its inception, the company has established long-term and friendly business contacts with more than 100 countries and regions around the world .The independent brand "BELTTT" at home and abroad with high visibility and reputation, and with a series of patent and intellectual property rights.

In the future, we will continue to improve our quality and service level as always. We will adhere to the business philosophy of "innovation, prudence and mutual gains" to meet the needs of our customers to the greatest extent. We sincerely hope to cooperate with you in a friendly way to achieve mutual gains situation and seek common development.

BELTTT has invested 10% of the total annual profit in the research and development of new products, and has established industry-leading technology, talents, experience and the R & D platform for quality management, and has more than 20 high-quality R & D teams. Product and technology R & D covers the full range of inverters and solar off grid power generation systems.

BELTTT adheres to customer demand oriented product development and innovation concept, aims at providing global users with the international product quality standards. Quality and cost-effective products and services. BELTTT is committed to building open, integrated, efficient, safe, simple inverters and solar power for customers. Infrastructure. We can not only efficiently provide customers with more products and services, but also constantly simplify the complexity of product management and maintenance costs.

On the basis of inheritance and practice, BELTTT continued to carry out process transformation and management optimization, but also spent a lot of money on establishing product identification testing center. We have been working with international leading research institutions and instrument manufacturers to carry out a rigorous testing of R & D products with a full range of user environments. The aim is to provide customers with more secure and reliable products. Thanks to strict product testing assurance, BELTTT can be continuously exported. Products and services that are tested in the market and create value for customers.



● **INNOVATION** ● **PRUDENCE** ● **MUTUAL GAINS**  
strain every nerve, no trouble with electricity,  
Light out thousands of families!



Poojin electronics is a company that has been awarded the certification of high and new technology enterprise.

We not only have experienced product design and R & D personnel.

We also have various testing standards suitable for the market

meanwhile we are also an enterprise certified by the intellectual property management system.

In recent years, we have provided more than 1 million service cases to the global customers.

## + BEF Series multi-function intelligent inverter

- Exquisite cutting, we accurately calculate the angle of each tangent line, so that the fuselage presents a myriad of beauty, each time looking at it, there's all different beauty. At the same time, we give the product more convenient operation, all for your better use experience.
- Inverter provides comprehensive operation condition monitoring, Through the LED monitor, we can timely understand the operation of the inverter and make timely response strategies for various alarms.
- The product through high and low temperature cycle work experiment, alternating humidity and heat test, rolling test, interface plug durability test, fireproof test, electromagnetic compatibility test, full load test and o on, and provides all kinds of safety protection functions.



**BEF300H**

**Rated power:** 300W **Peak power:** 600W **Input voltage:** 12V **Output voltage:** 220V  
**Input voltage range:** 10V-15.5V **Output frequency:** 50Hz **Output waveform:** Modified sine wave  
**Conversion efficiency:** ≥90% **AC socket:** 1\* power multi-function socket  
**USB charging interface:** 5V 2.1A interface  
**USB quick charging interface:** 1\*5V/9V/12V 2.4A **Cooling mode:** intelligent FAN  
**Protection function:** input low voltage protection, input high voltage protection, short circuit protection, overload protection, high temperature protection, reverse connection protection  
**Working temperature:** 0-40°C **Working humidity:** 20-90%RH



**BEF500H**

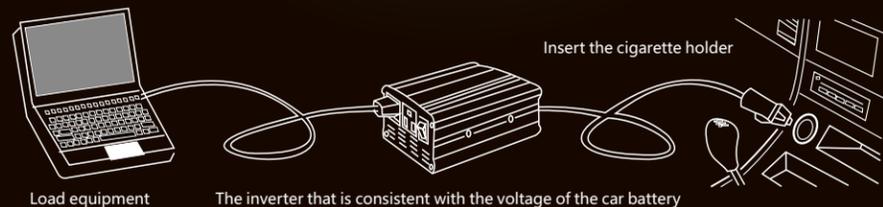
**Rated power:** 500W **Peak power:** 1000W **Input voltage:** 12V **Output voltage:** 220V  
**Input voltage range:** 10V-15.5V **Output frequency:** 50Hz **Output waveform:** Modified sine wave  
**Conversion efficiency:** ≥90% **AC socket:** 1\* power multi-function socket  
**USB charging interface:** 5V 2.1A interface  
**USB quick charging interface:** 1\*5V/9V/12V 2.4A **Cooling mode:** intelligent FAN  
**Protection function:** input low voltage protection, input high voltage protection, short circuit protection, overload protection, high temperature protection, reverse connection protection  
**Working temperature:** 0-40°C **Working humidity:** 20-90%RH



## CAR INVERTER

Car inverter can be applied to: mobile phones, electronic dogs, recorder, flashlight, razor, small fan, hair dryer. tablet PC, notebook ,computer, navigation vehicle, interphone and cigar lighter.

Car inverter application connection diagram



## + Car Inverter

- Advanced circuit design, using imported components, making the operation more stable, higher conversion efficiency
- Provides slow start function, provide high and low voltage protection function.
- Provide over-voltage, over-current, over-temperature, output short circuit, circuit break and other comprehensive protection.
- Provide input voltage display function, provide USB output and cigarette lighter output interface
- Plug maintenance free design to ensure the product can continue for a long time running



**BEL150FCA**

Rated power: 150W    Peak power: 300W    Input voltage: DC12V  
Output waveform: Modified sine wave    Output voltage: AC110V/220V (optional)  
USB output: 4\*USB    1 way 12V cigarette lighter interface  
Protection methods: over temperature, over current, over voltage  
product size (mm):170\*90\*36 net weight: 0.345kg

