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SUOER
Off Grid Inverter
Hybrid Inverter
Solar Charge Controller



About Suoer

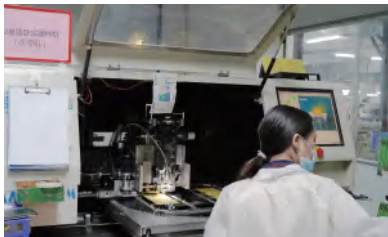
Foshan Suoer Electronic Industry Co., Ltd.
Founded in 2005, is located in the National High-tech Zone of Shishan Town, Nanhai District, Foshan City,Guangdong Province.The company is based on the new energy industry, focusing on distributed photovoltaic power generation,photovoltaic water pumping, and energy storage photovoltaic power generation. In other fields,it is a high-tech enterprise specializing in the R&D, production, sales and service of photovoltaic inverters for core equipment such as photovoltaic power generation systems.



COMPANY ADVANTAGES



01 Aging cabinet



02 AI automatic horizontal plug-in machine 01



03 Inverter intelligent assembly line



04 Adequate inventory



05 Assembly workshop 02

EXHIBITIONS AT HOME AND ABROAD



07 Attend several foreign exhibitions every year



08 Canton Fair

CUSTOMER FEEDBACK CHART



09 Belgium
1.5MW Project Volume
VMS-V-12K-48-HG



10 Salt Lake City,USA
2 MW Project Volume
SUN-6K-AH2

SUOER 2005-2025 GLOBAL NETWORK LAYOUT

In 150 countries and regions, Suoer has spread all over the world, forming a global supply chain network, establishing a competitive foundation in the international market, and enhancing its international influence.



Product Certification And Honorary Qualification



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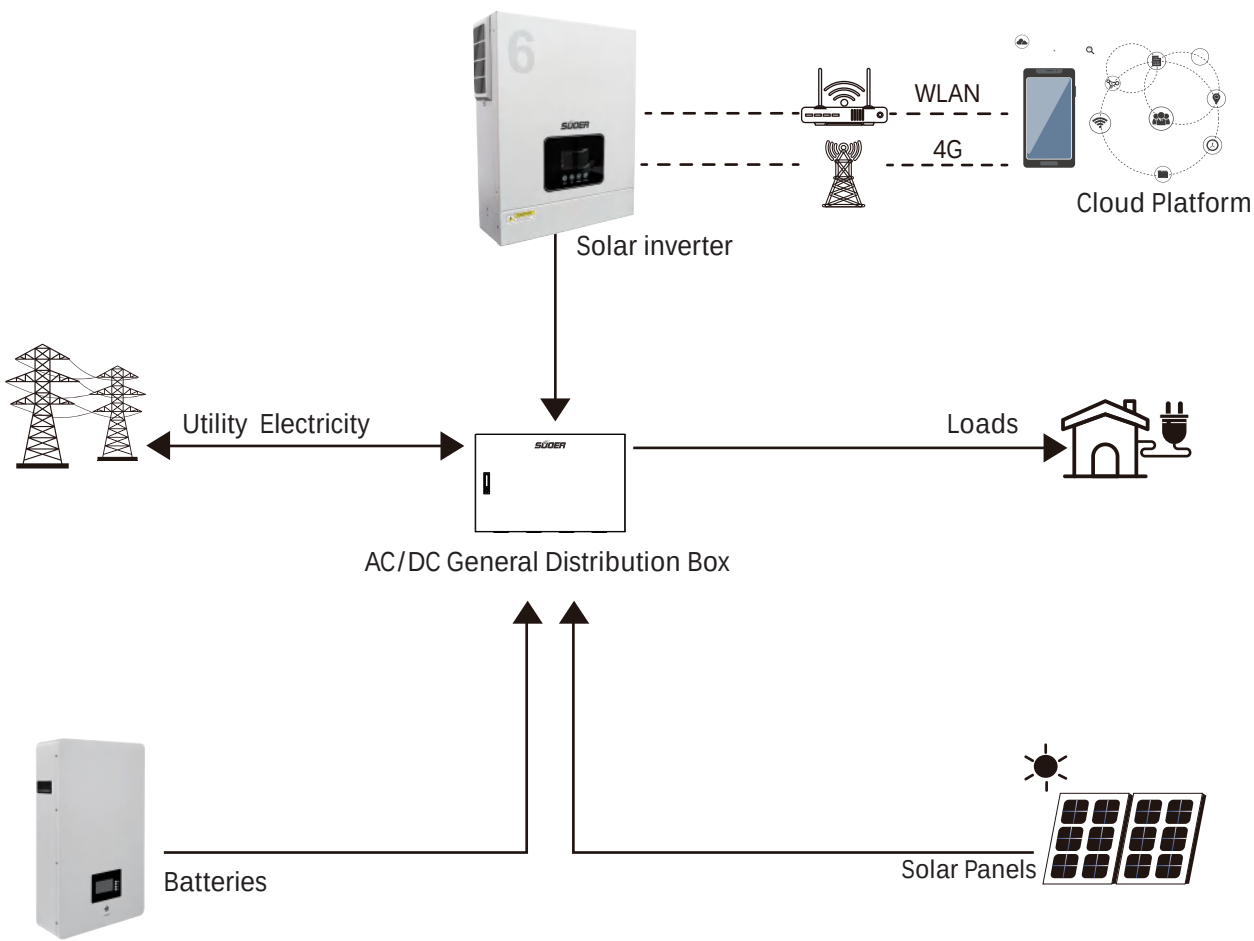
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Solar Inverter

The inverter will control the PV power generation to give priority to the load for use, and the excess power will be considered to charge the battery. When the load does not have enough power, the inverter will control the battery discharge to power the load.



