



## Pure sine wave output

1. AC output is the mains standard
2. Purifies the harmonic pollution of the mains
3. Protects the safety of electrical equipment and users
4. Improves the operation quality of electrical equipment and saves energy

## Low Frequency Hybrid Inverter

Over current protection

Over voltage protection

Low voltage protection

short circuit protection

Over temperature protection

- ★ Stable, intelligent and efficient
- ★ Strong load capacity, 3 times peak power, Easily cope with inductive loads, such as motors, pumps, air conditioners, etc.
- ★ AC input & AC output adjustable (110VAC: 104-120VAC, 220VAC: 210V-230VAC) for different precision electrical appliances
- ★ AC charging is adjustable from 0-30A / 0-40A / 0-50A.
- ★ In battery priority mode, can set to turn on and off the AC charging
- ★ 3-level voltage stabilizer to protect electrical appliances from high and low voltage damage
- ★ Built-in high efficiency up to 99% 50-120A MPPT solar charger controller

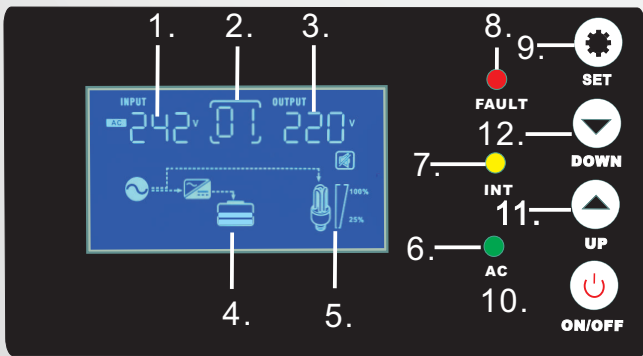
Can set battery high voltage protection and low voltage protection , float charge and equalize charge, compatible with different types of batteries



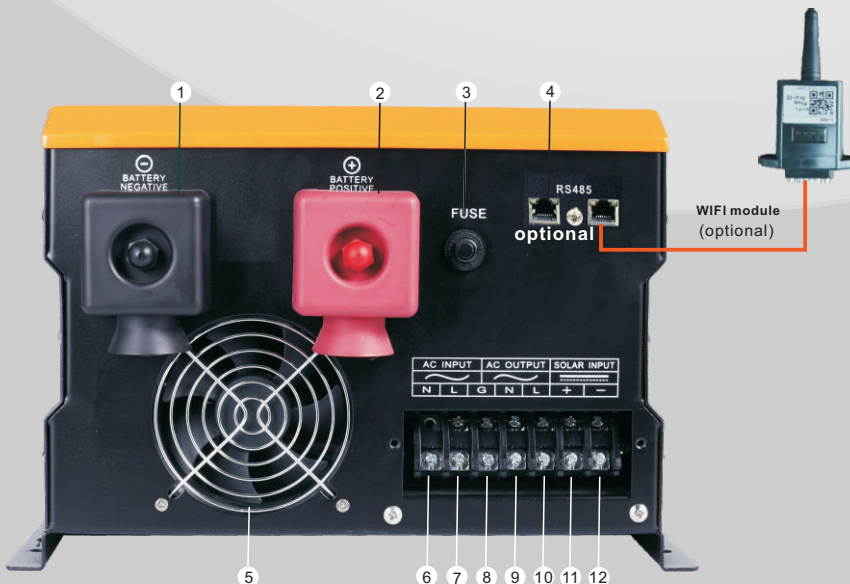
### Cooling system

1. Intelligently control fan ,when the temperature  $>45^{\circ}\text{C}$  automatically turn on,  $<45^{\circ}\text{C}$  closed, when the temperature is higher, the fan speed faster.
2. The load power  $> 50\%$  turn on ,  $< 50\%$  closed
3. AC charging current  $>10\text{A}$  turn on ,  $< 10\text{A}$  closed

