

Overview

TPower series is a low frequency pure sine wave inverter which can convert 110V/220Vdc to 220V/230Vac. The equipment consists of DC-AC inverter module and AC-AC bypass module. It features high reliability, high efficiency, concise outline, small volume, full protection functions, easy installation and operation.

The DC-AC inverter module is based on full digital and intelligent design. It adopts the advanced SPWM technology, outputs the pure sine wave and converts 110/220VDC to 220/230VAC which is suitable for AC loads of household appliances, electric tools, commercial units, electronic audio and video devices etc, especially for solar photovoltaic system. AC-AC bypass module adopts advanced control algorithm to achieve fast switching, it ensures the stability of output voltage, adopts high performance, high reliability semiconductor module to reduce volume and improve life span.

The product adopts 4.2 inch LCD display design, which displays real-time data and system running status.

The chassis is designed with sheet metal structure, which has the characteristics of high strength, shielding electromagnetic interference and so on. The chassis can be equipped with universal rotating casters and lifting support feet, which can fix or move the inverter at any time, to improve the mobility of the products.



Features

- Adoption of advanced SPWM technology, pure sine wave output
- Adoption of completely isolated inverter technology
- Low output harmonic distortion (THD \leq 3%)
- Bypass priority ,Inverter priority mode optional
- Output voltage 220/230VAC and frequency 50/60HZ optional
- Function of real-time power query and output power statistics
- Multiple automatic protection functions of short circuit / overheating / overload
- Friendly operation interface, 4.2 inch LCD display design, which displays real-time data and system running status
- Multiple LED indicators that instantly indicate the operating state of the system
- Adopt soft-startup design, avoid battery damage caused by high current from system powered
- Independent control of AC output by AC OUT button
- Overload operation under 1.1times
- Fan intelligent control, reduce loss and noise
- Adopt high reliability low power consumption and imported semiconductor module
- Remote switch&RS485 communication interface can remote monitoring and hardware startup
WIFI or Bluetooth communication module is optional
- 360 °Free movement and fixation (Optional casters)
- Modular design for easy maintenance

Technical Specifications

Model	TP20KB-220/220-1
Nominal system voltage	220VDC
Input voltage range	185 ~ 295VDC
nominal output power	20KVA
Output voltage	220/230Vac±3%(battery power supply mode)
Output Frequency	50Hz/60Hz±3%(battery power supply mode)
Load power factor	0.2-1 (VA is less than Output Continuous Power)
Output mode	Single Phase
Wave form	Pure Sine Wave
Distortion THD	≤3% (resistive load)
Max. efficiency	>90%(resistive rated load)
Bypass input voltage range	170VAC ~ 275VAC
Transfer time	12mS
No load consumption	≤1.8A
Backlight time	30S (Keystroke lighting)
Environmental parameter	
Working environment temperature	-25℃ ~ 50℃ (Derating use higher than 45℃)
Noise	<65dB(Distance1m)
Enclosure	IP20
Relative humidity range	0 ~ 95%(N.C.)
Altitude	5000m(Derating use higher than 1500m)
Mechanical parameters	
Overall dimension(LxWxH)	600×447×1350mm
Package dimension(LxWxH)	680×480×1500mm
Mounting dimension	900×1050×1500mm
Net weight	188kg