System Topology View



VMS Series [Off Grid Hybrid]

1.2 KW 220 / 230Vac Output (PV 17-115Vdc)



SOLAR INVERTER



MODEL	VMS-V-1.5K-12
Rated Power	1200W
AC Input	
Rated Input Voltage	208/220/230/240:L+N+PE
Voltage Range	90~280(APP mode); 170~280 (UPS mode)
Frequency Range	50 Hz/60 Hz (Auto sensing)
AC Output	
Rated Capacity	1.2KW (Output Power rating will be reduced to 90%when setting the Output Voltage to 208V)
Surge Power	2.4KVA
Voltage	208/220/230/240 VAC
Power Factor	1PF
Frequency(Hz)	50/60Hz+0.1%
Switch Time (ms)	10ms (APP/UPS/GEN mode)
WaveForm	Pure SineWave
Overload Capacity (Battery Mode)	60s@102%~110%oad:10s@120%~200%load
Max. Efficiency (Battery Mode)	90%@12VDC
Charger(PV/AC)	
Solar Charger Type	MPPT
Max PVInput Current/Power	18A/800W
MPPT Range@Operating Voltage (VDC)	17~115 VDC
PV Start-up Voltage	20VDC
Max PV Open Circuit Voltage (VDC)	115VDC
Max PV Charge Current (A)	50A
Max AC Charge Current(A)	50A
Max. Charge Current (PV+AC) (A)	100A
Battery	
Normal Voltage (VDC)	12VDC
Battery Type	Lithium and Lead-acid
General Data	
HML	LCD
Interface	RS485/RS232
Monitoring	WiFi(Optional)
General Data	
Relative Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	-10 °C - 60 °C
Storage Temperature	-15 °C - 60 °C
Max. Operating Altitude	4000m(Derating above 1000m)

VMS Series [Off Grid Hybrid]

2 / 3.2KW 220 / 230Vac Output (PV 40-400Vdc)



SOLAR INVERTER



MODEL	VMS-V-2.2K-12		VMS-V-3.2K-24	
Rated Power	2000W		3200W	
AC Input				
Voltage	230 VAC			
Select-able Voltage Range	70-280VAC(ForPersonalComputers) 90-280VAC(For Home Appliances)			
Frequency Range	50 Hz/60 Hz (Auto sensing)			
AC Output				
AC Voltage Regulation (Batt. Mode)	230 VAC+5%			
Surge Power	3000VA		6400VA	
Efficiency (Peak)PV to INV	98%			
Efficiency (Peak)Battery to INV	94%			
Waveform	Pure sine wave			
Transfer Time	10ms(For Personal Computers), 20ms(For Home Appliances)			
Battery & AC Charger				
Battery Voltage	12VDC		24VDC	
Floating Charge Voltage	13.5VDC		27VDC	
Overcharge Protection	16 VDC		33VDC	
Maximum AC Charge Current	60A			
Solar charger				
Maximum PV Array Power	2000W		3200W	
Maximum Charging Current	80A			
MPPT Range @ Operating Voltage	40-400VDC			
Maximum PV Array Open Circuit Voltage	400 VDC			
Physical				
Dimension, DxWxH (mm)	348 x 270 x 95mm			
Net Weight (kgs)	4kg		5kg	
Communication Inteface	RS232/Wifi			
Operating Environment				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	-10 °C - 50 °C			
Storage Temperature	-15 °C - 60 °C			

VMS Series [On/Off Grid Hybrid]

4.2 / 6.2KW 220/230/240Vac Output (PV 60-450Vdc)



SOLAR INVERTER



MODEL	VMS-V-4.2K-24-H	VMS-V-6.2K-48-H
Rated Power	4200W	6200W
AC Input / Output		
Voltage	220/230/240 VAC	
Output Waveform	Pure sine wave	
Frequency Range	50 Hz/60 Hz	
Grid-tie Output:		
Feed-in Grid Voltage Range	195~253VAC	
Feed-in Grid Frequency Range	49~51±1HZ/59~61±1HZ	
Maximum Load	4200W	6200W
Maximum Second Load	1400W	2066W
Battery & AC Charger		
Battery Voltage	20-33 VDC	40-63VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
Solar charger & AC charger		
Solar Charger Type	MPPT	
Maximum PV Array Power	6200W	6500W
Max Solar Charging Current	120A	120A
MPPT Range @ Operating Voltage	60~450VDC	
Maximum Solar Charge Current	120A	
Max AC Charging Current	100A	100A
Nominal PV Voltage	240VDC	360 VDC
Maximum PV Array Open Circuit Voltage	500 VDC	
BMS Communication Interface	RS485	
APP Monitoring Interface	RS232	
Physical		
Dimension, DxWxH (mm)	120 x 344 x 440mm	
Net Weight (kgs)	8.5kg	9.4kg
Operating Environment		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10 °C - 50 °C	
Storage Temperature	-15 °C - 60 °C	

VMS Series [On/Off Grid Hybrid]

9 / 12KW 220 / 230 / 240Vac Output (PV 90-450Vdc)