### LCD+LED Visual display, clear at a glance

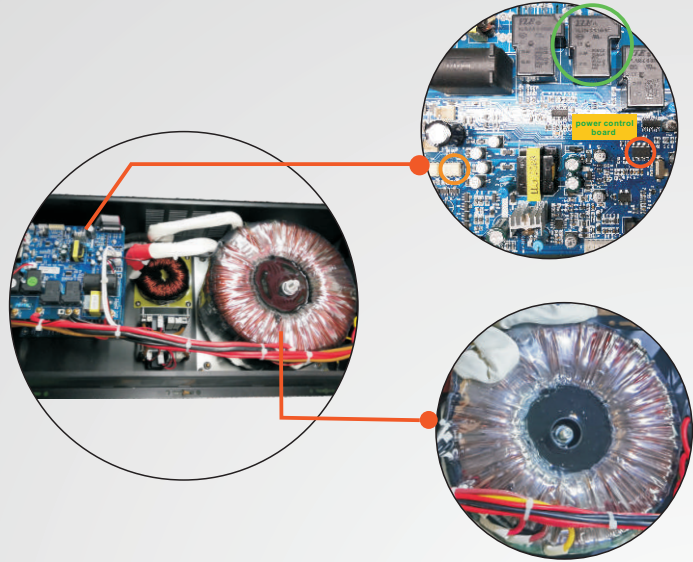


|     |                |  |
|-----|----------------|--|
| 1.  | INPUT          | AC input voltage                       |
| 2.  | Hz / (01)      | output frequency / Working mode        |
| 3.  | OUTPUT         | AC output voltage                      |
| 4.  | BATT           | Battery working condition and capacity |
| 5.  | LOAD 25%--100% | Load power Overload condition          |
| 6.  | AC             | AC input voltage normal                |
| 7.  | INVERTER       | Battery mode                           |
| 8.  | FAULT          | False signal light                     |
| 9.  | ⊕              | MUTE/FUNCTION                          |
| 10. | ⊖              | ON/OFF                                 |
| 11. | ⬆              | UP                                     |
| 12. | ⬇              | DOWN                                   |



support mobile APP, can monitor and set inverter parameters

- 1 Battery input positive
- 2 Battery input negative
- 3 AC input overcurrent switch protector
- 4 RS485WIFI network interface (optional)
- 5 Cooling fan
- 6 AC input neutral (blue)
- 7 AC input live (brown)
- 8 AC input & output ground (yellow-green)
- 9 AC output neutral (blue)
- 10 AC output live (brown)
- 11 Solar input positive (+)
- 12 Solar input negative(-)



Big current relay, low temperature, stronger impact resistance

SMD components small size, light weight, high in reliability and strong in vibration resistance, low solder joint defect rate ,more reliable

Large memory high-speed DSP chip Flexible, accurate, strong anti-interference, real-time and fast realization of various digital signal processing

### Toroidal transformer

low temperature, low noise, high efficiency  
**no load current  $\leq 0.6A$**

### Packed in Strong Carton :



- 01 City power priority: When the main power is available, the city power supply power to the load and charging to battery, when the city power is off inverter automatically converts and use the battery supply power to the load .
- 02 Energy saving mode : When the inverter is in battery priority mode and the output load is less than 10% of the power, the AC power output will be turn off,when the load is greater than 11% of inverter rated power, the inverter restarts output. This function is to reduce the battery loss and extend the battery backup time.
- 03 Battery priority: The battery supply power to the load. When the battery voltage is low Inverter automatic conversion use city power supply power to the load. (AC charging to battery or not set by PC).When the battery voltage is restored , the battery will supply power to the load again.
- 04 City power priority unattended: Inverter automatically turn on when connected to city power or battery voltage is normal. Inverter use city power supply power to the load first.
- 05 Battery priority unattended : When the battery voltage is normal ,the inverter automatically turn on and battery supply power to the load. When battery is low voltage shutdown , the inverter enters standby and waits for solar charging to battery .When the battery voltage is restored ,the inverter automatically turn on .





