

# User Manual

# Inverter 300W-500W

Read the instructions carefully before installing, operating or maintaining the inverter.

## CAUTION

- Non-qualified electricians are forbidden to open the case due to hazard of electrical shock.
- Consulting the dealer is required before using for below equipment. Its application, configuration, management and maintenance must be specially considered and designed.
- Medical equipment which is directly related to patients' life.
- Elevator and other equipment which may endanger personal safety.

## Safety and General Information

- Read all safety information and operating instructions carefully before attempting to install, operate, service or maintain the inverter.
- Do not disassemble this inverter. Contact your local service center if maintenance or repair is needed.
- Disconnect all connection wiring before maintenance or cleaning to avoid the risk of electric shock.
- Do not use liquid extinguisher if there is a fire, a dry powder extinguisher is recommended.
- Do not dispose of the batteries with fire. The batteries may explode.
- Do not open or mutilate batteries. Released electrolyte inside is harmful to the skin and eyes, and maybe toxic.
- Do not connect the positive pole and negative pole directly, otherwise it will cause electric shocks or will be on fire.
- Be sure the air vents on the UPS are not blocked. Allow adequate space for proper ventilation.

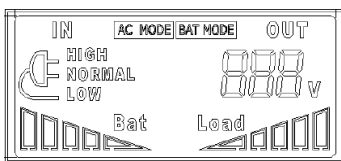
## Operation

### Front Panel Buttons and Display Interface

1. Power ON/OFF button 

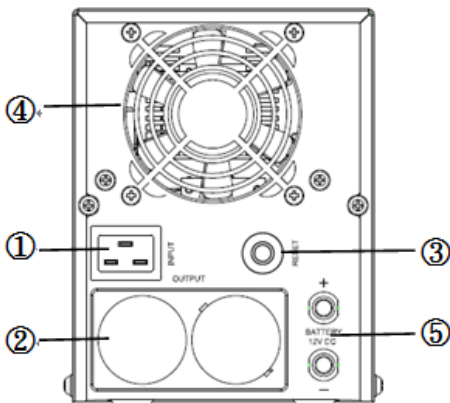
Turn on/off the UPS with LCD display: Press and hold the Power ON/OFF button on the front panel for 3 seconds

2. LCD display screen



Display information: Mains state/Output voltage/Battery capacity/Load capacity.

### Rear Panel



- ① Input power cord/IEC input outlet: connects the unit to utility power.
- ② Output outlets: connect critical equipment such as computer, monitor, or other data devices into these outlets.
- ③ Fuse/Circuit breaker: provides input protection.
- ④ Fan: provides heat dissipation.
- ⑤ External battery connection cable (Note that the red cable is connected to the positive terminal, black cable is connected to the negative terminal).

**Note:** The above pictures are for reference only, please in kind prevail.

## Specifications

MODEL	300W	500W
<b>DC INPUT</b>		
Nominal input voltage	12V	
DC input voltage range	10 ~ 15V	
<b>AC INPUT</b>		
Bypass voltage	0 ~ 264Vac for 220 / 230 / 240Vac;	
AC voltage	150 ~ 282Vac for 220Vac, 156 ~ 294Vac for 230Vac, 163 ~ 307Vac for 240Vac	
Nominal input frequency	50 / 60Hz (auto-sensing), 42.5 ~ 57.5Hz for 50Hz, 51 ~ 69Hz for 60Hz	
<b>OUTPUT</b>		
DC mode output voltage	220 / 230 / 240Vac ± 5%	
AC mode output voltage	220 / 230 / 240Vac ± 5%	
Nominal output frequency	50 / 60Hz ±0.3 (auto-sensing & settable)	
Output waveform	Pure sine wave	
Output power	300W	500W
Efficiency	Max. 95% (mains mode); Max. 80% (inverter mode)	
ECO mode	Settable (<3% load) to enter in 80s	
No-load shutdown	Settable, time can be set (1 ~ 99min), load can be set (3% ~ 50%)	
Transfer time	≤10ms	
Power factor	1.0	
THD	< 5% (linear load)	
Inductive load	Yes	
Motor load	Yes	
Rectifier load	Yes	
Overload capability	Mains mode: 110% for 120s, 125% for 60s, 150% for 10s (switch to bypass) Inverter mode: 110% for 60s, 125% for 10s, 150% for 10s (shut down)	
<b>BATTERIES</b>		
Charging current	5A(optional 10A/15A)	10A(optional 5A/15A)
Equalizing charge voltage	Single battery 14.4Vdc (default), 13.6 ~ 15Vdc adjustable	
Floating charge voltage	Single battery 13.7Vdc (default), 13.2 ~ 14.6Vdc adjustable	
Charge mode	3 stage charge mode	
EOD	Single battery 10.2Vdc (default), 9.6 ~ 11.5Vdc adjustable	
Reverse warning	Buzzer	
<b>OTHERS</b>		
Human-machine interface	LCD&BUZZER	
Operating temperature	0°C~40°C	
Operating humidity	5% ~ 95% RH	
Forced air cooling	Variable speed fans	
Net weight (kg)	5.3	7.5
Gross weight (kg)	5.8	8
Dimensions (W×D×H) (mm)	281×132×176	
Packaged dimensions (W×D×H) (mm)	355×195×251	