SOLAR INVERTER



MODEL	VMS-V-9K-48-H/HG	VMS-V-12K-48-H/HG
Rated Power	9000W	12000W
AC Input / Output		
Voltage	220/230/240 VAC	
Output Waveform	Pure sine wave	
Frequency Range	50 Hz/60 Hz	
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Transfer Time	10 ms (For Personal Computers), 20 ms (For Home Appliances)	
Grid-tie Output:		
Feed-in Grid Voltage Range	195~253VAC	
Feed-in Grid Frequency Range	49~51±1HZ/59~61±1HZ	
Maximum Load	9000W	12000W
Battery & AC Charger		
Battery Voltage	48VDC	48VDC
Floating Charge Voltage	54 VDC	54 VDC
Overcharge Protection	66VDC	66VDC
Solar charger & AC charger		
Solar Charger Type	Dual MPPT	
Maximum PV Array Power	11000W(5500W x 2)	12000W (6000W x 2)
Max Solar Charging Current	150A	150A
MPPT Range @ Operating Voltage	90~450VDC	
Max AC Charging Current	120A	150A
Maximum PV Input Current	18A x 2	27A x 2
Maximum PV Array Open Circuit Voltage	500 VDC	
BMS Communication Interface	RS485	
APP Monitoring Interface	RS485	
Parallel Function	Optional up to 6 units	
Physical		
Dimension, DxWxH (mm)	147 x 432 x 553mm	
Net Weight (kgs)	17.2kg	18.4kg
Operating Environment		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10 °C - 50 °C	
Storage Temperature	-15 °C - 60 °C	

SVM Series [On/Off Grid Hybrid]

10KW 220 / 230 / 240Vac Output (PV 90-450Vdc)



SOLAR INVERTER



MODEL		SVM-III-10.2KW-PRO
Rated Power		10200W
AC Input / Output		
Voltage		220/230/240 VAC
Output Waveform		Pure sine wave
Frequency Range		50 Hz/60 Hz
Grid-tie Output:		
Feed-in Grid Voltage Range		195~253VAC
Feed-in Grid Frequency Range		49~51±1HZ/59~61±1HZ
Maximum Load		10200W
Maximum Second Load		3400W
Battery & AC Charger		
Battery Voltage		48-63VDC
Floating Charge Voltage		54 VDC
Overcharge Protection		63 VDC
Solar charger & AC charger		
Solar Charger Type		Dual MPPT
Maximum PV Input Current		18A x 2
Maximum PV Array Power		10200W (5500W x2)
Max Solar Charging Current		160A
MPPT Range @ Operating Voltage		90~450VDC
Maximum Solar Charge Current		160A
Max AC Charging Current		140A
Nominal PV Voltage		360 VDC
Maximum PV Array Open Circuit Voltage		500 VDC
BMS Communication Interface		RS485
APP Monitoring Interface		RS232
Physical		
Dimension, DxWxH (mm)		120 x 344 x 440mm
Net Weight (kg)		15.5kg
Operating Environment		
Humidity		5% to 95% Relative Humidity(Non-condensing)
Operating Temperature		-10 °C - 50 °C
Storage Temperature		-15 °C - 60 °C

SUN Series [On/Off Grid Hybrid]

6KW 176V-280Vac Output (PV 80-520Vdc)



SOLAR INVERTER



MODEL	SUN-6K-AH2
PV Input	
Max. PV Input Power	9KW
Max. PV Open Circuit Voltage	550V
MPPT Range@Operating Voltage	80~520VDC
Full Power MPPT Voltage Range	250-500VDC
Start -up Voltage	90VDC
Max. Input Current per MPPT	19A/19A
Max. Short -circuit Current	25A/25A
MPPT Tracker/Strings	2/1
Nominal Input Voltage	360V
AC Output(On-Grid)	
Nominal Output Power to Grid	6KW
Max. Apparent Power to Grid	6KVA
Max. Apparent Power from Grid	6KVA
Max. Apparent Current from Grid	26.1A
Nominal Output Current from Grid	26.1A
Max. Output Current to Grid	26.1A
Nominal Voltage/Frequency	230V(176V~280V), 50/60Hz, L+N+PE
Adjustable Power Factor	0.8leading~0.8lagging
THDI	<2%
AC Output(BackUp)	
Nominal Output Power	6KW
Max. Apparent Power	6KVA
Nominal Output Current	26.1A
Max. Output Current	26.1A
Nominal Voltage/Frequency	230V(176V~238V), 50/60Hz, L+N+PE
Automatic Switch Time	<20ms
THDu	<2%
Overload Capacity	110%,30s/120%,10s/150%,0.02s
Efficiency	
Max. Efficiency	98%
Europe Efficiency	97.5%
MPPT Efficiency	99.00%
Max. Battery Charge/Discharge Efficiency	94.60%

MODEL	SUN-6K-AH2
Battery	
Battery Voltage Range	40~60V
Recommended Battery Voltage	48V
Max. Charging Voltage	60V
Max. Charging/Discharging Current	120A/120A
Battery Type	Lithium and Lead Acid Battery
Protection	
DC Switch	Yes
DC Reverse Polarity Protection	Yes
DC/AC Surge Protection	Type III/Type III
AC Overvoltage Protection	Yes
AC Short-circuit Protection	Yes
Ground Fault Monitoring	Yes
Anti-islanding Protection	Yes
Residual-current Monitoring	Yes
Insulation Resistance Monitoring	Yes
Peak/Valley Time Setting	Yes
General Data	
HMI	LCD & APP
BMS	RS485; CAN
EMS/Meter	RS485
Communication	WiFi(standard)/GPRS(opt)/4G(opt)
Ingress Protection	IP66
Operating Temperature Range	-25~60°C
Relative Humidity	0~95%(Non-condensing)
Max. Operating Altitude	4000m (Derating above 3000m)
Cooling	Natural
Noise Emission	≤ 29dB
Self-consumption(W)	<10
Standard Compliance	
Safety Regulation	IEC/EN62109-1/-2
EMC	IEC/EN61000-6-1/-2/-3
GridRegulation	Europe: EN50549, South Africa: NRS097-2-1:2017, Belgium: C10/11

FPV Series [Off Grid Hybrid]

5.5 / 7.5 / 10 KVA 220 / 230Vac Output (PV 260-450Vdc)



