



5kw Off Grid Pv Inverter

5kw off Grid Pv Inverter: ISOLAR INVERTER company registered capital of 10 million yuan, now has more than 30,000 square meters, office area of more than 3000 square meters, 3200 square meters of staff dormitory, more than 1000 workers, has more than 50 experienced science and technology research and development talents, China ISOLAR INVERTER established long-term cooperation and communication with the major

testing centers at home and abroad.

Product Description

About the ISOLAR INVERTER **5kw off Grid Pv inverter** power supply (Inverter Power System) produced by our company generally refers to the device of converting low voltage DC power into high voltage (or high voltage) AC power, which can use battery or solar photovoltaic panels, wind turbine as power supply to output stable AC power. The traditional inverter power supply uses the DC motor-alternator set to realize this power conversion, while the modern inverter power supply is mostly through the power semiconductor devices to realize the power conversion, also known as the static converter.

It is better than the traditional inverter in terms of volume, weight, conversion efficiency, reliability and electrical performance. It has 4 charging modes of power supply, only using solar panels, mains power first, solar energy first, hybrid charging, it has overcharge protection support, sufficient power output, Hybrid pure sine wave, fast conversion time. Can be used in, computers, TVs, electric fans, radios, etc.

Model		GS1000	GS2000	GS3000	GS4000	GS5000	GS6000	GS8K	GS10K	GS12K
	Nominal Power	1KW	2KW	3KW	4KW	5KW	6KW	8KW	10KW	12KW
AC Input	Input Voltage Waveform	Sinusoidal (utility or generator)								
	Nominal input Voltage	120/230VAC						230VAC		
	Low Line Disconnect	85Vac±4% (Normal) or 80Vac±4% (Wide) for 120V						184Vac±4% (Normal) or 135Vac±4% (Wide) for 230V		
	Low Line Re-connect	95Vac±4% (Normal) or 85Vac±4% (Wide) for 120V						194Vac±4% (Normal) or 145Vac±4% (Wide) for 230V		
	High Line Disconnect	136Vac±4% (Normal) or 140Vac±4% (Wide) for 120V						263Vac±4% (Normal) or 263Vac±4% (Wide) for 230V		
	Max AC input Voltage	120V for Max150V, 230V for Max270V						230V for Max270V		
	Frequency	50Hz:41-54Hz, 60Hz:51-64Hz								
AC Output	Output Voltage Waveform	Sine wave								
	Power Factor	0.9~1.0								
	Nominal Output Voltage	LV:120Vac ±10%rms, HV:230Vac ±10%rms								
	Nominal Output Frequency (Hz)	50Hz ± 0.3Hz, 60Hz ± 0.3Hz								
Solar Charger	Rated Charge Current	60A								
	PV Input Voltage range	30VDC-55VDC for 24VDC, 60-145VDC for 48V								
	Max.PV open circuit array voltage	24V for 55Vdc, 48V for 145Vdc								
	Charger mode	MPPT								
	PV Low Voltage Re-connect	PV≥Bat.V+3V								
	PV Low Voltage Disconnect	PV≤Bat.V								
	Efficiency	≥97%								
AC Charger	Nominal Charger Current	20A/35A/50A/70A/90A(5 stages adjustable charging Current)								
	Over charge Protection	Bat.V≥31.0VDC for 24V battery, Bat.V≥62.0VDC for 48V battery & beeps 0.5s every 1s & fault after 60s								
Charger	Nominal Charger Current	20A/35A/50A/70A/90A(According to the inverter model) & adjustable 5 stages charging Current								
	Over charge Protection	Bat.V≥15.5VDC/31.0VDC/62.0VDC, beeps 0.5s every 1s & fault after 60s								
Efficiency	Efficiency(Battery Mode)	≥87%								
	Efficiency (Line Mode)	>98%								
	Nominal DC input Voltage	24/48VDC								

5kw off Grid Pv Inverter Features and Applications

1.Using the sixth-generation of IPM intelligent module, stable performance, with short-circuit, overload, over-temperature protection, the service life can be more than 15 years;

2.Intelligent, modular design structure is simple and easy to maintain;

3.Dual-mode start selection function, through the liquid crystal setting can set the step-down start and frequency conversion start two ways. This can give full play to the power of the inverter, no longer need to take the motor, expand the capacity of the perceptual load, to save the user's cost;

4.The output frequency can be set by itself, for example, to control the motor speed is set to 30HZ, the inverter will output 30HZ. This feature is very convenient for customers to use in different load types;

5.The input DC voltage range can be set, such as overvoltage point, undervoltage point, overvoltage recovery point, and undervoltage recovery point can be set through the LCD screen. This function is convenient to increase or reduce the battery, photovoltaic module

flexible use;

6.Output pure sine wave, it has a good transient response is less than 50MS, small waveform distortion, high inverter efficiency, stable output voltage;

