



www.lgis.cc



Off Grid Solar Inverter

SANDI ELECTRIC CO., LTD.

Company profile

Yueqing Sandi Electric Co., Ltd is an international PV enterprise which is located in the "capital of China's electrical appliances" Wenzhou. Specialized in the new energy source and electrical source scientific research, development, manufacture and service had surpasses for 15 years.

Sandi company's products are widely applied in solar or wind energy, construction, industry, new energy source, civilian use, electric power, medical treatment, aviation, automatically control system of war industry and national heavy engineering project.

Main products: PV Grid-connected inverter, Solar off grid pure sine wave inverter, solar pump inverter, PV array combiner box, solar charge controller, wind-solar hybrid controller, single phase to three phase converter and etc products.

Sandi is recognized by widely customers according to entirely varieties, high quality and service first. The R&D and engineering technicians have multi-year experiences in product design, product implementation, engineering service and can manufacture the solar energy generation products with the international competition capability reaches advanced level in the world, our product have passed CE(EMC&LVD), SAA(AS4777&AS3100), G83/1, G59, VDE ARN 4105 and EN62109, EN61000 certification and approved by international standard.

SANDI Electric Company insist on technology as forerunner, keep long-term, good research cooperation with all universities; fetch in and absorb international advanced technology, built strictly quality control system.

We will take the work objective of “unremitting exploration, endeavor and innovation, honesty and dedication, perfect and practicality” and quality guideline of “criterion management, intensive manufacture, quality first, service with all hearts”. Seek excellence, value innovation!

We will ceaselessly struggle and create refulgence with you together.



Qualification certificate



Off-Grid Pure Sine Wave Inverter

Our SDP series Off Grid Pure sine wave inverter is one of the most advanced DC to AC conversion products in the world, it is suitable use for areas without electricity, vehicles, ships, solar energy, wind turbine and other renewable energy systems and etc, can supply power and provide guarantee effectively for the areas with traffic inconveniences, in the mountains, pastoral, border, island and other areas without electricity. It has the main advantages of high quality sine wave AC output, microcomputer control, humanness design, and it is high efficiency and low no-load loss, and no pollution. The inverter can also supply AC power to all kinds of electric equipment, air conditioners, electric motors, refrigerators, fluorescent lights, televisions, electric fans and other industrial power supply.

Technical Features:

- ✧ Using the sixth generation efficient IPM intelligent module from Japanese Mitsubishi, high efficiency and stable performance. It with powerful protection function, the protection for short circuit, over load, over temperature is more safe and reliable. It's service life can up to 15 years or more.
- ✧ Intelligentized, modularized, simple structure design easy to maintenance.
- ✧ Two kinds of start mode: Reduction Voltage Start and Variable Frequency Start. Customers can set start mode according to the type of their load. This function is very convenient for users and also reduce frequency converter's usage, which reduced the cost of equipment investment, easy to connect wires and control.
- ✧ The output frequency can be setting via LCD panel, it's very convenient for customer.
- ✧ The output voltage can be set between -40 % to +20 % of rated voltage. And the output voltage is very accuracy $\pm 1\%$.
- ✧ The DC input voltage range can be set. Over-voltage point, under-voltage point, over-voltage recovery point, under-voltage recovery point all can be setting via the LCD panel.
- ✧ Pure sine wave output. With good dynamic response less than 50MS, waveform distortion rate smaller, higher conversion efficiency and stable output voltage.
- ✧ Low frequency transformer which ensure the DC busbar and AC busbar are completely isolated to avoid interference.
- ✧ Wide input voltage can be set according to customer's requirement. Input voltage range can be selected from 100-400V or 400-800V, suitable for solar/wind system without backup batteries, it can save many cost and maximization use the solar/wind energy.