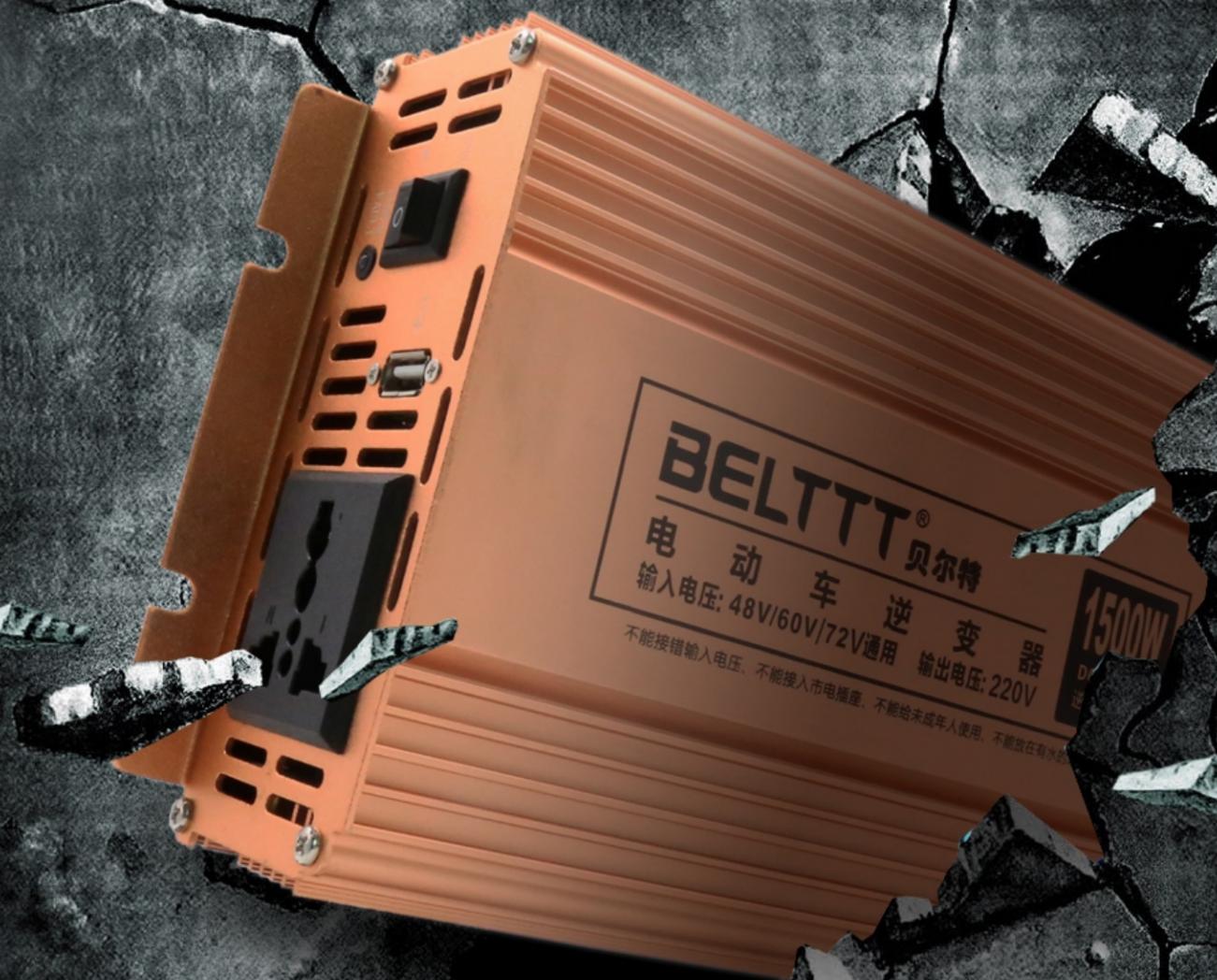


**BEPD150FCA**

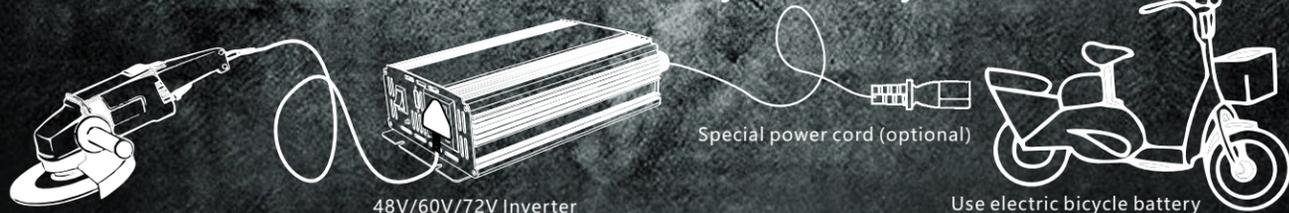
Rated power: 60W (12V) / 120W (24V)    Peak power: 120W (12V) / 240W (24V)  
Input voltage: DC12V / 24V (general)    output voltage: DC110V (12V) /220V (24V)  
USB output: 4\*USB    cigarette lighter interface: DC12V/24V (depending on input voltage)  
Size (mm):168\*96\*40.5

## BEW500SAF

Input voltage:48V/60V/72V | Rated power:500W | Peak power:1500W



### 48V/60V/72V Inverter connected electric bicycle battery schematic



The inverter with the input voltage of 48V/60V/72V can be powered directly by the battery of the electric bicycle through the dedicated power cord.

## + Small power inverter



- Advanced circuit design, adopting imported components, makes the conversion efficiency high.
- The inverter is equipped with advanced anti-jamming technology to provide slow start-up function, high and low voltage alarms, and high and low voltage protection.
- The inverter is equipped with advanced anti-jamming technology to provide slow start-up function, high and low voltage alarms, and high and low voltage protection.
- To provide over-voltage, over-current, over-temperature, output short circuit, circuit break and other comprehensive protection.
- Modified sine wave dc output, inverter provides AC, USB output interface.
- Plug and play maintenance free design ensures that the product can run continuously for a long time.
- Multiple DC input voltage and AC output voltage for your choice.
- Fashionable appearance, all metal body design, using passive intelligent fan heat dissipation, inverter efficiency up to 90%.
- The soft start circuit gradually increase the output voltage at startup, so as to eliminate the failure of the cold start, and also have the instantaneous drop of the output voltage and the quick recovery function, which reduces the instantaneous overload when the load is opened.

### BED300H

Rated power: 300W  
Peak power: 600W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 152.5\*95.2\*56.5mm  
Product weight: 0.44kg



### BEL300ST

Rated power: 300W  
Peak power: 600W  
Input voltage: 12V/24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 152\*95\*55mm  
Product weight: 0.438kg



### BED500H

Rated power: 500W  
Peak power: 1000W  
Input voltage: 12V/24VOptional  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 194.5\*95.2\*56.5mm  
Product weight: 0.59kg



### BEL500ST

Rated power: 500W  
Peak power: 1000W  
Input voltage: 12V/24V/48V/60V/72V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 193\*95\*55mm  
Product weight: 0.66kg



### BEL800ST

Rated power: 800W  
Peak power: 1600W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 226 \* 95 \* 55mm  
Product weight: 0.79kg



### BEL1000ST

Rated power: 1000W  
Peak power: 2000W  
Input voltage: 12V/24V/48V/60V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 241\*95\*55mm  
Product weight: 0.855kg



## More models are available for your choice

BEL80ST / BEL100ST / BEL150XT / BEL200ST / BEL350ST / BEL500XT / BEL600ST  
BEL800XT / BEL1000XT / BEL1200XT / BEL1500XT / BEL2000XT.....