SOLAR INVERTER



MODEL	FPV-5.5KVA	FPV-7.5KVA	FPV-10KVA
PV Input Parameters			
Maximum Input Power	5500W	7500W	10000W
PV Maximum Input Current	13A	18A	27A
PV Maximum Input Voltage	450VDC		
Nominal PV Voltage	380VDC		
PV input Voltage Range	260V DC to 450V DC		
AC Input Parameters			
AC Input Range	160VAC~300VAC		
AC Rated Voltage	220VAC		
AC Output Parameters			
Peak Output Power	8000W	12000W	16000W
Rated Output Power	4000W	6000W	8000W
Rated Output Current	18A	27A	36A
Output Wave Form	Pure Sine Wave		
Output Voltage Range	160VAC~240VAC		
Rated Output Voltage	220/230VAC		
Output Frequency Range	40Hz-50Hz		
Currentharmonics(at rated power)	<5%		
Maximum Efficiency	95%		
Environmental Parameters			
Operating Temperature	-25 °C - 60 °C		
Relative Humidity	0~95%		
Altitude	≤2000m		
Cooling Method	Fan cooling		
Nighttime Energy Consumption	<0.2W		
Noise Decibel	< 50 dB		
Communication			
LCD	2 lines of character display		
Mechanical Properties			
Dimensions(L*W*Hmm)mm	401*300*110mm		
Weight (kg)	4.8kg	5.3kg	5.92kg

SP Series [Split-phase High Frequency Inverter]

10 / 12KW 110 / 220Vac Output (PV 90-500Vdc)



SOLAR INVERTER



MODEL	SP10KW-48V-HG	SP10KW-48V-H	SP12KW-48V-HG	SP12KW-48V-H
Parallel Mode				
Permitted Parallel Number	1~6	NO	1~6	NO
AC Mode				
Rated Input Voltage	120(L1/N,L2/N)/240Vac(L1/L2)			
Frequency	50Hz/60Hz (Auto detection)			
Efficiency	>95%			
AC Reverse Protection	Yes			
Inverter Mode				
Output Voltage Waveform	Pure sine wave			
Rated Output Power	Split phase: 10000VA		Split phase: 12000VA	
	Single phase: 7200VA (limited by the wiring terminals)		Single phase: 7200VA (limited by the wiring terminals)	
Rated Output Power	Split phase: 10000W		Split phase: 12000W	
	Single phase: 7200W (limited by the wiring terminals)		Single phase: 7200W (limited by the wiring terminals)	
Power Factor	1			
Rated Output Voltage	120Vac(L1/N.L2/N)/240Vac(L1/L2)			
Peak Power	Split phase: 15000VA		Split phase: 18000VA	
	Single phase: 15000VA		Single phase: 18000VA	
Battery Voltage Range	40.0Vdc~58.6Vdc±0.6Vdc (Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen)			
AC Charging				
Battery Type	Lead acid or lithium battery			
Maximum Charge Current(can be set)	120A		160A	
Charge Voltage Range	40~58.6VDC			
PV Charging				
Number Of MPPT Groups	2			
Maximum PV Open Circuit Voltage	500VDC			
PV Operating Voltage Range	90VDC~500VDC			
MPPT Voltage Range	90VDC~450VDC			
Battery Voltage Range	40VDC~58.6VDC			
Maximum PV Input Current	22A+22A			
Maximum PV Input Power	5500W+5500W		6000W+6000W	
PV Charge Current(can be set)	200A		220A	
Hybrid Charging Max Charger Current Specifications (AC Charger + PV Charger)				
Max Charger Current(can be set)	0-200A		0-200A	
Certified Specifications				
Operating Temperature Range	-10°C to 55°C(>45°C derating)			
Storage Temperature Range	-25°C~60°C			
Humidity Range	5% to 95% (Conformal coating protection)			
Communicati On Interface	USB/RS485/(WiFi/GPRS)/Dry node control			
Size(L*W*D)	620*450*132mm			
Weight	23.8kg			

SP Series [Split-phase Low Frequency Inverter]

6 / 12KW 110 / 220Vac Output (PV 80-490Vdc)



SOLAR INVERTER



MODEL	SP6KW-48V	SP12KW-48V
Capacity	6000W	12000W
Peak Capacity	18000W	36000W
Battery Voltage	48V	48V
MPPT		
Charging Current	80A	110A
PV input Port	One route (60A)	
PV input Voltage Range	80~490V	
Max PV input Power	2880W	
MPPT Efficiency	≈99%	
Unattended Mode	Inverter is OFF mode: MPPT can charge battery if there is sunshine	
Input		
DC Input Voltage Range	42~60V	
AC Input Voltage Range	110V/120AC(L1-N) or 220VAC/240AC(L1-L2)	
AC Input frequency	45HZ-65HZ auto test	
AC Charging Current Can Choose	OFF(can switch off AC charging function)	
Output		
Output Wave	PURE SINE WAVE	
Output Efficiency	≈90%	
Output Voltage	L1-N/L2-N : 110VAC or 120VAC ; L1-L2 : 220VAC or 240AC	
Output Frequency	50Hz/60Hz can adjust at site	
ECO Mode And Loss	5W	
Battery parameter		
Battery Types	Lead-acid battery/GEL battery/ lithium iron phosphate battery/ ternary lithium battery/customized battery	
Battery Customized Parameters	Constant voltage charging, Floating charging, battery recover, AC recover, low voltage alarm and low voltage protection	
Battery Charging Types	Lead-acid: three steps, constant current charging, constant voltage charging, floating charging Lithium battery: constant current charging, constant voltage charging	
Lithium Battery String Numbers Can Choose	lithium iron phosphate battery:3.2V single one Ternary lithium battery:3.7V single one	
Protections	Battery low voltage/battery over voltage/over load protection/ high temperature protection/ charging type protections	
Transfer Time	<5ms	
Heat-dissipating Type	Intelligent temperature control	
Communications	RS232/RS485(Optional)	
Working Temperature	-10°C~40°C	
Altitude	≤3000m	
Inverter Size (L*W*Hmm)	495*320*220mm	560*390*200mm
Net Weight (kg) (About)	28kg	40kg

