

SDPO 5kw 48v 220v pv 145v MPPT 80a



#### **Performance characteristics**

- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
   Two output modes: mains bypass and inverter output; uninterrupted power
- supply. • Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.
- · With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- · ON/OFF rocker switch for AC output control.
- · Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
   Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- $\cdot$  360 ° all-round protection with a number of protection functions. Such as
- overload, short circuit and overcurrent. - Supply of a variety of user-friendly communication modules, such as Rs485 (GPRS,WiFi), CAN, USB etc., and suitable for computer, mobile phones,
- Internetmonitoring as well as remote operations.

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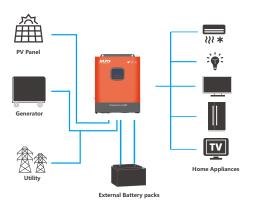
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#### **Application scenarios**



#### **Product connection diagram**



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**Product characteristics** 

•	ne inpac porc	0	buttery port
4	AC output port	12	Cooling fan
6	Grounding screw hold	13	PV port
6	RS485-2 communication port	(4)	Touch button
0	USB communication port	6	Indicator
8	RS485-1 communication port	16	LCD screen

	SDPO-4kw 48v	SDPO-5kw 48v		
AC mode				
Rated input voltage	,	230Vac		
Input voltage range		%/(90Vac-280Vac)±2%		
Frequency		Auto detection)		
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)	/57±0.3Hz ~ 65±0.3Hz (60Hz);		
Overload/short circuit protection	Circuit	breaker		
Efficiency		5%		
Conversion time (bypass and inverter)	10ms (	(typical)		
AC reverse protection		ilable		
Maximum bypass overload current	4	0A		
Inverter mode				
Output voltage waveform		ne wave		
Rated output power (VA)	4000	5000		
Rated output power (W)	4000	5000		
Power factor		1		
Rated output voltage (Vac)		Vac		
Output voltage error		5%		
Output frequency range (Hz)	50Hz ± 0.3Hz	/60Hz ± 0.3Hz		
Maximum Efficiency		12%		
Overload protection	$(102\% < load < 125\%) \pm 10\%$ : report error $(125\% < load < 150\%) \pm 10\%$ : report erro Load >150% ±10%: report error and turn	r and turn off the output after 10 seconds;		
Peak power	8000VA	10000VA		
Loaded motor capability	3HP	4HP		
Output short circuit protection	Circuit	breaker		
Bypass breaker specifications	4	A		
Rated battery input voltage	48V (Minimum sta	arting voltage 44V)		
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery settable on LCD screen)			
Power saving mode AC charging	Load ≤50W			
Battery type	Lead acid or I	ithium battery		
Maximum charge current	60A			
Charge current error	± 5	Adc		
Charge voltage range	40Vdc	~58Vdc		
Short circuit protection	Circuit breaker	and blown fuse		
Circuit breaker specifications	4	0A		
Overcharge protection	Alarm and turn off cl	narging after 1 minute		
PV charging				
Maximum PV open circuit voltage	145	iVdc		
PV operating voltage range	60-1-	45Vdc		
MPPT voltage range	60-1	15Vdc		
Battery voltage range	40-6	60Vdc		
Maximum output power	4200W	4200W		
PV charging current range (can be set)	0-80A	0-80A		
Charging short circuit protection	Blow	n fuse		
Wiring protection	Reverse pola	rity protection		
Certified specifications				
Certification	CE(EN6	52109-1)		
EMC certification leve	EN610	000, C2		
Operating temperature range	-15°C	to 55°C		
Storage temperature range	-25°C	~ 60°C		
Humidity range	5% to 95% (Conform	al coating protection)		
Noise	≤60dB			
Heat dissipation	Forced air cooling, variable speed of fan			
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control			
Size (L*W*D)	426*322*124mm			
	10.8			

SDPO 3kw 24v 220v pv 500v mppt 80a



#### **Performance characteristics**

·Load friendly: Stable sine wave AC output via SPWM modulation

Supports a wide range of battery technology: GEL, AGM, Flooded, LFP, and program.
 Dual LFP battery activation method: PV&mains
 Uninterrupted power supply: simultaneous connection to utility grid/generator and PV
 Intelligent programming: the priority of the output from different energy sources can be set