**BEM series big power modified sine wave inverter**  
**1000W / 1200W / 1500W / 2000W / 3000W / 5000W.....**  
**A variety of power products for your choice**



- Modified sine wave
- High conversion efficiency
- Supports multiple protection modes
- Multi output interface
- Plug and play
- All metal shell
- Intelligent cooling fan



**+ Big power modified sine wave inverter**

BELTTT Big power modified sine wave inverter use special intelligent circuit and high power field effect tube, which greatly reduces the power loss of the system. It also increases the soft start function and ensures the reliability of the inverter. It can meet the demand of most electrical equipment, and its main features are high efficiency, low noise and high cost performance. The modified sine wave inverter can be applied to mobile phone, laptop, TV, camera, CD player, various charger, car refrigerator, game console, DVD player, power tool. It is also widely used as a backup power source for tourism or field operations, and can also solve power problems in remote power areas. It has become a matching inverter for wind power and solar photovoltaic projects, and it can also serve as backup power for hospitals in industrial and mining enterprises.



**BEM1000L**

Rated power: 1000W  
Peak power: 2000W  
Input voltage: 12V/24V/48V/60V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 262\*150\*76mm  
Product weight: 1.58kg



**BEM1200L**

Rated power: 1200W  
Peak power: 2400W  
Input voltage: 12V/24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 327\*150\*76mm  
Product weight: 1.8kg



**BEM1500L**

Rated power: 1500W  
Peak power: 3000W  
Input voltage: 12V/24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 327\*150\*76mm  
Product weight: 1.8kg



**BEM2000L**

Rated power: 2000W  
Peak power: 4000W  
Input voltage: 12V/24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 427\*150\*107mm  
Product weight: 3.32kg



**BEM3000L**

Rated power: 3000W  
Peak power: 6000W  
Input voltage: 12V/24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 454\*180\*142mm  
Product weight: 4.8kg



**BEM5000L**

Rated power: 5000W  
Peak power: 10000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Product size: 600\*180\*163mm  
Product weight: 7.5kg



**BEP series pure sine wave inverter.**

300W / 500W / 800W / 1000W / 1500W  
2000W / 3000W / 5000W.....

A variety of power products for your choice

**+ Pure sine wave inverter**

Pure sine wave inverters are widely used in various fields: computer systems, communications systems, home, aviation, emergency, communications, industrial equipment, satellite communications equipment, military vehicles, medical ambulances, police cars, ships, solar energy, wind power generation, etc. Where an emergency backup power source is required, an EPS emergency power system may be constructed.

BELTTT pure sine wave inverter circuit design is advanced, adopting imported components, which makes the operation more stable and the conversion efficiency is higher. Full metal shell and provide fan speed intelligent control, effectively reduce running noise and temperature. The product provide over-voltage, over-current, over-temperature, short circuit, overload, circuit break and other comprehensive protection function. Plug and play maintenance free design ensures that the product can run continuously for a long time.



**BEP300SA**

Rated power: 300W  
Peak power: 600W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 211.5\*118\*56mm  
Product weight: 0.81kg



**BEP500SA**

Rated power: 500W  
Peak power: 1000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 236\*118\*56mm  
Product weight: 0.91kg



**BEP800S**

Rated power: 800W  
Peak power: 1600W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 309\*180\*142mm  
Product weight: 3.05kg



**BEP1000SA**

Rated power: 1000W  
Peak power: 2000W  
Input voltage: 12V/24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 367\*150\*76mm  
Product weight: 2.44kg



**BEP1500S**

Rated power: 1500W  
Peak power: 3000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 384\*180\*142mm  
Product weight: 4kg



**BEP2000S**

Rated power: 2000W  
Peak power: 4000W  
Input voltage: 12V/24V/48V/72V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 454\*180\*142mm  
Product weight: 4.9kg



**BEP3000S**

Rated power: 3000W  
Peak power: 6000W  
Input voltage: 12V/24V/48V/96V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 529\*180\*142mm  
Product weight: 6.02kg



**BEP5000S**

Rated power: 5000W  
Peak power: 10000W  
Input voltage: 24V/48V(Optional)  
Output voltage: 220V  
Output waveform: Pure sine wave  
Product size: 685\*180\*167mm  
Product weight: 8kg



- **BEU series modified sine wave UPS inverter**
- **BET series pure sine wave UPS inverter.**

350W / 500W / 800W / 1000W / 1200W / 1500W / 2000W  
3000W / 5000W.....

A variety of power products for your choice.



**BEU350L**

Rated power: 350W  
Peak power: 700W  
Input voltage: 12V  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage  
Product size: 242\*95\*54mm  
Product weight: 0.8kg



**BEU500L**

Rated power: 500W  
Peak power: 1000W  
Input voltage: 12V  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 203\*140\*64mm  
Product weight: 1.08kg



**BEU800L**

Rated power: 800W  
Peak power: 1600W  
Input voltage: 12V  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 248\*140\*64mm  
Product weight: 1.4kg



**BEU1000LX**

Rated power: 1000W  
Peak power: 2000W  
Input voltage: 12V  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 248\*140\*64mm  
Product weight: 1.4kg



**BEU1500L**

Rated power: 1500W  
Peak power: 3000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 333\*150\*107mm  
Product weight: 2.6kg



**BEU2000L**

Rated power: 2000W  
Peak power: 4000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 384\*180\*142mm  
Product weight: 4.4kg



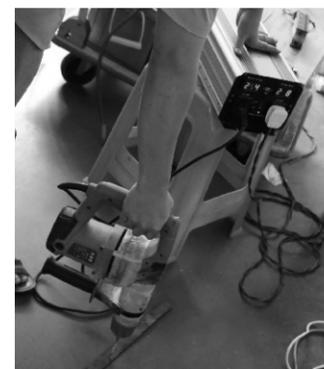
**BEU3000L**

Rated power: 3000W  
Peak power: 6000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 454\*180\*142mm  
Product weight: 5.3kg



**BEU5000L**

Rated power: 5000W  
Peak power: 10000W  
Input voltage: 12V/24V(Optional)  
Output voltage: 220V  
Output waveform: Modified sine wave  
Charging voltage: 220V  
Charging mode:  
constant current and constant voltage.  
Product size: 600\*180\*163mm  
Product weight: 7.92kg



## + UPS inverter (Rechargeable inverter)

UPS inverter is one of the inverter power supply, is under the condition of the mains electricity, the AC is converted to low voltage DC, the alternating current of constant voltage and frequency is converted into DC, recharge battery or accumulator equipment; When there is no mains electricity, the DC power in the battery or accumulator is converted into AC power for use in home appliances. When the battery is used as the power source or backup power, the UPS inverter has a wide range of application prospects.



