Low Frequency Solar Inverter

PV3500 Series (4KW-12KW)

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**INTRODUCTION**

PV3500 series is a multi-function inverter, combining functions of inverter and MPPT solar charger controller, solar charger and battery charger to offer uninterruptible power support with portable size. The comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and selectable input voltage based on different applications.

**FEATURES**

- Smart LCD setting (Working modes, Charge Current, Charge voltage, etc.)
- Built-in MPPT solar charge controller 60A/120A
- MPPT efficiency max 98%
- Powerful charge rate up to 100Amp
- Built-in pure copper UI transformer
- DC start & Automatic Self-Diagnostic Function
- RS485/USB monitoring function with free CD
- Supporting AGS, BTS port
- Compatible to generator

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**INVERTER SYSTEM CONNECTION**

PV3500 inverter system, it can work with battery as back up power for normal home power demands which take use of sunshine freely and save lots electricity bill for you.

**Solar Inverter System Connection:**
Power Inverter + Battery + Solar Panels + Grid + Application Loads

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**DIFFERENT WORKING MODES** (the sequence that the load get power from)

You can choose different working mode based on your need.

- **SBU**
- **SOL**
- **UTI**

**MONITORING SYSTEM**

With USB can connect with computer monitoring the working stage and the data of PV, AC and battery. LCD setting is also available in computer.
### PV3500 Series (4KW-12KW)  
**Low Frequency Solar Inverter**

#### Inverter Functions
1. Switch ON/OFF  
2. LCD display  
3. Inverter indicator  
4. Charging indicator  
5. Grid indicator  
6. Fault indicator  
7. PV indicator  
8. BAT-  
9. BAT+  
10. RS485/USB communication port  
11. AC input/Bypass breaker  
12. AC output breaker  
13. Remote control port  
14. Fan  
15. BTS  
16. AGS  
17. AC input  
18. AC output  
19. PV input  
20. Ground  
21. PV2 input (optional)  
22. PVI input

### Model Specifications
- **Rated power**:
  - 4KW, 5KW, 6KW, 8KW, 10KW, 12KW
- **Surge rating (20ms)**:
  - 12KW, 15KW, 18KW, 24KW, 30KW, 36KW
- **Capable of starting electric motor**:
  - 2HP, 2HP, 3HP, 4HP, 5HP, 6HP
- **Waveform**:
  - Pure sine wave / same as input (bypass mode)
- **Nominal output voltage RMS**:
  - 220V / 230V / 240VAC (+/-10% RMS)
- **Output frequency**:
  - 50Hz / 60Hz +/- 0.3Hz
- **Inverter efficiency (peak)**:
  - >85%, >88%
- **Power factor**:
  - 0.8
- **Typical transfer time**:
  - 10ms (max)
- **Frequency range**:
  - 50Hz / 60Hz (auto sensing)

### Battery Specifications
- **Minimum start voltage**:
  - 20.0VDC/21.0VDC for 24VDC mode (40.0VDC/42.0VDC for 48VDC mode)
- **Low battery alarm**:
  - 21.0VDC +/- 0.3V for 24VDC mode (42.0VDC +/- 0.6V for 48VDC mode)
- **Low battery cutoff**:
  - 21.0VDC +/- 0.3V for 24VDC mode (42.0VDC +/- 0.6V for 48VDC mode)
- **High voltage alarm**:
  - 32.0VDC +/- 0.3V for 24VDC mode (64.0VDC +/- 0.6V for 48VDC mode)
- **High battery voltage recover**:
  - 31.0VDC +/- 0.3V for 24VDC mode (62.0VDC +/- 0.6V for 48VDC mode)
- **Idle consumption-search mode**:
  - <25W when power saver on
  - <25W when power saver on

### charger Specifications
- **Output voltage**:
  - Depends on battery type
- **Charger AC input breaker rating**:
  - 40A, 40A, 50A, 80A, 80A, 80A
- **Overcharge protection S.D.**:
  - 31.4VDC for 24VDC mode (62.8VDC for 48VDC mode)
- **Maximum charge current**:
  - 65A, 40A, 50A, 60A, 70A, 80A, 100A
- **Continuous output power**:
  - Yes Variance in charging voltage & S.D. voltage base on the battery temperature

### Mechanical Specifications
- **Mounting**:
  - Wall mount
- **Dimensions (W*H*D)**:
  - 620*385*215mm, 670*410*215mm
- **Net weight (solar CHG) (kg)**:
  - 36, 41, 41, 69.2, 75.7, 75.7, 5.2
- **Shipping dimensions (W*H*D)**:
  - 755*515*455mm, 848*618*443mm
- **Shipping weight (Solar CHG) (kg)**:
  - 56, 61, 64, 89.2, 95.5, 95.5, 2.5
- **Operation temperature range**:
  - 0°C to 40°C
- **Storage temperature**:
  - -15°C to 60°C
- **Audible noise**:
  - 60dB MAX
- **Display**:
  - LED + LCD
- **Loading (20GP/40GP/40HQ)**:
  - 140pcs / 280pcs / 320pcs