



STAND TYPE LOW-FREQUENCY  
PURE SINE WAVE INVERTER

# ESG

## Features and function



- Pure sine wave output.
- CPU control technology; SCM control.
- Strong ability of impact resistance.
- have UPS function AC charging function.
- Wide input voltage range: 145-280V; three-step AVR (two-step-up, one step-down)
- Protection against overload, short-circuit, overvoltage, under-voltage and over-temperature, etc.
- Anti reverse connection protection and high-low voltage protection (option).
- Special overload protection: when it is overload, it will lock the unit automatically, when it restores, it will restart the unit automatically again.
- Strong inverter ability. It can change frequency immediately and it is able to drive the inductive load such as air conditioner, refrigerator, motor, etc.
- LCD display
- Meet the need of different power supply.
- Use MOSFET and IGBT.

## Working mode options

### 1. the city power priority:

when city power is available, the inverter will work AC output, city power will supply to load; when have both city power, inverter will charge power to battery. when city power failed, inverter will use battery power take the load.

### 2. Battery priority:

when it have battery power, inverter will use battery power take the load, when battery power is lower, inverter use UPS function, use city power take the load and charge the battery.

## Applicable scope

This is a new type of electricity, designed to resolve the problem of power shortage for the families, companies and other places. It can use for solar power system, light, radio, DVD, TV set, fans, freezer, computers, small hand-drill, and communication equipment. The inverter/UPS is widely used in the field of family houses, schools, hospitals, offices, etc.



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## Technical specifications

Model		ST-1000	ST-1500	ST-2000	ST-2500	ST-3000	ST-4000	ST-5000	ST-6000
Rated capacity(W)		700W	1000W	1400W	1800W	2000W	3000W	3500W	4800W
Battery Voltage		12VDC	24 VDC				48VDC		
Working Mode		PV(Photovoltaic priority) / AC（AC priority）optional							
PV & controller	Input Voltage Range 〉	12Vdc-25Vdc			24Vdc-50Vdc			48Vdc-90Vdc	
	Max. Charge Current	30A	40A	40A	40A	50A	50A	60A	60A
	Max. Conversion Efficiency	95%							
Display	LCD	LCD screen + LED lights							
Mains status (Optional)	Input Voltage Range	140Vac~275Vac							
	Input Frequency Range	45-65 Hz（automatically transfer to invert mode when overfrequency）							
	Output Voltage Range	190Vac~245Vac							
	Input PF.（AC/DC）	0.95							
	Efficiency	mains mode≥ 89%							
	Charge Current	10A-30A							
	Mains Overload	warning until decrease load							
	Short Circuit	yes							
Inverter Output	Inverter Output Voltage	220V±3%							
	Output Frequency	0 Hz / 60Hz ± 0.3Hz frequency adaptive							
	Output Power Factor	≥0.8							
	Wave Form Distortion	linear load≤ 3%							
	PV-AC Transfer Time	4Ms typical value Max.6 Ms							
	Efficiency	invert mode≥ 85%							
	Inverter Overload	110%-130% shutdown at 30s. 130%-150% shutdown at 3s							
	Short Circuit	system automatically shut down							
Alarm	Mains Abnormal	1time/1S, silence auto after 5S							
	Low Battery	1time/1S and flash battery last grid							
	Overload	1time/ 1S and display "overload" grid							
Others	Output Sockets	universal sockets / customized							
	Surge Protection	optional							
	Ambient Temperature	0℃ ～40℃							
	Ambient Humidity	10% ～90%(non condensed)							
	Noise	≤ 50dB							
Appearance	ExternalSize(mm) L×W×H	450*285*125mm（from ST-1000 to ST-3000）						640*370*185mm(from ST-4000 to ST-6000)	
	Gross Size(mm) L×W×H	470*315*142						670*412*215mm	
	Qty/Ctn	1							