### **BET800S**

Rated power:800W Peak power:1600W Output voltage:220V Output waveform:Pure sine wave  
Output frequency:50Hz Battery voltage:12V/24V(Optional) Voltage range:10V-15.5V(12V) / 20V-31V(24V)  
Protection mode:Battery input high and low voltage protection, battery reversal polarity protection, short circuit protection, overload protection, overtemperature protection, overcurrent protection.  
Charging voltage:220V Working temperature:0-40°C Working humidity:10-90%RH  
Charging mode: the output voltage adopts three-stage charging mode (constant current, constant pressure, floating charge)  
Product features:LED visual input and output voltage monitoring, USB output full metal shell intelligent cooling fan  
Product weight:3.37Kg Product size:309\*\*180\*142



### **BET1500S**

Rated power:1500W Peak power:3000W Output voltage:220V Output waveform:Pure sine wave  
Output frequency:50Hz Battery voltage:12V/24V(Optional) Voltage range:10V-15.5V(12V) / 20V-31V(24V)  
Protection mode:Battery input high and low voltage protection, battery reversal polarity protection, short circuit protection, overload protection, overtemperature protection, overcurrent protection.  
Charging voltage:220V Working temperature:0-40°C Working humidity:10-90%RH  
Charging mode: the output voltage adopts three-stage charging mode (constant current, constant pressure, floating charge)  
Product features:LED visual input and output voltage monitoring, USB output full metal shell intelligent cooling fan  
Product weight:4.36Kg Product size:384\*180\*142



### **BET2000S**

Rated power:2000W Peak power:4000W Output voltage:220V Output waveform:Pure sine wave  
Output frequency:50Hz Battery voltage:12V/24V(Optional) Voltage range:10V-15.5V(12V) / 20V-31V(24V)  
Protection mode:Battery input high and low voltage protection, battery reversal polarity protection, short circuit protection, overload protection, overtemperature protection, overcurrent protection.  
Charging voltage:220V Working temperature:0-40°C Working humidity:10-90%RH  
Charging mode: the output voltage adopts three-stage charging mode (constant current, constant pressure, floating charge)  
Product features:LED visual input and output voltage monitoring, USB output full metal shell intelligent cooling fan  
Product weight:5.28Kg Product size:454\*180\*142



### **BET3000S**

Rated power:3000W Peak power:6000W Output voltage:220V Output waveform:Pure sine wave  
Output frequency:50Hz Battery voltage:12V/24V/48V(Optional)  
Voltage range:10V-15.5V(12V) / 20V-31V(24V) / 40V-62V(48V)  
Protection mode:Battery input high and low voltage protection, battery reversal polarity protection, short circuit protection, overload protection, overtemperature protection, overcurrent protection.  
Charging voltage:220V Working temperature:0-40°C Working humidity:10-90%RH  
Charging mode: the output voltage adopts three-stage charging mode (constant current, constant pressure, floating charge)  
Product features:LED visual input and output voltage monitoring, USB output full metal shell intelligent cooling fan  
Product weight:6.48Kg Product size:529\*180\*142



### **BET5000S**

Rated power:5000W Peak power:10000W Output voltage:220V Output waveform:Pure sine wave  
Output frequency:50Hz Battery voltage:24V/48V(Optional) Voltage range:20V-31V(24V) / 40V-62V(48V)  
Protection mode:Battery input high and low voltage protection, battery reversal polarity protection, short circuit protection, overload protection, overtemperature protection, overcurrent protection.  
Charging voltage:220V Working temperature:0-40°C Working humidity:10-90%RH  
Charging mode: the output voltage adopts three-stage charging mode (constant current, constant pressure, floating charge)  
Product features:LED visual input and output voltage monitoring, USB output full metal shell intelligent cooling fan  
Product weight:8.46Kg Product size:685\*180\*167

## PHPU series smart pure sine wave UPS inverter

- Pure sine wave output
- High conversion efficiency
- Support remote control
- Many working models
- Visual interface
- Three-phase charging

**Power range: 1000W / 2000W / 3000W / 4000W / 5000W / 6000W**



- PHPU1KW-12V
- PHPU2KW-12V
- PHPU2KW-24V
- PHPU3KW-12V
- PHPU4KW-24V
- PHPU5KW-24V
- PHPU6KW-24V



## + Low frequency power inverter

The low frequency power inverter converts the dc power into a low-voltage alternating current firstly, and then the AC power is boosted to 220V and 50Hz ac for load by the low frequency transformer. Its advantages are simple structure; all kinds of protective functions can be realized in case of low voltage. There is a low frequency transformer between the inverter power supply and the load; therefore the inverter power supply is stable, reliable and has overloading capacity and strong impact resistance. It can also suppress the high harmonics in the waveform. The frequency inverter is mainly used for instrument and medical treatment, power supply of military industry, electric power, precision electric equipment and other equipment



### 1000W / 2000W / 3000W Low frequency power inverter

**Rated power:**1000W / 2000W / 3000W(Optional) **Input voltage:**12V/24V/48V(Optional)  
**Output waveform:**Low frequency pure sine wave **Output voltage:**AC110V / AC220V  
**Protection type:** battery input high and low voltage protection, battery reversal polarity protection, short-circuits protection, overload protection, over temperature protection, over current protection.

**Working mode:** inverter/by-pass **Output frequency:** 50Hz/60Hz rated efficiency :88%

**Charging voltage:**95-127V(110V) / 164-243V(220V)

**Charging mode:** multi-stage charging and numerical control progressive

**Charging current:** 35A/70A **Remote control:**RS232 /USB(Optional)

**Product weight:**17kg(1000W) / 20kg(2000W) /22kg(3000W) **Product size:**442\*218\*179



### 4000W / 5000W / 6000W Low frequency power inverter

**Rated power:**4000W / 5000W / 6000W(Optional) **Input voltage:**24V/48V(Optional)  
**Output waveform:**Low frequency pure sine wave **Output voltage:**AC110V / AC220V  
**Protection type:** battery input high and low voltage protection, battery reversal polarity protection, short-circuits protection, overload protection, over temperature protection, over current protection.