·High energy efficiency: up to 99.9% MPPT capture efficiency ·Instant viewing of operation: the LCD panel displays data and settings ,while you can also

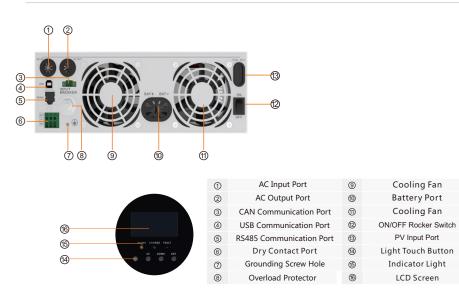
be viewed using the app and webpage Power saving: power saving mode automatically reduces power consumption at zero-load

Efficient heat dissipation: via intelligent adjustable speed fans

-Multiple safety protection functions: short circuit protection, overload protection, reverse polarity protection, and so on.

under-voltage and over-voltage protection and reverse polarity protection.

#### **Product characteristics**



Model	SDPO 3kw 24v 220v	Adjustable
Battery Input		
Battery type	Sealed、FLood、GEL、LFP、Ternary	√
Rated Battery Input Voltage	24V ( Minimum Startup Voltage 22V)	
Hybrid Charging Maxi		~
mum Charging Current	80A	
Battery Voltage Range	20Vdc~33Vdc ± 0.3Vdc(Undervoltage Warning/Shutdown Voltage/Overvoltage Warning/Overvoltage Recovery)	V
Solar Input		
Maximum PV Open-circuit	500/4	
Voltage	500Vdc	
PV Working Voltage Range	120-500Vdc	
MPPT Voltage Range	120-450Vdc	
Maximum PV Input Current	13A	
Maximum PV Input Power	4000W	
Maximum PV Charging Current	80A	√
AC Input(generator/grid)		1
Mains Maximum Charging		
Current	80A	√
Rated Input Voltage	220/230Vac	
Input Voltage Range	UPS Mains Mode : (170Vac~280Vac)±2% APL Generator Mode : (90Vac-280Vac)±2%	√
Frequency	50Hz/ 60Hz (Automatic Detection)	
Mains Charging Efficiency	>95%	
Switch Time (bypass and inverter)	10ms(Typical Value)	
Maximum Bypass Overload Current	30A	
AC Output		1
Output Voltage Waveform	Pure Sine Wave	1
Rated Output Voltage (Vac)	230Vac (200/208/220/240Vac)	√
Rated Output Power (VA)	3300 (2850/2950/3150/3000)	
Rated Output Power(W)	3300 (2850/2950/3150/3000)	
Peak Power	6000VA	
On-load Motor Capacity	2HP	
Output Frequency Range(Hz)	50Hz±0.3Hz/60Hz±0.3Hz	√
Maximum Efficiency	>92%	
No-load Loss	Non Energy-saving Mode: <50W Energy-saving Mode : <25W (Manual Setup )	
General		1
Certificate	CE(IEC 62109-1)	
EMC Certification Level	EN61000, C2	
Working Temperature Range	-10°C ~ 55°C	
Storage Temperature Range	-25°C ~ 60°C	
Humidity Range	5% to 95%(Conformal Coating Protection)	
Dimensions	378mm*280mm*103mm	
Weight (KG)	7.4	

SDPO 3.5kw 48v 110v pv 145v MPPT 80a



#### **Performance characteristics**

- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
- $\cdot$  Two output modes: mains bypass and inverter output; uninterrupted power supply.
- · Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- · Advanced MPPT technology with an efficiency of 99.9%.
- $\cdot$  With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- · ON/OFF rocker switch for AC output control.