# Specification:

| Model                 |   | 1000W  | 1500W | 2000W | 3000W                        | 4000W         | 5000W           | 6000W                                    | 8000W             | 10000W               | 12000W |  |
|-----------------------|---|--|-------|-------|------------------------------|---------------|-----------------|--|-------------------|----------------------|--------|--|
| Inverter Input        | Rated capacity                                | 1000W  | 1500W | 2000W | 3000W                        | 4000W         | 5000W           | 6000W                                    | 8000W             | 10000W               | 12000W |  |
|                       | peak power                                    | 3000W  | 4500W | 6000W | 9000W                        | 12000W        | 15000W          | 18000W                                   | 24000W            | 30000W               | 36000W |  |
|                       | Commercial Power range                        | 110VAC:83V-137VAC 120VAC:90V-150VAC<br>220VAC:165V-275VAC 230VAC:173V-287VAC   |       |       |                              |               |                 | 220VAC:176V-264VAC<br>230VAC:184V-276VAC |                   |                      |        |  |
|                       | AC frequency range                            | 45-65HZ  |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Efficiency                                    | >85%   |       |       |                              |               |                 |  |                   |                      |        |  |
| MPPT Solar controller | MPPT Solar controller                         | 30A / 50A  |       |       | 50A/60A/80A                  |               |                 |  | 80A /100A         |                      |        |  |
|                       | Solar input power                             | 360W/720W/1200Wv   |       |       | 1200W/1440W/2400W2880W/3840W |               |                 |  | 3840W/4800W/9600W |                      |        |  |
|                       | Solar input voltage(max)                      | 12VDC/24VDC:130V   |       |       | 48VDC:160V                   |               |                 | 96VDC: 280V                              |                   |                      |        |  |
| Battery               | Type  | lead-acid battery GEL battery lithium battery  |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | DC Voltage                                    | 12VDC /24VDC/48VDC   |       |       | 24VDC/48VDC                  |               |                 | 48VDC/96VDC                              |                   |                      |        |  |
|                       | Input voltage range                           | 12VDC:10.5-15VDC   |       |       | 24VDC:21-30VDC               |               |                 | 48VDC:42-60VDC                           |                   | 96VDC:84-120VDC      |        |  |
|                       | Floating charge set                           | 12V:12.9 ~ 13.6 V  |       |       | 24V:25.8V~27.2V              |               | 48V:51.6V~54.4V |  | 96V:103.2V~108.8V |                      |        |  |
|                       | Low voltage restored                          | 12VDC:12.6-14.4VDC   |       |       | 24VDC:25.2-28.8VDC           |               |                 | 48VDC:50.4-57.6VDC                       |                   | 96VDC:100.8-115.2VDC |        |  |
|                       | Low voltage shutdown set                      | 12VDC:10-10.9V   |       |       | 24VDC:20-21.8V               |               | 48VDC:40-43.6V  |  | 96VDC:80V-87.2V   |                      |        |  |
|                       | over voltage protection                       | 12VDC:16.7VDC  |       |       | 24VDC:33.4V                  |               | 48VDC:66.8V     |  |                   |                      |        |  |
|                       | over voltage alarm                            | 12VDC:15VDC  |       |       | 24VDC:30V                    |               | 48VDC:60V       |  |                   |                      |        |  |
|                       | AC charging                                   | 5A-35A(40A, 50A, 60A,70A Optional)   |       |       |                              |               |                 |  |                   |                      |        |  |
| Inverter Output       | Capable of starting electric motor            | 0.5HP  | 1HP   | 1.5HP | 2HP                          |               |                 | 3HP                                      |                   |                      |        |  |
|                       | AVR voltage range (VAC)                       | 110/120/220/230/240±10% (Auto-sensing)   |       |       |                              |               |                 |  |                   | Without              |        |  |
|                       | Power factor                                  | 100%   |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Transfer time                                 | Typical: 5ms(Including detection time)   |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Temperature protection                        | ≥85℃ alarm ≥90℃ machine shut off   |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | overload                                      | IPS automatically shut down if overload exceeds 110%-120% of normal value for 30 seconds, IPS automatically resume work if overload comes to rated load. |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Wave form                                     | Pure sine wave   |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Frequency                                     | Commercial power supply: shared frequency with the commercial inversion state:60/50±0.5  |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Output frequency range (electric supply mode) | Tracking automatically   |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Protection                                    | Overload, short circuit, battery high and low voltage, AC input high and low voltage protection  |       |       |                              |               |                 |  |                   |                      |        |  |
| temperature           | Conversion method                             | Interactive  |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | Operating Temperature                         | 0℃~70℃   |       |       |                              |               |                 |  |                   |                      |        |  |
| Appearance            | Thermal method                                | Cooling fan in intelligent control≤42℃ fan rotates slowly to ≥45℃ fan rotates fast   |       |       |                              |               |                 |  |                   |                      |        |  |
|                       | External Size(mm) (L*W*H)                     | 510*325*215mm  |       |       |                              | 645*325*215mm |                 |  | 765*320*250mm     |                      |        |  |
|                       | Gross Size(mm) (L*W*H)                        | 560*380*280mm  |       |       |                              | 730*400*290mm |                 |  | 840*405*320mm     |                      |        |  |
|                       | Net weight(kg)                                | 14   | 15    | 18    | 20                           | 31            | 34              | 35                                       | 52                | 54                   | 56     |  |
| Gross weight(kg)      | 16  | 17   | 20    | 22    | 35                           | 37            | 38              | 56                                       | 58                | 60                   |        |  |