**Working mode:** inverter/by-pass **Output frequency:** 50Hz/60Hz rated efficiency :88%

**Charging voltage:**95-127V(110V) / 164-243V(220V)

**Charging mode:**Multi-stage charging and numerical control progressive

**Charging current:**35A/70A **Remote control:**RS232 /USB(Optional)

**Product weight:**35kg(4000W) / 38kg(5000W) /40kg(6000W) **Product size:**442\*218\*179



### 8000W / 10000W / 12000W Low frequency power inverter

**Rated power:**8000W / 10000W / 12000W(Optional) **Input voltage:**48V/96V(Optional)  
**Output waveform:**Low frequency pure sine wave **Output voltage:**AC220V  
**Protection type:** battery input high and low voltage protection, battery reversal polarity protection, short-circuits protection, overload protection, over temperature protection, over current protection.

**Working mode:** inverter/by-pass **Output frequency:** 50Hz/60Hz rated efficiency :80%

**Charging voltage:** 164-243V(220V) **Charging mode:**Determination of battery type

**Charging mode:**Multi-stage charging and numerical control progressive

**Charging current:**Adjustable **Remote control:**RS232 /USB(Optional)

**Product weight:**55.8Kg **Product size:**549\*450\*201.2



## BESIB500PSN (12V-10A-6A-220V) Solar off-grid power generation system

1 dc voltmeter / 2 USB outlet / 4 12V dc output interface / 2 220V ac output socket  
**6A charger / 10A solar controller / 500W pure sine wave inverter**  
Battery compartments size: 450\*240\*240mm / Product size: 480\*265\*555mm



## + Solar off-grid power generation system

Off-grid solar power system converts solar energy into electricity by using solar panels in sun; power the load through solar controller, at the same time charges the battery. In cloudy weather or no sunshine, battery bank provides energy to dc load by controller; at the same time, the battery should also directly supply power to the independent inverter, the DC power is converted into AC power through an independent inverter, and the AC load is powered. The off-grid solar power generation system is widely used in remote mountainous area, no power area, island, communication base station and so on. The system is composed of photovoltaic array, solar power controller, off-grid inverter, battery group, dc load and ac load.



### BEISP series Economical Solar off-grid power generation system (Hybrid inverter)

Power range: 300W-5000W (Optional)  
Output frequency: Modified sine wave / Pure sine wave (Optional)  
Charging current: 10A-50A (Optional)  
solar controller: 5A-150A (Optional)  
Output voltage: 220V



### BEISB500MSN(12V-6A-220V) Solar off-grid power generation system

1 DC voltmeter / 2 USB outlet / 4 12V dc output socket / 2\*220V AC output socket  
**6A Charger / 10A Solar controller / 500W Modified sine wave inverter**  
Battery: 12V/40AH(Optional)  
Product size: 412\*230\*300mm



### BEISB500MSN (12V-10A-6A-220V) Solar off-grid power generation system

1 DC voltmeter / 2 USB outlet / 4 12V dc output socket / 2\*220V AC output socket  
**6A Charger / 10A Solar controller / 500W Modified sine wave inverter**  
Battery compartments size: 400\*200\*220mm  
Product size: 430\*230\*510mm



### BEISB1000PSN (12V-30A-20A-220V) Solar off-grid power generation system

1 DC voltmeter / 2 USB outlet / 4 12V dc output socket / 3\*220V AC output socket  
**20A Charger / 30A Solar controller / 1000W Pure sine wave inverter**  
Battery compartments size: 550\*340\*290mm  
Product size: 580\*370\*655mm



### BEISB1000PSN (12V-30A-20A-220V) Solar off-grid power generation system

1 DC voltmeter / 2 USB outlet / 4 12V dc output socket / 3\*220V AC output socket  
**20A Charger / 30A Solar controller / 1000W Pure sine wave inverter**  
Battery compartments size: 570\*350\*290mm  
Product size: 645\*385\*750mm



- DC portable solar off-grid power generation system
- AC portable solar off-grid power generation system



**PJSD10**  
**Solar DC power generation system**

- 1\*DC voltmeter
- 2\*USB outlet
- 4\*12V Dc output socket
- 1\*12V Dc output socket
- 1\*Solar panel (photovoltaic panel) input interface
- 10A Solar controller
- Product size: 157\*140\*148mm



**PJCD10**  
**Solar DC power generation system**

- 1\*DC voltmeter
- 2\*USB outlet
- 4\*12V DC output socket
- 1\*12V Dc output socket
- 1\*Solar panel (photovoltaic panel) input interface
- 6A AC charger
- 10A Solar controller
- Product size: 157\*185\*165mm



**BESB7A**  
**Solar DC power generation system**

- 3\*3W DC lamp
- 3\*12V Dc output socket
- 2\*USB outlet
- 1\*12V 10W Solar panel
- 1\*Solar socket
- 1\*12V 7AH Battery



**BESIB150MSN(12V-10A-220V)**

- 1\*DC voltmeter
- 2\*USB outlet
- 3\*12V DC output socket
- 1\*220V AC output socket
- 10A Solar controller
- **150W Modified sine wave inverter**
- 1\*12V 7AH Battery
- Product size: 200\*190\*115mm



**BESI500PCN(12V-10A-220V)**

- 1\*USB outlet
- 2\*12V DC output socket
- 1\*220V AC output socket
- 10A Solar controller
- **500W Pure sine wave inverter**
- Product size: 287\*218\*121mm



**BESI300MDN(12V-10A-220V)**

- 1\*DC voltmeter
- 1\*AC voltmeter
- 1\*USB outlet
- 2\*12V DC output socket
- 1\*220V AC output socket
- 10A Solar controller
- **300W Modified sine wave inverter**
- Product size: 287\*170\*105mm



**BESI500MTN(12V-20A-220V)**

- 1\*DC voltmeter
- 1\*Battery voltage voltmeter
- 1\*AC voltmeter
- 1\*USB outlet
- 2\*12V DC output socket
- 1\*220V AC output socket
- 20A Solar controller
- **500W Pure sine wave inverter**
- Product size: 287\*170\*105mm



**BESI2000PCN(24V-30A-220V)**

- 1\*USB outlet
- 2\*12V DC output socket
- 2\*220V AC output socket
- 30A Solar controller
- **2000W Pure sine wave inverter**
- Product size: 385\*480\*137mm



## + Solar controller

The solar controller is called the solar charge-discharge controller and is an automatic control device used in a solar power generation system to control the charging of the solar battery square array. It regulates and controls the charging and discharging conditions of the battery, and controls the power output of the solar module and the battery to the load according to the power demand of the load. It is the core control part of the entire photovoltaic power supply system. BELTTT solar controllers are available in two types, waterproof and universal. The products are mainly suitable for solar power generation, solar lighting and solar street lighting.