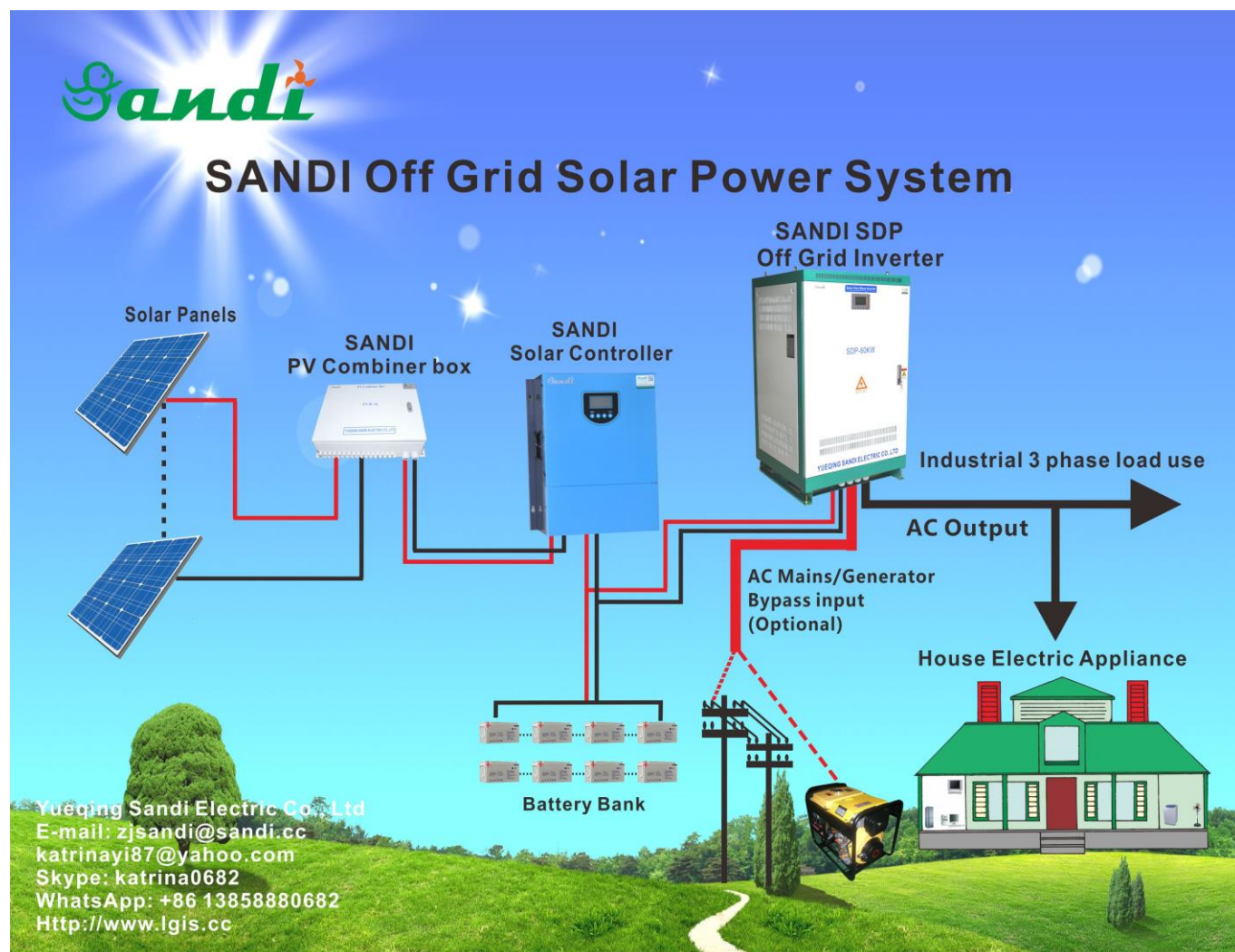
- ✧ Using SVPWM space vector algorithms, high conversion efficiency, high instantaneous power and low losses conversion efficiency up to 94%.
- ✧ Powerful data display function. LCD can display the DC input voltage, output frequency, phase voltage, phase current, AC bypass input voltage, output power KWH, time and date, temperature, fault code display.
- ✧ European CE (EMC, LVD) certificate, accredited by Australian CEC, ERAC energy network.

[Optional]

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

■ PV Off-grid Solar Power System

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



Technical Parameters (Normal model)

Model		SDP-5KW		SDP-6KW	
Isolation mode		Low Frequency Transformer			
DC Input	Rated voltage (Vdc)	96V	120V	96V	120V
	Rated current （A）	52A	42A	62.5A	50A
AC Output	Rated output power	5KW		6KW	
	Output waveform	Pure Sine Wave			
	Rated Voltage	220V±3%	380VAC±3%	220V±3%	380VAC±3%
	Phases	Single phase	3 phase 4 wire	Single phase	3 phase 4 wire
	Rated current （A）	23A	7.6A (phase current)	27A	9A (phase current)
	Frequency	50Hz or 60Hz			
	Rated output voltage range (V)	110/120/220/230/240/380/400/415/440/480VAC optional			
	Power Factor （PF）	0.95			
	Overload Ability	150%, 5 seconds			
	Efficiency	>93%			
	Waveform distortion rate (THD)	<3%（Linear load）			
	Dynamic Response (0 to 100% load)	5%, ≤50ms			
	Display	LCD			
	Running mode	Working continuously			
	Electrical insulation properties	2000Vac, 1 Minute			
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.			
	Cooling method	Fan-cooled			
	Short-circuit protection	No automatic recovery, need to restart the machine			
Working environment	Noise（1 meter）	≤50dB			
	Degree of protection	IP20（indoor）			
	Working Altitude（m）	≤2000			
	Working temperature	-25~+55℃			
	relative humidity	0~90%, non-condensing			
Mechanical dimension	Depth* Width * Height	540x450x760mm			
	Weight（Kg）	75Kg		86Kg	

