# **Application**

- 1. Back-up UPS system for industrial, commercial, household, etc
- 2. Mobile power and standby power for areasthat are lack of utility.
- 3. Off-grid solar & wind power system
- 3.1 Simple Off-grid solar & wind powersystem
- 3.2 AC first Off-grid solar & windpower system
- 3.3 DC first Off-grid solar & windpower system

### **Features**

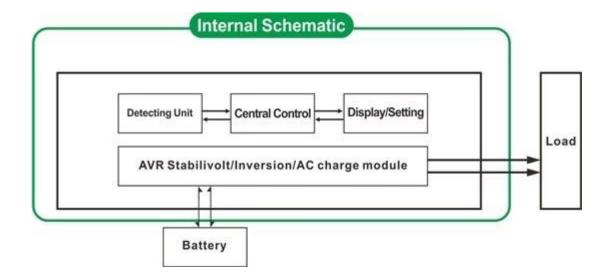
- 1. pure sine wave output, full power
- 2. CPU management and control, modular design
- 3. LCD display, can visually display various parameters
- 4. Multifunction design, can set a variety of working mode
- 5. External battery connection, convenientto expand use time and back-up power time; user can connect as many batteriesas needed
- 6. With super load carrying ability and high load capacity, this series of inverters can not only drive resistance load; but also various kinds of inductive loads, such as motor, air

conditioner, electric drills, fluorescentlamp, gas lamp, etc. It can drive almost any kinds of load.

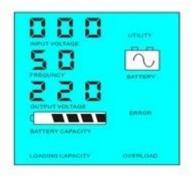
- 7. Low frequency circuit design, goodsystem stability, low failure rate and long service life (under properoperation, it may be as long as 5 years)
- 8. Perfect protection: low voltageprotection, over voltage protection, overheat protection, short-circuitprotection, overloads protection; alarm alert
- 9. CE / EMC / LVD/ RoHS Approvals.
- 10. Two years warranty, life-long technical supports

#### **Function**

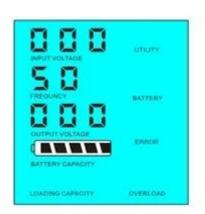
1. Sole inversion function under inversion mode □only connected to battery □, can be set to normal operatingmode and sleep mode.



1.1 Normal working mode FREQUNCY in the LCD display is set on 01. No matter whether there are AC loads connected to the inverter or not, the inverter's outputterminal will always have voltage ready to supply power to the loads. Underthis mode, the LCD will be displayed as bellow:



1.2 Sleep mode FREQUNCY in the LCD display is setas 02. If the power of the loads that connected to the inverter is lower than 5% of the inverter's rated power, there will be no output from the inverter. That is tosay, only the chip of inverter is working under such condition and the power consumption is only 1-6W; If the power of the loads that connected to the inverter is higher than 5% of the inverter's rated power, then the inverter will automatically start the inversion function and supply power to the loads within 5s. As shown below:

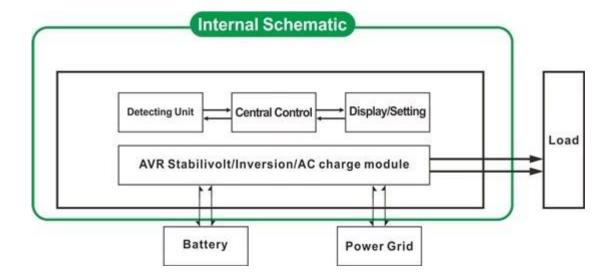




Load's power < 5% of inverter's rated power

Load's power>5% of inverter's rated power

2. UPS function under utility mode(connected to battery and utility .Can beset as utility first, battery standby mode and battery first, utility standbymode).

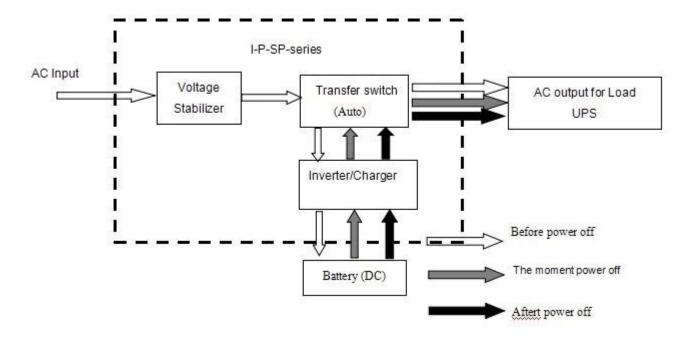


2.1 Utility first, battery standby UPSmode: FREQUENCY in the LCD display is set as 01. When both utility and batteryare connected to the inverter, utility will supply power to the loads prior to the battery. When utility is cut off, the battery will automatically continue supply power after inversion.