### PJRC10P / PJRC20P Waterproof solar controller



**Rated Charring current:** 10A(PJRC10P) / 20A(PJRC20P)  
**Rated Load curren:** 10A(PJRC10P) / 20A(PJRC20P) **Support No-load loss:** <6mA  
**System Voltage:** 12V / 12V,24V auto **Overload, Short Circuit Protection:** Yes  
**Circuit voltage:** Not more than 0.26V **Discharge Circuit voltage:** not more than 0.15V  
**Overvoltage protection:** 17V, X2/24V **Working temperature:** -35°C~+55°C  
**Temperature compensation:** -5mv/°C, 2V **Under voltage Compensatio:** 11.85V, X2/24V  
**Over discharge Return Voltage:** 12.5V, X2/24V **Waterproof grade:** IP67  
**Control Mode:** Charging PWM Pulse Width Modulation  
**Over discharge voltage:** 11.1V-discharge rate compensation corrected initial over discharge voltage (no-load voltage), X2/24V

### PJSC10I / PJSC20I / PJSC30I Universal solar controller



**Rated Charring current:** 10A(PJSC10I) / 20A(PJSC20I) / 30A(PJSC30I)  
**Rated Load curren:** 10A(PJSC10I) / 20A(PJSC20I) / 30A(PJSC30I) **Support No-load loss:** <6mA  
**System Voltage:** 12V / 12V,24V auto **Overload, Short Circuit Protection:** Yes  
**Circuit voltage:** Not more than 0.26V **Discharge Circuit voltage:** not more than 0.15V  
**Overvoltage protection:** 17V, X2/24V **Working temperature:** -35°C~+55°C  
**Temperature compensation:** -5mv/°C, 2V **Under voltage Compensatio:** 12V, X2/24V  
**Over discharge Return Voltage:** 12.6V, X2/24V  
**Control Mode:** Charging PWM Pulse Width Modulation  
**Over discharge voltage:** 11.1V-discharge rate compensation corrected initial over discharge voltage (no-load voltage), X2/24V

### PJSC40L/PCSC50L / PJSC60L / PJSC80L / PJSC100L / PJSC120L / PJSC150L Intelligent solar controller



**Rated Charring current:** 40A(PJSC40L) / 50A(PCSC50L) / 60A(PJSC60L) / 80A(PJSC80L) / 100A(PJSC100L) / 120A(PJSC120L) / 150A(PJSC150L)  
**System Voltage:** 12V / 12V(auto), 48V **Solar Input voltage:** <=55V(12/24V) / <=100V(48V)  
**Overload, Short Circuit, Under voltage, Overcharge Protection:**Yes **Waterproof grade:** IP30  
**Support No-load loss:** <=30mA **Working temperature:** -25°C~+60°C  
**Support battery type:** Lead-acid battery, colloidal battery, opens battery  
**Charging method:** Constant voltage, boost, float charge **Temperature compensation:** -4mv/°C/2V  
**Product size:** 150\*135\*63mm(40A/50A/60A/80A) / 216\*203\*106.8mm(100A/120A/150A)

### PJWP30D / PJWP40D / PJWP50D / PJWP60D Intelligent solar controller



**Display mode:** LCD display battery power energy, voltage and current and charge and discharge status, daily generation power and power consumption data statistics;  
**Protection methods:** Low voltage protection, overvoltage protection, overcharge protection, overload protection, over current protection, overheat protection, short circuit protection, and reverse discharge protection Solar panel and battery reverse polarity protection;  
**Parameter modification:** Charge and discharge control parameters can be manually adjusted through three silicone keys;  
**Working mode:** normal 24-hour work mode, light control mode, light control delay mode, light control delay and morning light;  
**Charging mode:** three-stage (full speed, float charge, boost) PWM charging mode;  
**Battery Type:** Built-in three types of battery (sealed, open, gel) and lithium battery parameters, support to starting from solar panel while 0 voltage of battery;  
**Interface features:** Optional remote communication monitoring RS232 or RS485;  
**Backplane type:** fin cooling bottom plate;  
**Features:** Built-in temperature probe, LCD with backlight, limited lightning protection

### Pure Sine Wave Inverter with built-in controller

PIC	Type	Model	SPEC	Input Voltage	AC Charger	Solar Controller Type
	BEPSS HYBRID INVERTER	BEPPS1K	1KVA/800W 220VAC	12VDC	10A/20A	PWM 50A
		BEPPS3K	3KVA/2400W 220VAC	24VDC	20A/30A	PWM 50A
		BEPPS5K	5KVA/4000W 220VAC	48VDC	20A/30A	PWM 50A
	BEPMS HYBRID INVERTER	BEPMS1K	1KVA/800W 220VAC	24VDC	25A	MPPT25A
		BEPMS3K-25AMPPT	3KVA/2400W 220VAC	24VDC	25A	MPPT25A
		BEPMS3K-60AMPPT	3KVA/2400W 220VAC	24VDC	60A	MPPT 60A
		BEPMS5K	5KVA/4000W 220VAC	48VDC	60A	MPPT 60A

### MPPT Series Solar Controller

Product	PJeSmart	PJWiser	PJMaster	PJGalaxy
Product photo				
Battery voltage	12/24/36/48V	12V/24V	12/24/36/48V	96V
Charging current	20A/30A/40A/50A/60A	15A/20A	30A/40A/50A	80A/100A
Communication mode	RS485		RS485(support for parallel communication)	
USB 5V	None	2 usb ports	None	
Cooling mode	Temperature controlled fan	Self heat dissipation		Temperature controlled fan
Charge mode	Three stages: constant current (MPPT), constant voltage, float charge.			
PV Input maximum voltage	150V	100V	150V	300V
Battery Type	Sealed lead-acid battery, drain cell, gel cell, nickel cadmium cell; And can customize for other special battery			
Temperature compensation	Yes			
Monitor Mode	PC software + mobile APP stand-alone monitoring, cloud remote monitoring			
DC load	40A/60A	20A	40A	100A
Output mode	always on; always off; PV voltage control; Time control			
Display mode	LCD display (with backlight)			
Display content	PV voltage, PV current, charging current, charging voltage, annual power generation, annual daily quantity, discharge voltage, discharge current, temperature, working status, error prompt, etc			



### + Solar Panels (Solar Modules)

Solar panels (also called solar modules) Assemblies of multiple solar cells are the core part of solar power systems and the most important part of solar power systems.