Model		SDP-8KW		SDP-10KW	
Isolation mode		Low Frequency Transformer			
DC Input	Rated voltage (Vdc)	120V	192V	192V	240V
	Rated current （A）	67A	42A	52A	42A
AC Output	Rated output power	8KW		10KW	
	Output waveform	Pure Sine Wave			
	Rated Voltage	220V±3%	380VAC±3%	220V±3%	380VAC±3%
	Phases	Single phase	3 phase 4 wire	Single phase	3 phase 4 wire
	Rated current （A）	36A	12A (phase current)	45.5A	15A (phase current)
	Frequency	50Hz or 60Hz			
	Rated output voltage range (V)	110/120/220/230/240/380/400/415/440/480VAC optional			
	Power Factor （PF）	0.95			
	Overload Ability	150%, 5 seconds			
	Efficiency	>93%			
	Waveform distortion rate (THD)	<3%（Linear load）			
	Dynamic Response (0 to 100% load)	5%, ≤50ms			
	Display	LCD			
	Running mode	Working continuously			
	Electrical insulation properties	2000Vac, 1 Minute			
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.			
	Cooling method	Fan-cooled			
	Short-circuit protection	No automatic recovery, need to restart the machine			
Working environment	Noise（1 meter）	≤50dB			
	Degree of protection	IP20（indoor）			
	Working Altitude（m）	≤2000			
	Working temperature	-25~+55℃			
	relative humidity	0~90%, non-condensing			
Mechanical dimension	Depth* Width * Height	540x540x760mm			
	Weight（Kg）	102Kg		110Kg	

Model		SDP-12KW		SDP-15KW	
Isolation mode		Low Frequency Transformer			
DC Input	Rated voltage (Vdc)	192V	240V	192V	240V
	Rated current （A）	62.5A	50A	78A	62.5A
AC Output	Rated output power	12KW		15KW	
	Output waveform	Pure Sine Wave			
	Rated Voltage	220V±3%	380VAC±3%	220V±3%	380VAC±3%
	Phases	Single phase	3 phase 4 wire	Single phase	3 phase 4 wire
	Rated current （A）	55A	18A (phase current)	68A	23A (phase current)
	Frequency	50Hz or 60Hz			
	Rated output voltage range (V)	110/120/220/230/240/380/400/415/440/480VAC optional			
	Power Factor （PF）	0.95			
	Overload Ability	150%, 5 seconds			
	Efficiency	>93%			
	Waveform distortion rate (THD)	<3%（Linear load）			
	Dynamic Response (0 to 100% load)	5%, ≤50ms			
	Display	LCD			
	Running mode	Working continuously			
	Electrical insulation properties	2000Vac, 1 Minute			
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.			
	Cooling method	Fan-cooled			
	Short-circuit protection	No automatic recovery, need to restart the machine			
Working environment	Noise（1 meter）	≤50dB			
	Degree of protection	IP20（indoor）			
	Working Altitude（m）	≤2000			
	Working temperature	-25~+55℃			
	relative humidity	0~90%，non-condensing			
Mechanical dimension	Depth* Width * Height	500x600x800mm			
	Weight（Kg）	122Kg		150Kg	