PL Series [Off Grid Hybrid]

1.5 / 1 / 3 / 5VA 220 / 230Vac Output (PV 50/105Vdc)



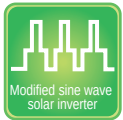
SOLAR INVERTER



MODEL	PL-1.5KA	PLP-1000	PL-3KVA	PL-5KVA
Rated capacity	1500VA/1000W	1000W	3000VA/1800W	5000VA/3000W
Mains Input				
Voltage range	230 VAC±5%			
Frequency range	50Hz/60Hz±2.5Hz			
The Output				
Battery efficiency	81%	83%	83%	85%
Waveform	Pure sine wave			
The utility efficiency	93%			
Efficiency(Peak) PV to INV	AC220V±5%			
Output Frequency	50/60Hz±1% (battery mode)			
Transfer time	8ms			
Battery				
Voltage	12V	12V	24V	48V
AC Charge current	0-20A	0-20A	0-30A	0-30A
PV Charging Current	/	30A(PWM)	60A(MPPT)	60A(MPPT)
Max PV Array open circuit voltage	/	50Vdc	105Vdc	105Vdc
Display				
Method	LCD+LED			
Content	input/output voltage, Battery capacity,load capacity,machine mode,frequency			
Protect				
Output short circuit	Breakdown insurance of power status,Inverse shutdown			
Overload	When the load exceeds 105 %,the buzzer gives out an alarm sound and does not shut down.Load over 110%,120%,60 seconds protection shutdown;Load more than 130%, 10 seconds protection shutdown;Load overload 150%,0.5 second protection shutdown;			
High main voltage	Turn off power supply and inverter automatically			
Low battery voltage	The machine will automatically shut off the output,and the machine will automatically resume charging when the mains power is restored			
Over-term perature	To turn it off			
Work Environment				
Temperature	-10 - 50℃			
Altitude	≤3000m			

SON Series [Off Grid Hybrid]

1.5 / 2.4KVA 220 / 230 / 240Vac Output (PV 18-36Vdc)



SOLAR INVERTER

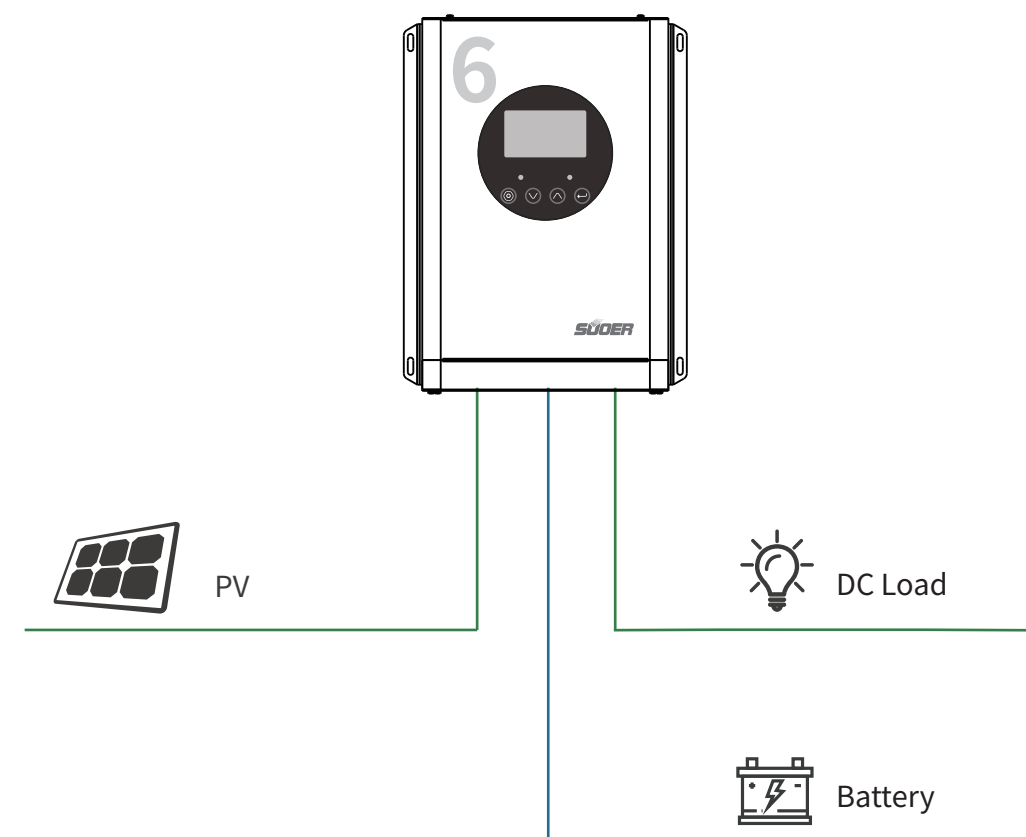


MODEL	SON-1500VA	SON-2400VA
Input		
Nominal Voltage	220~240VAC	220~240VAC
Voltage Range	90~280VAC	90~280VAC
Nominal Frequency	50Hz or 60Hz(Auto Detection)	50Hz or 60Hz(Auto Detection)
Solar		
Nominal Voltage	18Vdc	36Vdc
Charging Current	50A±1Amax	50A±1Amax
Output		
Voltage	±10%	±10%
Frequency	50/60Hz0.1Hz	50/60Hz0.1Hz
Waveform	Modified Sine-wave	Modified Sine-wave
Efficiency(AC to AC)	>95%	>95%
Efficiency(DC to DC)	±10%	±10%
Battery		
Normal Voltage	12Vdc	24Vdc
Charger		
Charging Voltage	14.4DC	28.8DC
AC Charging Current	10A/20A	10A/15A
Overcharging Protection	16.0V	32.0V
Transfer		
Time	15-20ms typical(narrow range40ms max(wide range)	
Audible Alarm		
Low Battery Voltage inbattery mode	Buzzing every 2 seconds	
Overload	Buzzing every 0.5 seconds	
Fault	Buzzing continuously	
Environment		
Temperature	0~40℃	

