

# THE THIRD GENERATION

Pure sine wave inverter

Start the revolution of the inverter

- 100% full power
- No waveform distortion
- High conversion efficiency Strong anti-interference performance
- Simple operation strong frequency and voltage stabilization functions
- Automatic protection function more than 10 years of Service life



## THE CHOICE/MODEL/MEANING OF THE INVERTER

### WHAT IS THE INVERTER ?

Inverter is a device which converts 12v/24v/48v DC power (battery, accumulator jar) into 220v 50Hz/60Hz AC power (pure sine wave/square wave) and it is widely used in office, communications, leisure and entertainment.

### TYPES OF INVERTER ?

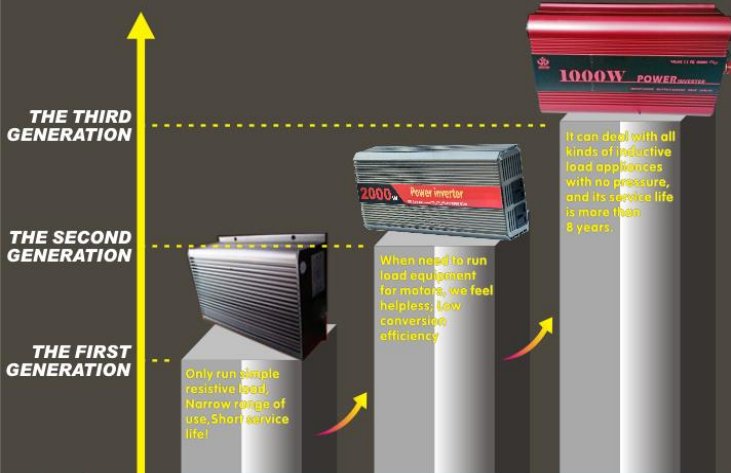
Inverters can be classified by waves: one is pure sine wave inverter and another one is modified square (our company called modified sine) wave inverter. Pure sine wave inverter can provide high quality AC power and run any roads (like inductive appliance and resistive appliance) with no electromagnetic interference but high cost. Modified sine wave inverter can meet most of our electricity demand. It is high efficiency, low noise and cheap price, but it only runs resistive appliance.

Inverter can be classified by usage as following: solar inverter, inverter with charger, household inverter, car inverter etc.

### SIX PROTECTION FUNCTIONS



### OLD AND NEW PERFORMANCE CONTRAST



## Signal indicator

Green light: normal operation  
Red light: failure indication

## USB output

Direct current output  
mode 1A/5V

## Power switch

I: ON turn on (start working)  
O: OFF turn off (stop working)

## Alternating current output

The socket model is chose by users: 12V/24V/48V switch into 110V/220V ( $\pm 10\%$ )



## Positive terminal

Connect with the battery's positive pole.

## Intelligent fans

According to product temperature and loads operation condition, the fans will open and shut up intelligently with energy saving and high efficiency.

## 100% fine copper

Copper plus silver content  
99.5 to 99.95%  
Good electrical conductivity,  
high efficiency

## Negative terminal

Connect with the battery's negative pole.



Quality depends on the details  
Professional research and development over 31 years



### With pure copper and the high density of the copper strip voltage transformer

100% pure copper full power high frequency density coil transformer, output more stability, more safely



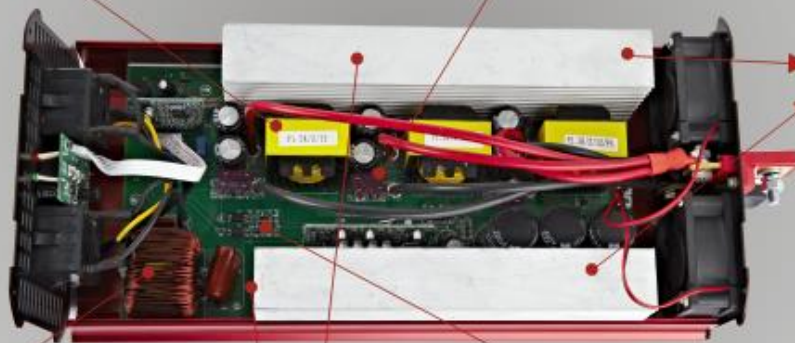
### insurance with chip inserted

Load large current, loading safety



### cooling fin

Larger full aluminium material cooling fin Heat faster and more efficient



### All copper ring

Used to suppress common mode noise, prevent interference signals generated by inverter affects the use of electrical appliances.



### Power tube

Import FAIRCHILD IGBT+IR CPU; Performance is more stable, more efficient, Built in cooling silicone, high temperature is not a problem



### Circuit board

Use jiantao plate with the SMT patch technology Combined with industrial production conditions, to ensure that the finished product zero error With multiple shockproof function and anti-throw protection function.

# INTERNAL DISPLAY AND COMPARISON



Details highlight quality

Professional research and development over 31 years



## THE SAFEST DESIGN—THE BUILT-IN FINE COPPER TRANSFORMER

**WIN!**

**FAIL!**

**VS**



**built-in two fine copper isolation transformers**  
To protect the safety of power source is to protect the safety of life.

**Other inverters only with simple relay**  
The transformer with any fine copper can't avoid breakdown—electrical appliances burning.

Model : TW-1500		TW-1500-12V	TW-1500-24V	TW-1500-48V
AC Output	Continuous power:	1500W		
	Surge power:	3000W		
		120%<load<load</load		
		150%<load<load</load		
	Output Waveform	Pure Sine Wave (THD < 3%)		
	Output Frequency	50Hz±0.1% or 60Hz±0.1% (Optional)		
	AC Output Voltage	100~120VAC / 200~240VAC (Optional)		
DC Input	DC Input Voltage	12V DC	24V DC	48V DC
	Voltage Range	10.8V-15.5V	21.6V-31V	43.2V-62V
	Low Voltage Alarm	10.8V± 0.2V	21.6V±0.4V	43.2V±0.8V
	Low Voltage Shut down	10.2V±0.2V	20.4V±0.4V	40.8V±0.8V
	Over Voltage Shut down	15.5V±0.2V	31V±0.4V	62V±0.8V
Converting Max. Efficiency		90% (Full Loading) / 95% (1/3 Loading)		
No Load Consumption		<0.8A	<0.4A	<0.2A
Protection	Over Thermal:	Shut Off Output Automatically, Temperature >75°C		
	Short circuit protection:	Reverse Polarity (External Fuse)		
	Cooling Fan automatically run	Temperature ≥45°C		
Environment	Working temperature	-10°C~+50°C		
	Working humidity	20%~90% RH Non-Condensing		
	Storage Temperature Range	-30°C~+70°C		
LED Indicator Light		Inverter, Fault		
Packing	Inner Box Dimensions (mm)	315*195*135mm		6pcs /Carton
	Inner Box Weight (kg)	2.6 kg		
	Carton Dimensions (mm)	420*340*460 mm		
	Carton Weight (kg)	16 kg		