Model		SDP-20KW		SDP-25KW	
Isolation mode		Low Frequency Transformer			
DC Input	Rated voltage (Vdc)	220V	240V	240V	
	Rated current （A）	91A	83A	104A	
AC Output	Rated output power	20KW		25KW	
	Output waveform	Pure Sine Wave			
	Rated Voltage	220V±3%	380VAC±3%	220V±3%	380VAC±3%
	Phases	Single phase	3 phase 4 wire	Single phase	3 phase 4 wire
	Rated current （A）	91A	31A (phase current)	114A	38A (phase current)
	Frequency	50Hz or 60Hz			
	Rated output voltage range (V)	110/120/220/230/240/380/400/415/440/480VAC optional			
	Power Factor （PF）	0.95			
	Overload Ability	150%, 5 seconds			
	Efficiency	>93%			
	Waveform distortion rate (THD)	<3%（Linear load）			
	Dynamic Response (0 to 100% load)	5%, ≤50ms			
	Display	LCD			
	Running mode	Working continuously			
	Electrical insulation properties	2000Vac, 1 Minute			
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.			
	Cooling method	Fan-cooled			
	Short-circuit protection	No automatic recovery, need to restart the machine			
Working environment	Noise（1 meter）	≤50dB			
	Degree of protection	IP20（indoor）			
	Working Altitude（m）	≤2000			
	Working temperature	-25~+55℃			
	relative humidity	0~90%， non-condensing			
Mechanical dimension	Depth* Width * Height	550x700x1000mm			
	Weight（Kg）	185Kg		230Kg	

Model		SDP-30KW		SDP-40KW	
Isolation mode		Low Frequency Transformer			
DC Input	Rated voltage (Vdc)	240V	300V	360V	
	Rated current （A）	125A	100A	111A	
AC Output	Rated output power	30KW		40KW	
	Output waveform	Pure Sine Wave			
	Rated Voltage	220V±3%	380VAC±3%	220V±3%	380VAC±3%
	Phases	Single phase	3 phase 4 wire	Single phase	3 phase 4 wire
	Rated current （A）	136A	45.5A (phase current)	182A	61A (phase current)
	Frequency	50Hz or 60Hz			
	Rated output voltage range (V)	220/230/240/380/400/415V/440/480AC optional			
	Power Factor （PF）	0.95			
	Overload Ability	150%, 5 seconds			
	Efficiency	>93%			
	Waveform distortion rate (THD)	<3%（Linear load）			
	Dynamic Response (0 to 100% load)	5%, ≤50ms			
	Display	LCD			
	Running mode	Working continuously			
	Electrical insulation properties	2000Vac, 1 Minute			
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.			
	Cooling method	Fan-cooled			
	Short-circuit protection	No automatic recovery, need to restart the machine			
Working environment	Noise（1 meter）	≤50dB			
	Degree of protection	IP20（indoor）			
	Working Altitude（m）	≤2000			
	Working temperature	-25~+55℃			
	relative humidity	0~90%， non-condensing			
Mechanical dimension	Depth* Width * Height	650x750x1100mm			
	Weight（Kg）	260Kg		350Kg	

Model		SDP-50KW	SDP-60KW
Isolation mode		Low Frequency Transformer	
DC Input	Rated voltage (Vdc)	360V	
	Rated current (A)	139A	167A
AC Output	Rated output power	50KW	60KW
	Output waveform	Pure Sine Wave	
	Rated Voltage	380VAC±3%	380VAC±3%
	Phases	3 phase 4 wire	3 phase 4 wire
	Rated current (A)	76A (phase current)	91A (phase current)
	Frequency	50Hz or 60Hz	
	Rated output voltage range (V)	220/230/240/380/400/415V/440/480AC optional	
	Power Factor (PF)	0.95	
	Overload Ability	150%, 5 seconds	
	Efficiency	>93%	
	Waveform distortion rate (THD)	<3% (Linear load)	
	Dynamic Response (0 to 100% load)	5%, ≤50ms	
	Display	LCD	
	Running mode	Working continuously	
	Electrical insulation properties	2000Vac, 1 Minute	
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.	
	Cooling method	Fan-cooled	
	Short-circuit protection	No automatic recovery, need to restart the machine	
Working environment	Noise (1 meter)	≤50dB	
	Degree of protection	IP20 (indoor)	
	Working Altitude (m)	≤2000	
	Working temperature	-25~+55℃	
	relative humidity	0~90%, non-condensing	
Mechanical dimension	Depth* Width * Height	800x850x1200mm	
	Weight (Kg)	420Kg	450Kg