Mppt Solar Controller

This Solar Controller adopts MPPT maximum power tracking technology , it can quickly and accurately track the maximum power point of the solar cell and significantly improve the energy utilization rate of the solar system. It is widely used in solar off-grid photovoltaic systems, manage the charge and discharge of solar panels, batteries and DC loads in the system.

System Topology View



SMP Series [MPPT Solar Controller]

30 / 40 / 60 / 100A 12 / 24 / 48V System (PV 150Vdc)



MPPT SOLAR CONTROLLER

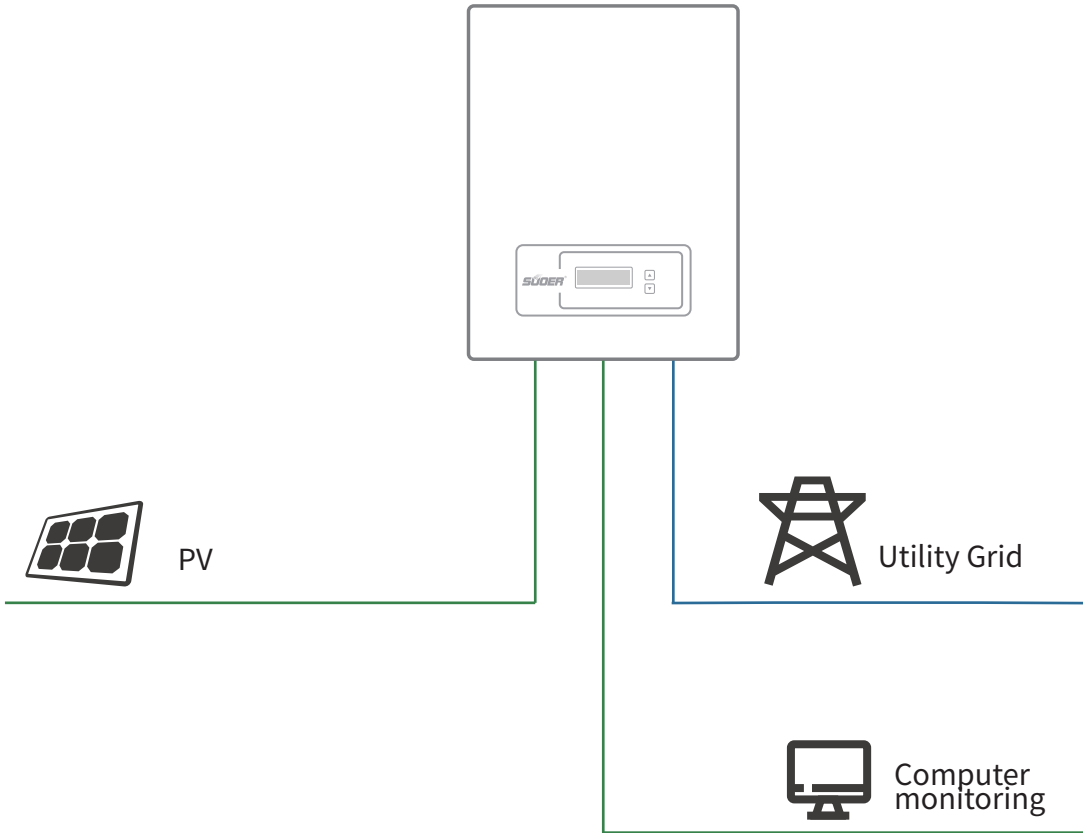


MODEL	SMP-4830		SMP-4840	SMP-4860	SMP-48100
charging mode	/	MPPT automatic maximum power point tracking			
charging method	/	Three stages:constant current charging(MPPT),Equalizing charging,float charging			
system type	12V/24V/48V	Automatical recognition/Manual setting			
System identification voltage range	12V system	DC8V-DC16V			
	24V system	DC16V-DC32V			
	48V system	DC32V-DC64V			
Quiesent dissipation	12V/24V/48V	≤5W			
Max conversion efficiency	12V/24V/48V	≥95.5%			
Photovoltaic module utilization ratio	12V/24V/48V	≤99.9%			
Input Characteristics					
Mppt working voltage range	12V system	DC18V-DC150V			
	24V system	DC36V-DC150V			
	48V system	DC72V-DC150V			
Maximun photovoltaic input power	12V system	450W	600W	900W	1500W
	24V system	850W	1200W	1700W	2900W
	48V system	1700W	2300W	3400W	5700W
Output Characteristics					
Optional battery type (default lead-acid)	/	Lead acid battery,LiFePo 4 battery , Ternary lithium battery or Use-Defined			
Rated current	12V/24V/48V	30A	40A	60A	100A
Protection					
Input low voltage protection	12V system	DC14V			
	24V system	DC28V			
	48V system	DC32V			
Input low voltage recovey (Lead-acid battery)	12V system	DC16V			
	24V system	DC32V			
	48V system	DC64V			
Input overvoltage protection	12V/24V/48V	DC180V			
Input overvoltage recovery	12V/24V/48V	DC170V			
Input polarity reverse protection	/	YES			
Output polarity reverse protection	/	YES			
High temperature protection	/	70℃			
Audible noise	/	≤50dB			
Heat dissipation mode	/	fan cooling			
Protective level	/	Ip21			
Environmental requirements					
Humidity	/	0~90%RH			
height above sea level	/	0~3000m			
Ambient temperature	/	-20℃~+40℃			
storage temperature	/	-40℃~+70℃			

On Grid Photovoltaic Energy Storage Solutions

This inverter is the one which DC electricity produced by solar panels is turned into grid-compatible AC electricity. AC electricity produced can reduce your electricity bill.

