

Product Introduction

This Pure Sine Wave Inverter is the one of the most advanced technology DC to AC conversion products in the world, its suitable use is for areas without electricity, providing a complete power solution for strict demand applications. With SVPWM technology, it has a high conversion efficiency, high instantaneous power and low losses power output pure sine wave, applying to capacitive, inductive and nonlinear mixed-load, with superior load capacity, perfect protection function: overload, short circuit, low/over battery voltage, improper operation etc., which won't cause mechanical failures. This Inverter is very suitable for solar power systems, wind power generation systems, and wind and solar hybrid generation systems. The inverter can supply AC power to all kinds of electric equipment, air conditioners, electric motors, refrigerators, fluorescent lights, televisions, electric fans, and other industrial power supplies.

Technical Features:

- ✧ Adopted the sixth generation **efficient IPM intelligent module** from Japanese Mitsubishi, high efficiency and stable performance. It has a powerful protection function for short circuit, over load, and over temperature which is more safe and reliable. Fault rate < 1%.
- ✧ **Modular and simple structure design**, very easy and convenient for maintenance, with any fault you only need us to send parts for replacement, the maintenance is low-skill work.
- ✧ **100% full power output** can work 24h*7. **High efficiency > 94%. Service life > 15 years.**
- ✧ **Setting flexible:** 1) Wide DC input voltage range can be set: The DC input voltage range (over-voltage point, under-voltage point, over-voltage recovery point, under-voltage recovery point and under voltage recovery time) can be set, convenient for adding more solar panels or batteries in the future. 2) The output voltage can be set: the accuracy of the output voltage is very high less than 1%. 3) The output frequency 50Hz/60Hz can be set.
- ✧ **Two kinds of start mode:** Variable Frequency Start or Step-Down Voltage Start. It has higher capacity to drive motor inductive load, the normal inverter's power needs to enlarge 3-7 times at least, however our inverter with VFD function, the inverter's power does not need to enlarge times, for example: 5KW inverter can take a 3kw-5kw pump.
- ✧ **Powerful data display function.** Big color LCD can display the DC input voltage, output frequency, phase voltage, phase current, AC bypass input voltage, output power KWH, time and date, temperature, fault code display.
- ✧ **AC Bypass Input Optional, Two kinds of work mode can be set:** DC (Battery/Solar) priority or AC bypass priority can be set.
- ✧ **Pure sine wave output.** With good dynamic response less than 50MS, waveform distortion rate smaller, higher conversion efficiency and stable output voltage.

- ✧ **Built-in low frequency isolation transformer**, strong impact resistance, available with motors, pump, air conditioners and other high impact equipment. At the same time DC busbar and AC busbar are completely isolated to avoid interference, the harmonic and interference is very small, constant voltage and constant frequency stable output.
- ✧ Wide input voltage can be set according to customer's requirement. Input voltage range can be selected from 100-300V, 200-500V or 500-850V, **suitable for off grid systems without backup batteries**, it can save costs and maximize the use of solar/wind energy.
- ✧ Using SVPWM space vector algorithms, high conversion efficiency, high instantaneous power, and low losses conversion efficiency up to 94%.
- ✧ Approved by **European CE (EMC, LVD), SAA, UL1741&CSA22.2** certificate.

