Features

1) Easy to install.To configure a solar system, customers only need to connect it with solarpanels and batteries.

2)CPU management andcontrol,modulardesign

3)LCD display,can visually displayvarious parameters(such as the output voltage, frequency, working mode, etc)

4)Multifunctiondesign,customersdon’t need to buy solar, controller, charger and stabilizer,etc

5) External batteryconnection, convenient to expand back-up power time; user can connect as manybatteries as needed according to the local sunlight and wind.

6)With superload-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, fluorescent lamp, gas lamp, etc. It can drive almost any kindsof load

7)Low frequency puresine wave circuit design, good system stability, easy for maintenance, lowfailure rate and long service life (under proper operation, it may be as longas 5 years)

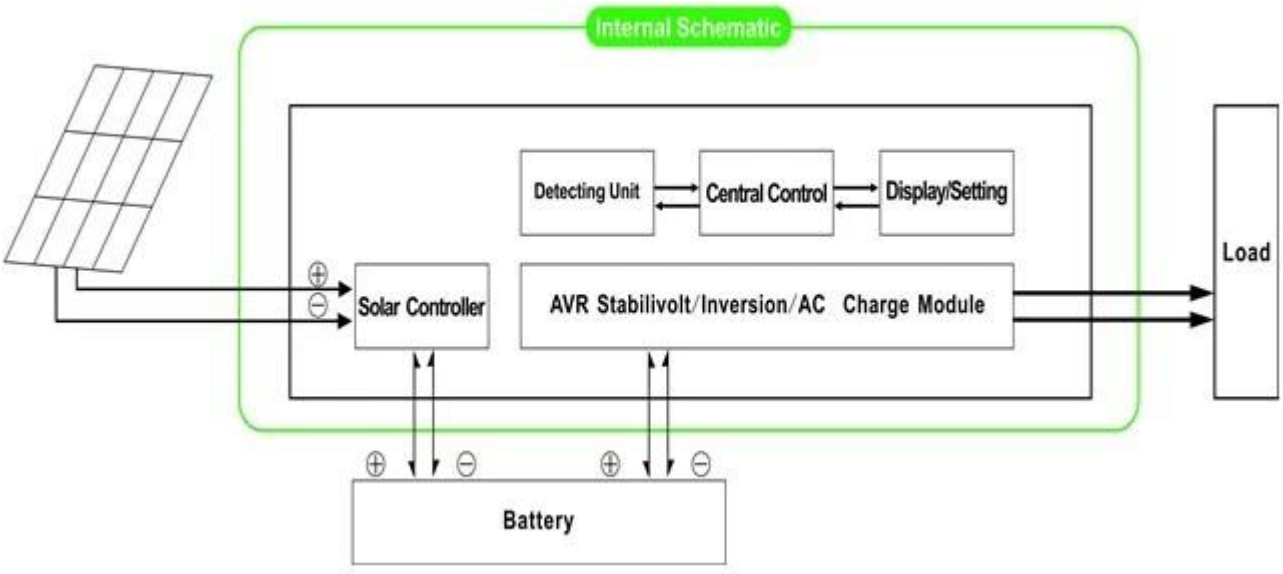
8) Perfectprotection: low voltage protection, over voltageprotection, overheat protection, short-circuit protection, overloads protection

9) CE / EMC / LVD/RoHS /CCC approvals

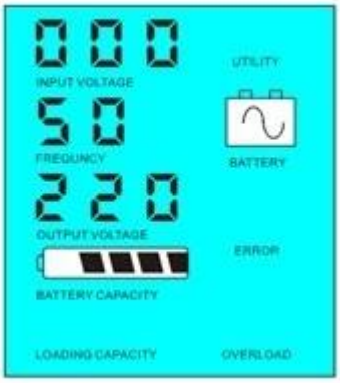
10) 2 years warranty,life-long technical supports

Function

1. Soleinversion function under inversion mode only connected to battery ,can be setto normal working mode and sleep mode



1.1 Normal workingmode□FREQUENCY in the LCD display is set as 01. No matter whetherthere are AC loads connected to the inverter or not, the inverter’s output terminal will always havevoltage ready to supply power to the loads. Under this mode, the LCD will bedisplayed as bellow:



1.2 Sleep mode□FREQUENCY inthe LCD display is set as 02. If the power of the loads that connected to theinverter is lower than 5% of the inverter’s rated power, there will be no output from the inverter.That is to say, only the chip of inverter is working under such condition andthe power consumption is only 1-6W; If the power of the loads that connected tothe inverter is higher than 5% of the inverter’s rated power, then the inverter will automatically startthe inversion function and supply power to the loads within 5s. As shown below:

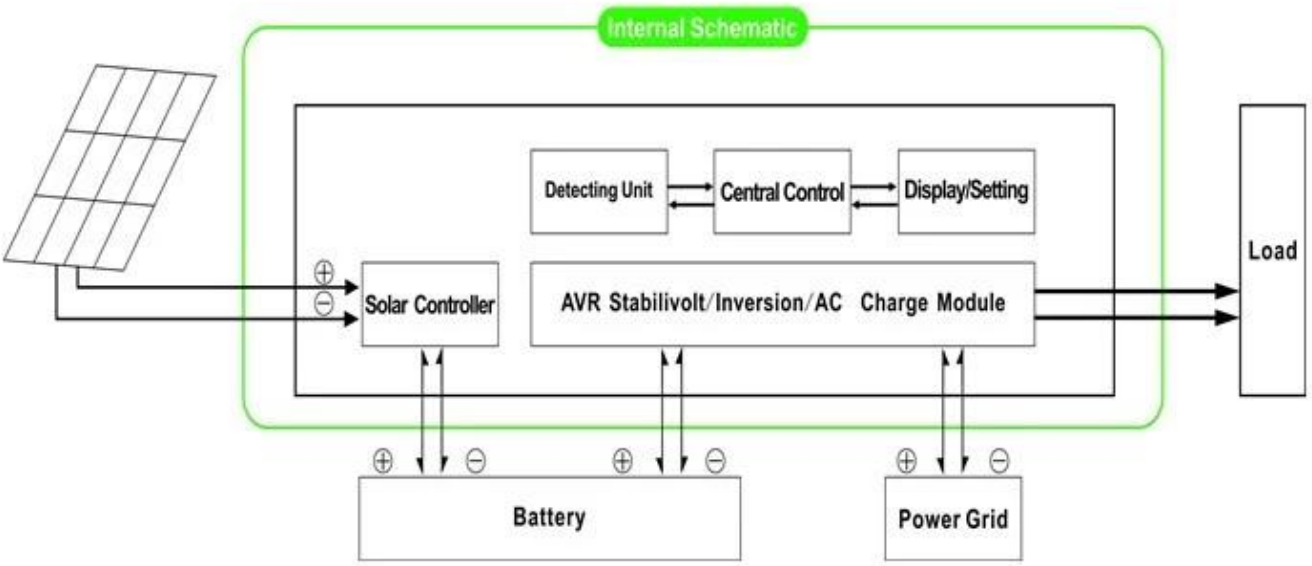
Load’s power< 5% of inverter’s rated power

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

System introduction under this mode:

1) Only the solar panel charges thebattery

2) Independent sole off-grid solarpower system; suitable for areas that are lack of utility or have rich solar energy



2. UPS function under utility mode□connected tobattery and utility .Can be set as utility first, battery standby mode and battery first, utility standby mode.

2.1. Utility first,battery standby UPS mode: FREQUENCY in the LCD display is set as 01. Whenboth utility and battery are connected to the inverter, utility willsupply power to the loads prior to the battery. When utility is cut off, thebattery will automatically continue to supply power after inversion.

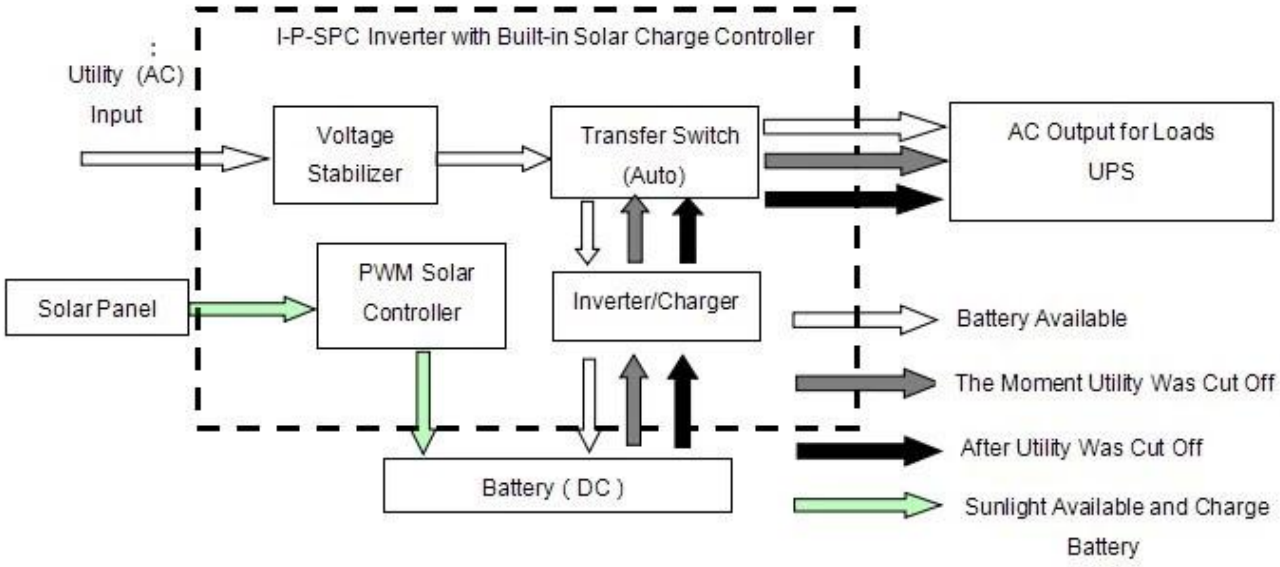
Steps are asfollows:

Step 1: When utility power is available, itwill output directly after voltage being stabilized and charge batteries at thesame time.

Step 2: Whenutility power is cut off suddenly, the inverter will convert DC power to ACpower automatically to ensure uninterrupted power supply within 5ms.

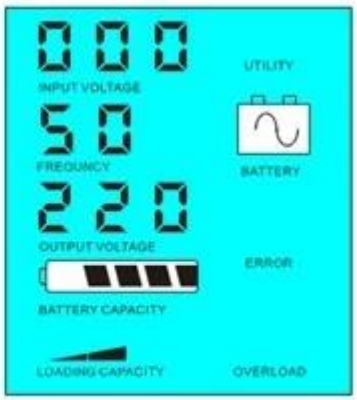
Step 3: Whenutility power becomes available again, it will automatically transfer toutility supplying power to loads and charge batteries at the same time.

See Workflowas below:



LCDdisplayed as bellow:

Utility supply power and charge battery



Without utility and battery supply power

System introduction under this mode:

1) There are 2 ways to charge thebattery, utility and solar panel

2) This system is suitable for powersystems built in areas lacking utility or power systems that frequently used inareas with/without utility

2.2.Battery first, utility standby UPS mode: FREQUENCY in the LCD display is set as03. When both utility and battery areconnected to the inverter, battery will supply power to the loads prior toutility. When battery capacity is not enough, utility will continue to supplypower automatically.

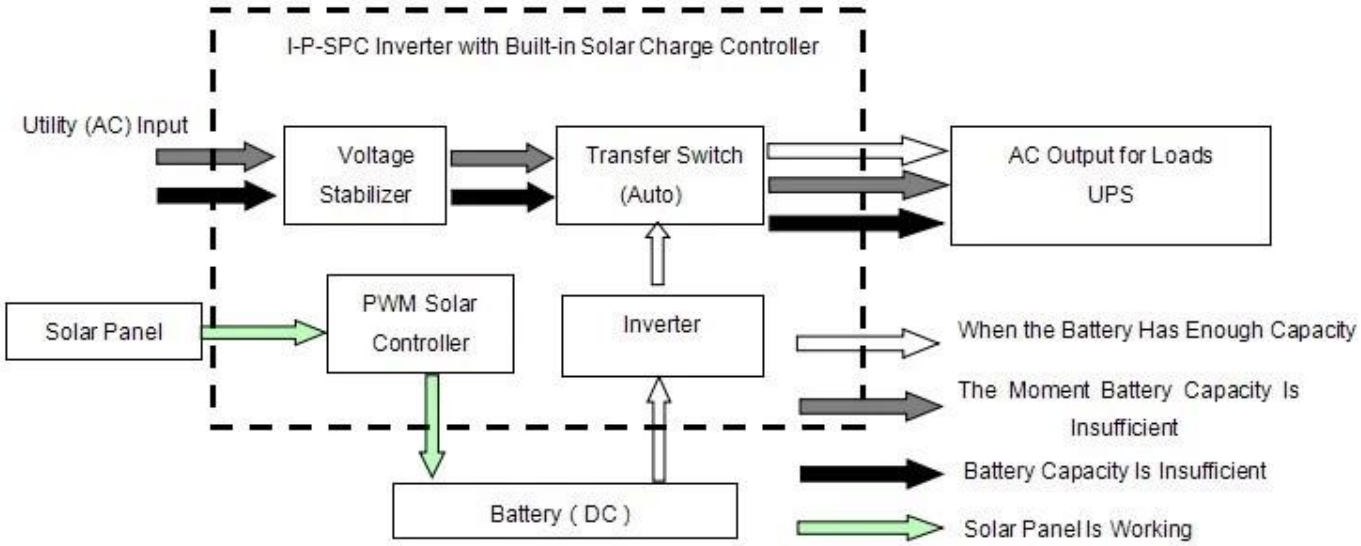
Stepsare as follows:

Step 1: When battery hasenough power, it will supply power to the loads directly

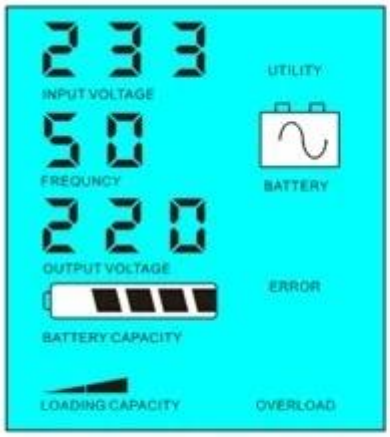
Step2: When battery does not have enough power, it will automatically transfer toutility supplying power to the loads

Step 3: After thebattery is fully charged (e.g. by solar or wind charge controller), it willthen automatically transfer to battery supplying power to the loads.

See Workflowas below:



LCDdisplayed as bellow:



Battery has power and supply power

Battery dead, utility supply power

System introduction under this mode:

1)There is only way to charge the battery: solar panel

2) This system is suitable for areas where electricity isexpensive and environmental areas where solar power can be fully used to saveutiliypower, such as family solar&wind system and streetlightsolar&wind system

Parameter

Model Parameter		500VA	700VA	1000VA	1500VA	2000VA	3000VA	4000VA
Rated Output Capacity		350W	500W	700W	1000W	1500W	2000W	3000W
Peak Power		700W	1000W	1500W	2000W	3000W	4000W	6000W
Battery Voltage(DC)□		12V or 24V		24V		24V or 48V		
PWM Solar Controller	Voltage	12V or 24V		24V		24V or 48V		
	Current	10A	20A	20A		30A		40A
	PV Max Input Voltage	12V System□25V 24V System□50V		50V		24V System□50V 48V System□100V		
Size W×D×H(mm)		335*165*375				350*220*460		
Packing Size W×D×H(mm)		355*185*395				370*240*480		
Net Weight (kg)		7	8	12	14	20	23	29
Gross Weight (kg)		8	9	13	16	22	25	31

Model Parameter		5000VA	6000VA	7000VA	10kVA	15kVA	20kVA	30kVA
Rated Output Capacity		3500W	4000W	5000W	7000W	10000W	15000W	20000W
Peak Power		7000W	8000W	10000W	14000W	20000W	30000W	40000W
Battery Voltage(DC)		48V			96V		192V	
PWM Solar Controller	Voltage	48V			96V		192V	
	Current	50A	60A		50A		50A	
	PV Max Input Voltage	100V			200V		400V	
Size W×D×H(mm)		420*260*605					420*280*625	
Packing Size W×D×H(mm)		440*280*625					440*300*645	
Net Weight (kg)		31	50	50	55	85	105	125
Gross Weight (kg)		33	55	60	65	95	115	135
General Parameter								
Working mode (setting)	01	Utility First, Battery Standby						
	02	Sleep Mode,no utility,load's power higher than 5% of rated power, start to work automatically						
	03	Battery first, utility standby						

AC Input	Voltage	220V±35% or 110V+35%（Optional）
	Frequency	50Hz±3% or 60Hz±3% （Optional）
AC Output	Voltage	220V±3% or 230V±3 or240V±3% or 100V±3% or 110V±3% (Optional)
	Frequency	50Hz±0.5 or 60Hz±0.5 (Optional)
Utility charge	AC Charge Current	0~15A
	Charge Time	Depend on battery capacity and quantity
	Battery Protection	Automatic detection, Charge and discharge protection,Intelligent Management
PV Charge		Total Current of PV Input Should Be Less Than Rated Current
Display	Display Mode	LCD+LED
	Display Information	Input voltage,output voltage,output frequency,battery capacity,Load condition,Status Information
Output Wave Type		Pure sine wave output,waveform distortion rate≤3
Overload Ability		（120% 1 min,（130% 10s
Power Consumption	Sleep Mode	1~6W
	Normal Mode	1~3A
Conversion Efficiency		80%~90%
Transfer Time		（5ms （AC to DC / DC to AC）
Protection		Overload output,short-circuit,high-voltage input,low-voltage input,overheat
Environment	Temperature	-10℃（50℃
	Humidity	10%（90%
	Altitude	≤4000m

- The above parameters with “or” means that the parameter needs to do factory settings as per customer’s preference.
- We have our own professional inverter controller and UPS R&D team and we provide technical support and OEM service.
- The controller information above is our company’s standard parameter can be changed according to customer’s requirement.

ConnectionDiagram

Others

Pleaserefer to the outline design, technical documents, product brochures, etc.

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