ITEM NO.	S/P-65	S/P-85	S/P-135	S/P-165	S/P-200
Maximum Power at ST(Pmax)W	65Wp	85Wp	135Wp	165Wp	200Wp
Maximum Power Voltage(Vmp)V	18V	18V	18.2V	18.6V	37.2V
Maximum Power Current(Imp)A	3.61A	4.72A	7.42A	8.87A	5.38A
Open Circuit Voltage(Voc)V	21.2A	21.5A	19.8A	22.9A	45.4A
Short Circuit Current(Isc)A	3.98A	5.19A	7.75A	9.12A	5.82A
Cell Efficiency(%)	16.8%	17.9%	17.3%	18.2%	18.09%
Module Efficiency(%)	15.5%	15.8%	15.16%	16.36%	15.67%
Size of Module(mm)	690*665*25	750*665*28	1190*665*35	1471*665*35	1580*818*40
Solar Cell	156*78	156*104	156*115	156*156	125*125
Number of Cell(PCS)	36PCS	36PCS	36PCS	36PCS	72(6*12)PCS
Weight(KG)	5.6kg	6.4kg	8.5kg	10.5kg	14.2kg
Power Tolerance			0~+3%		



### + Universal Series Sealed Lead Acid Battery

BELTTT series PJQS lead-acid battery is a battery product with good safety, simple maintenance, long service life, stable quality and high reliability. It can pass the safety certification of battery products at the same time.

PJQS series lead-acid batteries can be applied to solar power systems, inverters, UPS, EPS, and other emergency power supply systems.

Model NO.	Nomina l voltage(V)	Rated capacity(AH) 20hrs/25	weight		Dimensions(mm)						Terminal Type		
			kg	ibs	Length		Width		Height				
					mm	inch	mm	inch	mm	inch	mm	inch	
PJQS-7-12V	12	7	2.15	4.73	151	5.95	65	2.56	94	3.7	100	3.94	T2
PJQS-10-12V	12	10	2.95	6.5	151	5.95	65	2.56	111	4.37	116	4.57	T2
PJQS-12-12V	12	12	3.43	7.55	151	5.95	98	3.86	94	3.7	100	3.94	T2
PJQS-15-12V	12	15	4.8	10.56	181	7.13	77	3.03	167	6.58	167	6.58	T3
PJQS-38-12V	12	38	12.9	28.4	197	7.76	166	6.54	174	6.86	181	7.13	T12/T6
PJQS-50-12V	12	50	16.2	35.7	230	9.06	138	5.44	211	8.31	224	8.83	T5/T14
PJQS-60-12V	12	60	19.4	42.7	350	13.79	166	6.54	179	7.05	179	7.05	T7/T16A
PJQS-65-12V	12	65	20.5	45.2	350	13.79	166	6.54	179	7.05	179	7.05	T7/T16A
PJQS-80-12V	12	80	23.4	51.5	260	10.2	169	6.65	211	8.31	215	8.47	T8/T16A
PJQS-100-12V	12	100	29.8	65.56	331	13.04	173	6.82	213	8.39	233	9.18	T8/T16A
PJQS-120-12V	12	120	36.5	80.5	407	16.04	174	6.86	209	8.23	236	9.3	T9/T20
PJQS-150-12V	12	150	42.5	93.7	484	19.07	171	6.74	240	9.46	241	9.5	T10/T20
PJQS-180-12V	12	180	56.5	124	522	20.57	240	9.46	216	8.51	240	9.46	T9/T18
PJQS-200-12V	12	200	60	132.3	522	20.57	240	9.46	216	8.51	240	9.46	T9/T18

## BELC series smart charger

- Intelligent control and management of battery charging process
- Multiple safety protection functions
- Three-stage charging mode (constant current, constant voltage, float charge), smart fan
- Detailed charging indicator and current value indicator.
- Applicable to lead-acid batteries and other rechargeable batteries



**BELC5A**

**Charging voltage:** 12V **Charging current:** 5A **Constant voltage charging voltage:** 14.4V  
**Input voltage range:** 180V-260V **Frequency:** 50Hz/60Hz **Full load efficiency:** 85%  
**Working temperature:** -20~+60°C **Working humidity:** 20-90%RH, non-condensing  
**Product Weight:** 0.465 Kg **Product Size:** 103\*124\*56 mm (L\*W\*H)  
 When the input current is greater than 2A, the fuse is automatically blown and the DC output supports reverse polarity protection  
 Intelligent cooling fan, the fan runs automatically when the charging current is greater than 1A, and provides charge indicator and ammeter



**BELC10A**

**Charging voltage:** 12V **Charging current:** 10A  
**Constant voltage charging voltage:** 14.6V **Float charge Charging voltage:**13.7V  
**Input voltage range:** 180V-260V **Frequency:** 50Hz/60Hz **Full load efficiency:** 85%  
**Working temperature:** -20~+60°C **Working humidity:** 20-90%RH, non-condensing  
**Product Weight:** 0.465 Kg **Product Size:** 129\*124\*56 mm (L\*W\*H)  
 When the input current is greater than 2A, Provide output short circuit protection and reverse connection protection  
 Three-stage charging mode (constant current, constant voltage, float charge), smart fan, battery on-line detection and charge indication function