7.Built-in power frequency isolation transformer, strong impact resistance, can take the motor, motor, air conditioning and other strong impact equipment. At the same time, the DC bus and the AC bus are completely isolated, to avoid the interference between the AC and DC;

8.LCD liquid crystal display, can display the input DC voltage, output frequency, phase voltage, phase current, mains bypass voltage, output power KWH, time, temperature, fault display;

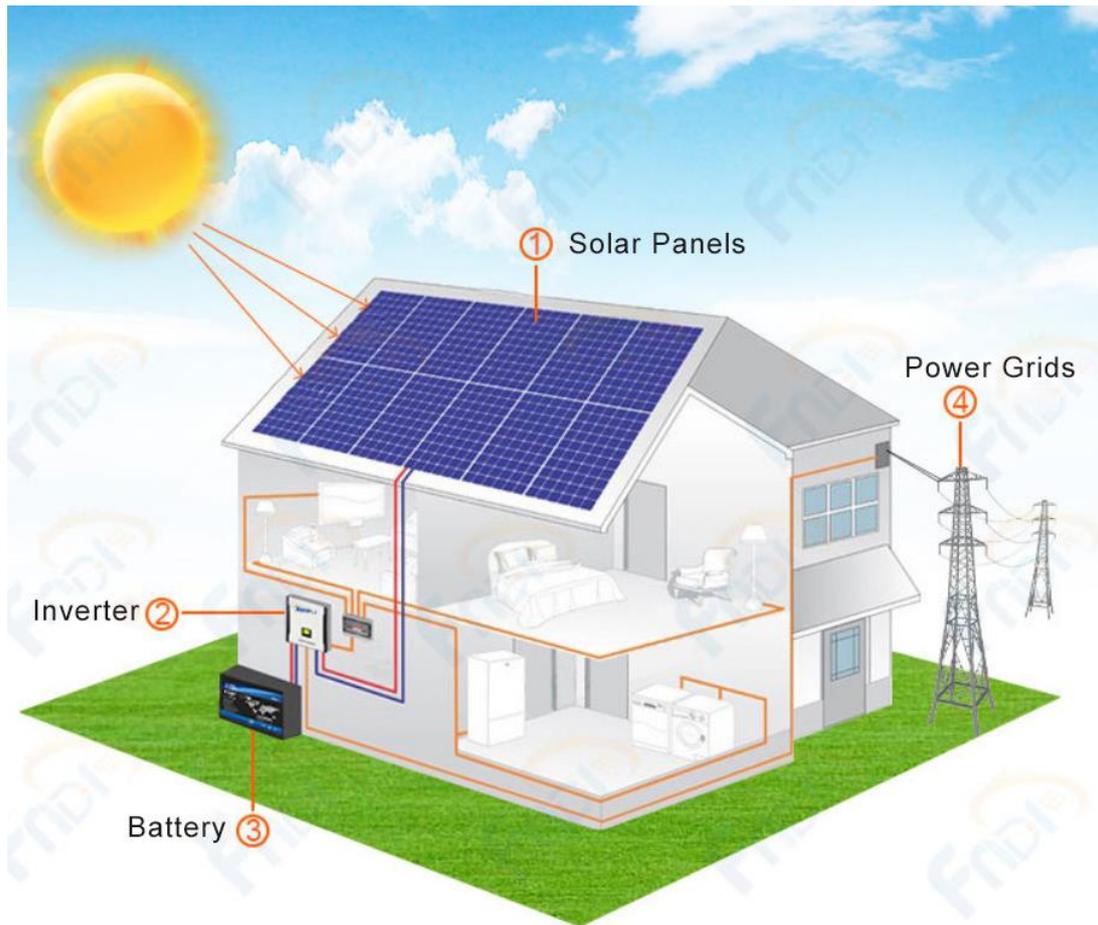
9.Using the SVPWM space vector algorithm, the high conversion efficiency, high instantaneous power and low load-free loss conversion efficiency can be more than 93%;

10.Wide voltage input can be customized according to customer requirements, input voltage range from 100-400V, 200-500V, 300V-600V or 450-800VDC, suitable for solar / wind energy system with no backup battery, DC input directly connected to solar panel / wind generator, online switching time is 0 seconds;

Working principles of the 5kw off Grid Pv Well

Working principle:

This product set of solar charge and discharge control function, in the configuration of solar modules, battery and connection cable can form a complete solar power generation system, as long as the solar lighting to the place, you can use your power generation system, suitable for indoor installation, suitable for power grid can not cover area living electricity, the field work temporary electricity, communication power supply, etc.



This product is suitable for indoor installation, suitable for residential electricity consumption in areas that cannot be covered by the power grid, for the field operation of temporary power supply, communication power supply, wind power, photovoltaic, wind and solar complementary off-grid power generation system, coastal islands, remote mountainous areas, border posts and other unmanned areas of power supply.