Model		SDP-80KW	SDP-100KW
Isolation mode		Low Frequency Transformer	
DC Input	Rated voltage (Vdc)	480V	
	Rated current (A)	167A	208A
AC Output	Rated output power	80KW	100KW
	Output waveform	Pure Sine Wave	
	Rated Voltage	380VAC±3%	380VAC±3%
	Phases	3 phase 4 wire	3 phase 4 wire
	Rated current (A)	121A (phase current)	152A (phase current)
	Frequency	50Hz or 60Hz	
	Rated output voltage range (V)	380/400/415/440/480VAC optional	
	Power Factor (PF)	0.95	
	Overload Ability	150%, 5 seconds	
	Efficiency	>93%	
	Waveform distortion rate (THD)	<3% (Linear load)	
	Dynamic Response (0 to 100% load)	5%, ≤50ms	
	Display	LCD	
	Running mode	Working continuously	
	Electrical insulation properties	2000Vac, 1 Minute	
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.	
	Cooling method	Fan-cooled	
	Short-circuit protection	No automatic recovery, need to restart the machine	
Working environment	Noise (1 meter)	≤50dB	
	Degree of protection	IP20 (indoor)	
	Working Altitude (m)	≤2000	
	Working temperature	-25~+55℃	
	relative humidity	0~90%, non-condensing	
Mechanical dimension	Depth* Width * Height	900x1100x1600mm	
	Weight (Kg)	520Kg	600Kg

Model		SDP-120KW	SDP-150KW
Isolation mode		Low Frequency Transformer	
DC Input	Rated voltage (Vdc)	480V	
	Rated current (A)	250A	312.5A
AC Output	Rated output power	120KW	150KW
	Output waveform	Pure Sine Wave	
	Rated Voltage	380VAC±3%	380VAC±3%
	Phases	3 phase 4 wire	3 phase 4 wire
	Rated current (A)	182A (phase current)	227A (phase current)
	Frequency	50Hz or 60Hz	
	Rated output voltage range (V)	380/400/415/440/480VAC optional	
	Power Factor (PF)	0.95	
	Overload Ability	150%, 5 seconds	
	Efficiency	>93%	
	Waveform distortion rate (THD)	<3% (Linear load)	
	Dynamic Response (0 to 100% load)	5%, ≤50ms	
	Display	LCD	
	Running mode	Working continuously	
	Electrical insulation properties	2000Vac, 1 Minute	
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.	
	Cooling method	Fan-cooled	
	Short-circuit protection	No automatic recovery, need to restart the machine	
Working environment	Noise (1 meter)	≤50dB	
	Degree of protection	IP20 (indoor)	
	Working Altitude (m)	≤2000	
	Working temperature	-25~+55℃	
	relative humidity	0~90%, non-condensing	
Mechanical dimension	Depth* Width * Height	900x1100x1600mm	
	Weight (Kg)	560Kg	600Kg

Model		SDP-200KW		SDP-250KW
Isolation mode		Low Frequency Transformer		
DC Input	Rated voltage (Vdc)	480V	600V	600V
	Rated current (A)	417A	333A	417A
AC Output	Rated output power	200KW		250KW
	Output waveform	Pure Sine Wave		
	Rated Voltage	380VAC±3%		380VAC±3%
	Phases	3 phase 4 wire		3 phase 4 wire
	Rated current (A)	303A (phase current)		379A (phase current)
	Frequency	50Hz or 60Hz		
	Rated output voltage range (V)	380/400/415/440/480VAC optional		
	Power Factor (PF)	0.95		
	Overload Ability	150%, 5 seconds		
	Efficiency	>93%		
	Waveform distortion rate (THD)	<3% (Linear load)		
	Dynamic Response (0 to 100% load)	5%, ≤50ms		
	Display	LCD		
	Running mode	Working continuously		
	Electrical insulation properties	2000Vac, 1 Minute		
Protection Function	Protection	Input reverse polarity, under voltage, overvoltage, output over-current, short circuit, overheating etc.		
	Cooling method	Fan-cooled		
	Short-circuit protection	No automatic recovery, need to restart the machine		
Working environment	Noise (1 meter)	≤50dB		
	Degree of protection	IP20 (indoor)		
	Working Altitude (m)	≤2000		
	Working temperature	-25~+55℃		
	relative humidity	0~90%, non-condensing		
Mechanical dimension	Depth* Width * Height	1200x1200x1860mm		
	Weight (Kg)	980Kg		1200Kg



SANDI ELECTRIC CO., LTD

***Add: Lvao Industrial Zone Liushi Town, Yueqing City,
Zhejiang Province 325604, China.***

Tel:+86-577-62793760

Fax:+86-577-61209955

Mobile phone: +86 13858880682

E-mail: zjsandi@sandi.cc or katrinayi87@yahoo.com

Skype: katrina0682

WhatsApp: +86 13858880682