Steps are as follows:

- Step 1: When utility power is available, it will output directly after voltagebeing stabilized and charge batteries at thesame time.
- Step 2: When utility power is cut offsuddenly, the inverter will convert DC power to AC power automatically toensure uninterrupted power supply within 5ms.
- Step 3: When utility power becomes available again, it will automatically transfer to utility supplying power toloads and charge batteries at the same time.

See Workflow as below:



LCD displayed as bellow:





Utility supply power and charge battery

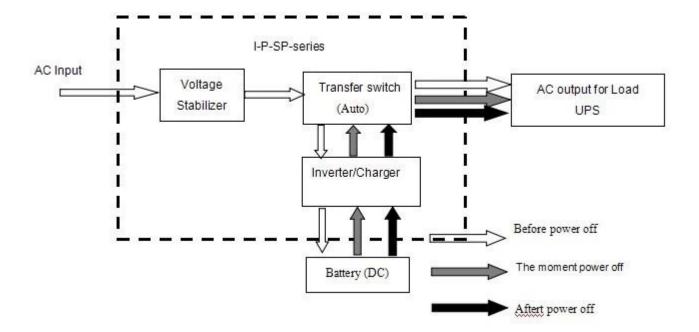
Without utility and battery supply power

2.2 Battery first, utility standby UPSmode: FREQUENCY in the LCD display is set as 03. When both utility and battery are connected to the inverter, battery will supply power to the loads prior to utility. When battery capacity is not enough, utility will continue to supply power automatically.

Steps are as follows:

- Step 1: When battery has enough power, it will supply power to the loads directly
- Step 2: When battery does not have enoughpower, it will automatically transfer to utility supplying power to the loads
- Step 3: After the battery is fully charged(e.g. by solar or wind charge controller), it will then automatically transferto battery supplying power to the loads.

See Workflow as below.



LCD displayed as bellow:



Battery has power



Battery dead, utility supply power

## **Parameter**

| Model                  |              | 10KVA  |
|------------------------|--------------|--|
| Parameter              |              |  |
| Rated Output Capacity  |              | 7000W  |
| Peak Power             |              | 14000W   |
| Battery Voltage(DC)    |              | 96V/192V[optional]   |
| Size W×D×H(mm)         |              | 420*260*605  |
| Packing Size W×D×H(mm) |              | 440*280*625  |
| Net Weight (kg)        |              | 55   |
| Gross Weight (kg)      |              | 65   |
| General Parameter      |              |  |
| Working Mode           | 1            | Utility First, Battery Standby                                   |
| □Cotting□              | 2            | Sleep Mode,no utility,load's power higher than 5% of rated       |
| <pre>□Setting□</pre>   | 2            | power, start to work automatically                               |
|                        | 3            | Battery first, utility standby                                   |
| AC Input               | Voltage      | 220V±35% or 110V+35%[optional[                                   |
| AC IIIput              | Frequency    | 50Hz±3% or 60Hz±3% [optional]                                    |
|                        | Voltage      | 220V±3% or 230V±3 or 240V±3% or 100V±3%                          |
| AC Output              |              | or 110V±3% (optional)  |
|                        | Frequency    | 50Hz±0.5 or 60Hz±0.5 (optional)                                  |
|                        | AC Charge    | 0~15A  |
|                        | Current      |  |
| Battery charge         | Charge Time  | Depend on battery capacity and quantity                          |
|                        | Battery      | Automatic detection, Charge and discharge protection,Intelligent |
|                        | Protection   | Management   |
| Display                | Display Mode | LCD  |
|                        | Display      | Input voltage, output voltage, output frequency, battery         |
|                        | Information  | capacity,Load condition,Status Information                       |
| Output Wave Type       |              | Pure sine wave output, waveform distortion rate≤3                |
| Overload Ability       |              | □120% 1 min,□130% 10s  |
| Power                  | Sleep Mode   | 1~6W   |
| Consumption            | Normal Mode  | 1~3A   |
| Conversion Efficiency  |              | 80%~90%  |

| Transfer Time |             | □5ms □AC to DC / DC to AC□                                   |
|---------------|-------------|--|
| PINIACION     |             | Overload output,short-circuit,high-voltage input,low-voltage |
|               |             | input,overheat   |
| Environment   | Temperature | -10°C <u></u> 50°C   |
|               | Humidity    | 10%□90%  |
|               | Altitude    | ≤4000m   |

### Remark

The "optional" parameter can be set as percustomer's requirement

The above is our standard parameter. Subject to change without prior notice.

We have our own professional inverter and controller R&D team and we provide technical support and OEM service.

## **Others**

Please refer to the outline design, technical documents, product brochures, etc.

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