System Topology View



SOG Series [On Grid Solar Inverter]

3 / 5KW 150-280Vac Grid Volt. IP65



ON GRID SOLAR INVERTER



MODEL	SOG-3K-SM	SOG-5K-DM
Rated Power	3000W	5000W
Input		
Recommended max PV input power	3100W	5200W
Max DC power for single MPPT	3100W	3100W
Number of independent MPPT	/	2
Number of DC inputs	/	1 for each MPPT
Max. Input voltage	500V	500V
Number of MPPT/String per MPPT	1/1	2/1
Start-up input voltage	120V	
Rated input voltage	380V	
MPPT voltage range	100-490V	
Full load DC voltage range	240-400V	
Max.Input current per MPPT	13A	
Max.Input current	13A	
Output Data (AC)		
Max. AC power	3000W	5000W
Max. output current	/	/
Max.AC output current	14A	22A
Nominal grid voltage	L/N/PE, 220VAC, 230VAC, 240VAC	
Grid voltage range	(According to local standard) 150V-280VAC	
Nominal frequency	50Hz/60Hz	
Grid frequency range	50Hz/60Hz	
Active power adjustable range	0-3000W	0-5000W
THDi	<3%	
Power factor	1 default(adjustable +/-0.8)	
Performance		
Max.Efficiency	97.6%	97.4%
European weighted efficiency	97%	96.9%
Self-consumption at night	<10W	<10W
MPPT adaptation efficiency	99%	99%
Protection		
DC reverse polarity protection	No	
DC switch	Yes	
Anti-Islanding protection	Yes	
Overvoltage category	II(DC side)/III(AC side)	
Over temp protection	Yes	
Leakage current protection	Yes	
Over voltage protection	Yes	
Over current protection	Yes	
Earth fault protection	Yes	
SPD	MOV:Type III standard	
Communication		
Power management App	Yes	
Standard communication mode	Rs485,WiFi/GPRS(optional)	
General Data		
Topology	Transformerless	
Allowable relative humidity range	0~100%	
Noise	<25dB	
Cooling	Natural	
Max.Operating altitude	≤2000m	
Display	LCD	
Protective level	IP65	
Ambient temperature range	-25℃~+60℃	
Dimensions (W / H / D)	274.5 x 321.6 x 99.7mm	600x 490 x 170mm
Weight	8.6kg	20kg

GTI-D Series [On Grid Solar Inverter]

1KW (PV 34-45Vdc)



ON GRID SOLAR INVERTER



Display Of The Grip

- 1. Screen displays 5 parameters in turn:Output voltage,output current,output power,gross power generation,total generation time.
- 2. Power switch on the handle is used to control the backlight.
- 3. Press the "rest" button with a small wooden stick for more than 5 seconds, release the indicator light after the red light and green light are on at the same time, and clear the total power generation and power generation time after release;
- 4. Press the "CT" button with a small wooden stick for more than 5 seconds, release the indicator light after the red light and green light are on at the same time, and switch between full power and CT mode

MODEL	GTI-D1200
Output Power	1000W
Voltage of Solar panel	Vmp:42-45V ;Voc:50V
Recommended power of solar panel	1200-1500W
MPPT voltage range	30-45V
AC voltage range	190~260V
Voltage frequency range of electric network	50/60Hz±1%
Power factor	>0.97
MPPT efficiency	>99%
THD	<5%
Phase shift	<2%
Max efficiency	≥86%
Protection function	Low/High AC Voltage Protection;Low/High PV Voltage Protection;High temperature protection;Island protection; Frequency protection etc.
Working temperature	-20℃~50℃
Protective level	Design for interior
Cooling method	Controlled by smart fan
Standby power	2~3W
Display mode	Grip of LED + LCD screen display
Dimensions (W / H / D)	91 x 221 x 328.7mm