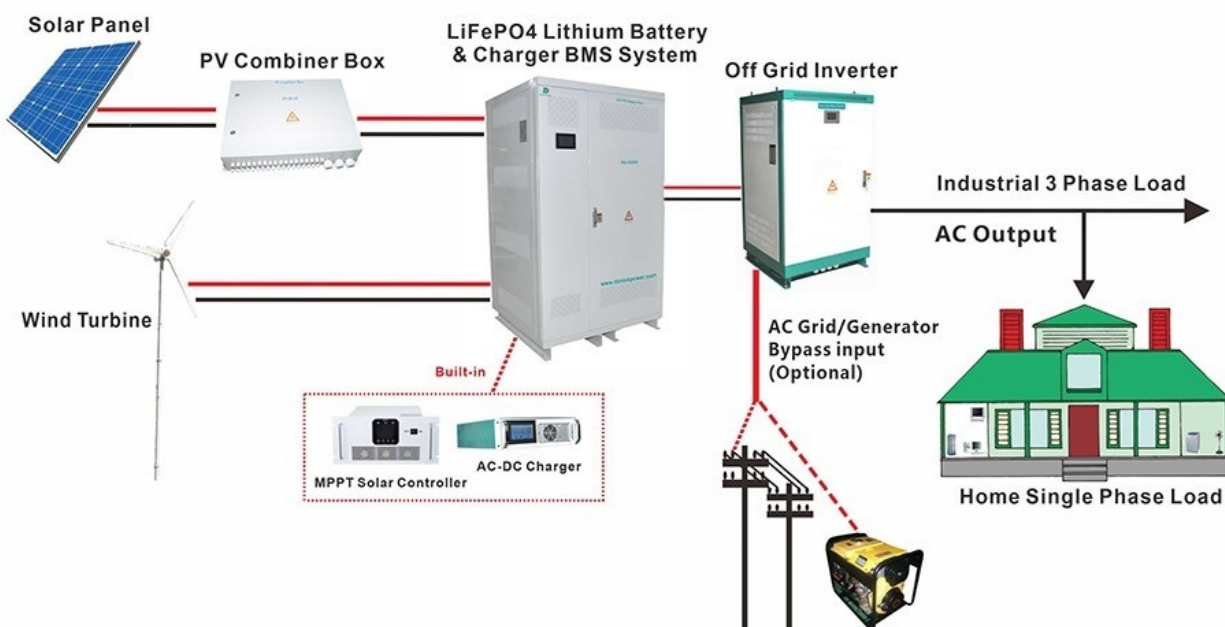
[Optional]

- ✧ **RS485 remote monitoring;**
- ✧ **Can add AC bypass input complementary function;**
- ✧ **Accept OEM.**

PV Off-grid Solar Power System

The PV Off-grid solar power generation system includes a solar panel array, solar charge controller, storage battery, Off-grid inverter, PV combiner box etc. In the sunshine, the solar panel converts the solar energy to DC power and charges the battery group by the charge controller. Then the off-grid inverter converts the DC power into AC power to supply the AC load.

Off Grid Energy Storage System



Product Show



Technical Parameter

Model	SDP-100KW
Isolation mode	Low Frequency Transformer
DC Input	
Rated battery input voltage (Vdc)	460Vdc
DC Input voltage range(Vdc)	400-660Vdc
AC Output	
Rated power (Kw)	100KW
Rated voltage	120/208Vac
Number of phases	Three phase + N + PE
Rated current (A)	277.6A (phase current)
Output frequency	60Hz
Waveform	Pure sine wave
Waveform distortion rate (THD)	Linear load≤2%
Dynamic Response time (Load 0←→100%)	5%, ≤50ms
Power Factor (PF)	0.99
Inverter Efficiency	>94%
Electrical insulation properties	2000Vac、1 Minute
Protection Function	
Overload Ability	150%、10s
Protection	Input reverse polarity, under voltage, over voltage, output over-current, short circuit, overheating etc.
Display	LCD
Communication interface (optional)	RS485 (A、B)
Method of working	Working continuously
Cooling method	Fan-cooled
Short-circuit protection	No automatic recovery, need to restart the machine
Working Environment & Mechanical dimension	
Degree of protection	IP20 (indoor)
Working Altitude (m)	Up to 8000 Feet (≤2500m)
Working temperature (°C)	-15~+50°C
Relative humidity (°C)	0~90%, No condensation
Noise (1 meter)	≤50dB
Unit size: (W x D x H)	35.5" * 37.5" * 55.2" High - (900*950*1400mm)
Reference weight (Kg)	700Kg