**BELC20A**

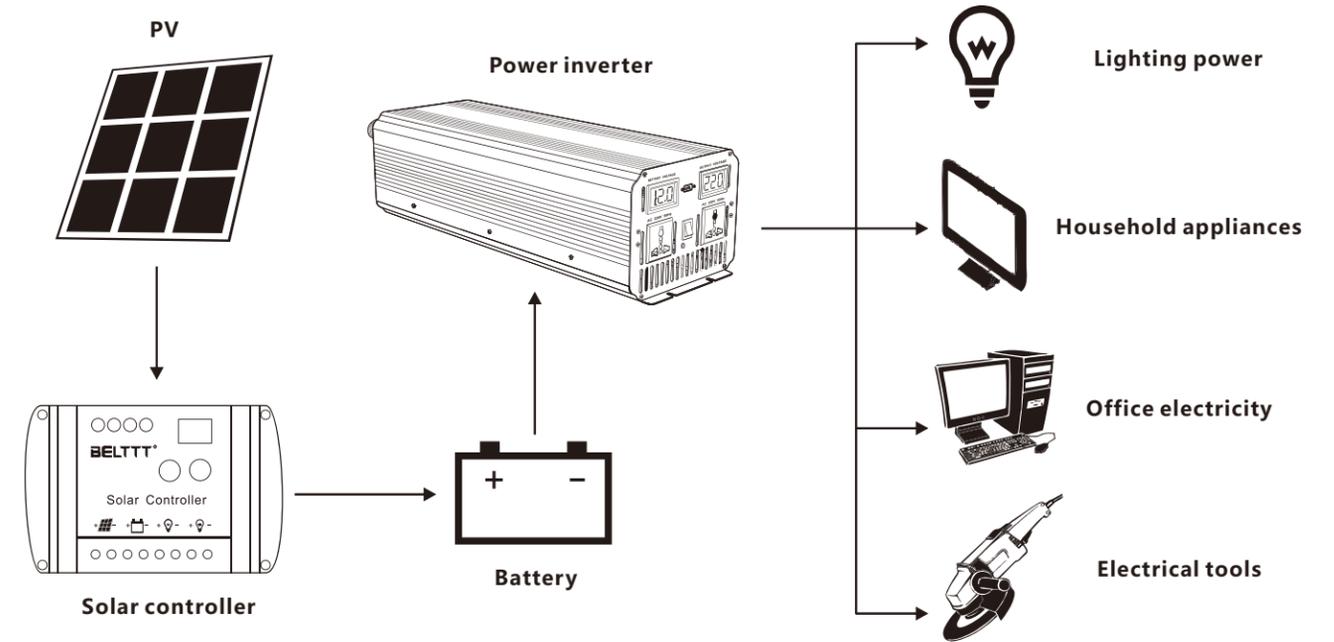
**Charging voltage:** 12V **Charging current:** 20A  
**Constant voltage charging voltage:** 14.6V **Float charge Charging voltage:**13.7V  
**Input voltage range:** 180V-260V **Frequency:** 50Hz/60Hz **Full load efficiency:** 85%  
**Working temperature:** -20~+60°C **Working humidity:** 20-90%RH, non-condensing  
**Product Weight:** 0.99 Kg **Product Size:** 209\*140\*64 mm (L\*W\*H)  
 When the input current is greater than 5A or the output current is greater than 48A, the fuse is automatically blown short circuit protection and reverse protection  
 Three-stage charging mode (constant current, constant voltage, float charge), smart fan, battery on-line detection and charge indication function



**BELC50A**

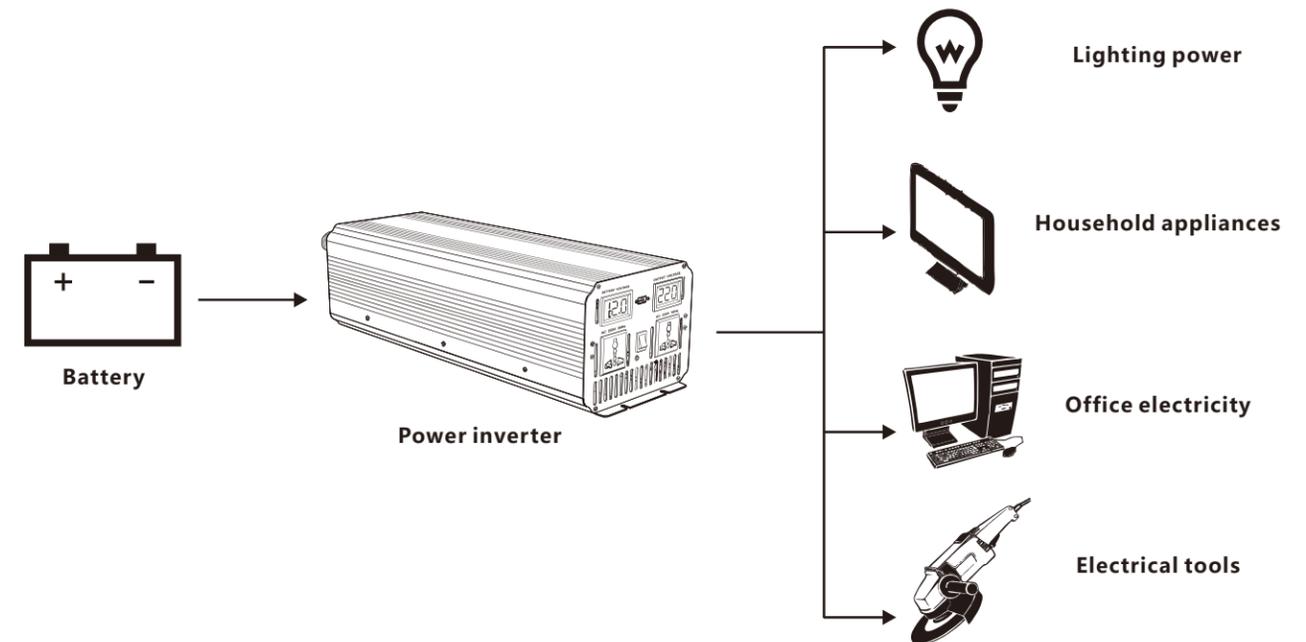
**Charging voltage:** 12V **Charging current:** 50A  
**Constant voltage charging voltage:** 14.4V **Float charge Charging voltage:**13.5V  
**Input voltage range:** 180V-260V **Frequency:** 50Hz/60Hz **Full load efficiency:** 85%  
**Working temperature:** -20~+60°C **Working humidity:** 20-90%RH, non-condensing  
**Product Weight:** 1.96 Kg **Product Size:** 290\*180\*70mm (L\*W\*H)  
 When the input current is greater than 10A or the output current is greater than 95A, the fuse is automatically blown short circuit protection and reverse protection  
 Three-stage charging mode (constant current, constant voltage, float charge), smart fan, battery on-line detection and charge indication function

## Solar energy off-grid power system connection diagram



Inverters, solar controllers (can also buy integrated inverter and controller function of solar energy control one machine), solar panels, batteries can form a complete set of solar off-grid power generation system.

## Inverter emergency power supply connection diagram



The inverter and the battery can form an independent power supply system. The load of the equipment and the time of use must be determined according to the output power of the inverter and the capacity of the battery. The inverter can't charge the battery. If you need to charge the battery, you need to choose the UPS inverter with charging function, or buy another charger.