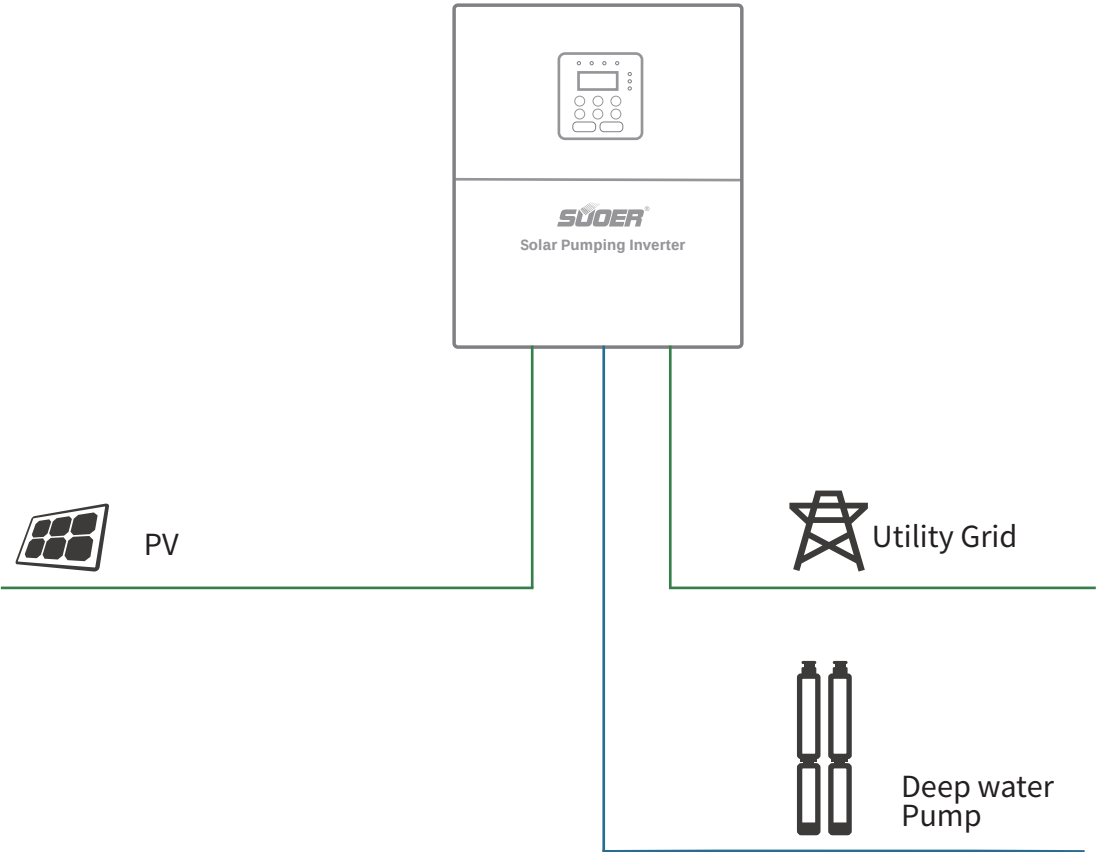


Solar Pump Inverter

This inverter uses with solar panels to work, converts the DC electricity to AC electricity, and drives the AC water pump to run. AC water pump uses the power which produced by this inverter to pump water from Well or pond to water towers, storage tanks, or use for agriculture irrigation and pastures. . Inverter no need to work with batteries, it can also use city electricity while no enough sunshine.

System Topology View

Solar Variable-frequency Drive,VFD



PV100 Series [Solar Pump Inverter]

1.5 / 2.2 / 4 / 5.5 / 7.5 / 11 / 15 / 18.5KW Single Phase/Three Phase



SOLAR PUMP INVERTER



Model	PV100-1R5GSS	PV100-2R2G-SS	PV100-004G-SS	PV100-1R5G-S	PV100-2R2G-S	PV100-1R5G-4T	PV100-2R2G-4T
PV Input Data							
Max.DC Voltage(V)	440 Vdc			440 Vdc		800 Vdc	
Start-up Voltage(V)	200 Vdc			200 Vdc		300 Vdc	
Lowest Working Voltage(V)	150 Vdc			150 Vdc		250 Vdc	
Recommended DC input Voltage Range (V)	200~400 Vdc			200~400 Vdc		300~750 Vdc	
Recommended MPPT Voltage	330 Vdc			330 Vdc		550 Vdc	
AC/Generator							
AC Input Voltage (V)	220(-15%)~240(+10%)VAC Single Phase					380(-15%)~440(+10%)VAC Three Phase	
Rated Input current(A)	15.7A	24A	30A	15.7A	24A	5A	5.8A
Output Data							
Rated Output Power(KW)	1500W	2200W	4000W	1500W	2200W	1500W	2200W
Rated Output Current(A)	10.2A	14A	23A	7.5A	10A	4.2A	5.5A
Rated Output Voltage(V)	220(-15%)~240(+10%)VAC Single Phase			220(-15%)~240(+10%)VAC Three Phase		380(-15%)~440(+10%)VAC Three Phase	
Output Frequency	50Hz/60Hz(optional)						
Protection							
Surge Protection(AC)	Yes						
Under voltage Protection	Yes						
Short Circuit Protection	Yes						
Over heated Protection	Yes						
Protection Level	The protection level of standard inverter is IP20						
General Date							
Ambient Temperature Range	-20℃~45℃						
Cooling Method	Fan Cooling						



Model	PV100-004G-4T	PV100-5R5G-4T	PV100-7R5G-4T	PV100-011G-4T	PV100-015G-4T	PV100-018G-4T
PV Input Data						
Max.DC Voltage(V)	800 Vdc					
Start-up Voltage(V)	300 Vdc					
Lowest Working Voltage(V)	250 Vdc					
Recommended DC input Voltage Range (V)	300~750 Vdc					
Recommended MPPT Voltage	550 Vdc					
AC/Generator						
AC Input Voltage (V)	380(-15%)~440(+10%)VAC Three Phase					
Rated Input current(A)	13.5A	19.5A	25A	32A	40A	47A
Output Data						
Rated Output Power(KW)	4000W	5500W	7500W	11000W	15000W	18500W
Rated Output Current(A)	9.5A	14A	18.5A	25A	32A	38A
Rated Output Voltage(V)	380(-15%)~440(+10%)VAC Three Phase					
Output Frequency	50HZ/60HZ (optional)					
Protection						
Surge Protection(AC)	Integrated					
Under Voltage Protection	Integrated					
Open Circuit Protection	Integrated					
Short Circuit Protection	Integrated					
Over Heated Protection	Integrated					
Protection Level	The protection level of standard inverter is IP20,butthis field is not displayed					
General Date						
Ambient Temperature Range	-20°C~45°C					
Cooling Method	Fan Cooling					
Standard Warrnaty (month)	12					