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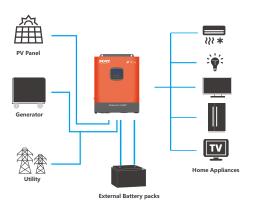
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- · Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
   Lithium battery activation design, allowing access of lead-acid battery and
  lithium battery.
- $360^{\circ}$  all-round protection with a number of protection functions. Such as
- overload, short circuit and overcurrent. - Supply of a variety of user-friendly communication modules, such as Rs485 (GPRS,WiFi), CAN, USB etc., and suitable for computer, mobile phones,
- Internetmonitoring as well as remote operations.

#### **Application scenarios**



#### **Product connection diagram**



# 16 15 44 1 1 1 1 2 3 5 6 7 9 10 0 0 5 6 7 9 10 10 0 0 5 6 7 9 10 10 0 0 0 0 Dry contact por Cooling fan Cooling fan AC input port 10 Battery port 10 10

**Product characteristics** 

3	AC input port	11	Battery port
(4)	AC output port	12	Cooling fan
6	Grounding screw hold	13	PV port
6	RS485-2 communication port	69	Touch button
7	USB communication port	6	Indicator
0	RS485-1 communication port	@	LCD coroon

Models	SDPO-2.5kw 24v	SDPO-3kw 48v	SDPO-3.5kw 48v	
AC mode				
Rated input voltage		110/120Vac		
Input voltage range		(90Vac~140Vac) ±2%		
Frequency		50Hz/ 60Hz (Auto detection)		
Frequency Range	47±0.3Hz	~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3	Hz (60Hz);	
Overload/short circuit protection		Circuit breaker		
Efficiency		>95%		
Conversion time (bypass and inverter)		10ms (typical)		
AC reverse protection		Available		
Maximum bypass overload current		40A		
Inverter mode				
Output voltage waveform		Pure sine wave		
Rated output power (VA)	2500	3000	3500	
Rated output power (W)	2500	3000	3500	
Power factor	2300	1	3300	
		-		
Rated output voltage (Vac)		120Vac		
Output voltage error		±5%		
Output frequency range (Hz)		50Hz ± 0.3Hz/60Hz ± 0.3Hz		
Maximum Efficiency		>91%		
Overload protection	(110% < load < 125%	<ul> <li>±10%: report error and turn off the outp ) ± 10%: report error and turn off the out report error and turn off the output after</li> </ul>	tput after 10 seconds;	
Peak power	4000VA	4500VA	5000VA	
Loaded motor capability	1HP	2HP	2HP	
Output short circuit protection		Circuit breaker		
Bypass breaker specifications		40A		
Rated battery input voltage		48V (Minimum starting voltage 44V)		
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery settable on LCD screen)			
Power saving mode	Load ≤50W			
AC charging				
Battery type	Lead acid or lithium battery			
Maximum charge current	40A			
Charge current error		± 5Adc		
Charge voltage range		40Vdc~60Vdc		
Short circuit protection		Circuit breaker and blown fuse		
Circuit breaker specifications		40A		
Overcharge protection	A	arm and turn off charging after 1 minu	te	
PV charging				
Maximum PV open circuit voltage		145Vdc		
PV operating voltage range		60-145Vdc		
MPPT voltage range		60-115Vdc		
Battery voltage range		40-60Vdc		
Maximum output power	420		4200W	
PV charging current range (can be set)	0-8		0-80A	
Charging short circuit protection		Blown fuse		
Wiring protection		Reverse polarity protection		
Certified specifications		p		
Certification		CE(EN62109-1)		
EMC certification leve		EN61000, C2		
Operating temperature range		-15°C to 55°C		
Storage temperature range		-15°C to 55°C -25°C ~ 60°C		
		-25°C ~ 60°C to 95% (Conformal coating protection	n)	
Humidity range	5'		11)	
Noise		≤60dB		
Heat dissipation		orced air cooling, variable speed of far		
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control			
Size (L*W*D)	426*322*124mm			

SDPO 3.5kw 110v 5kw 220v 48v pv 145v MPPT 80a with parallel



#### **Performance characteristics**

· Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sinewave. · Two output modes: mains bypass and inverter output; uninterrupted power

supply.

· Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.

· Advanced MPPT technology with an efficiency of 99.9%. With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.

· ON/OFF rocker switch for AC output control. · Power saving mode available to reduce no-load loss. Intelligent variable speed

fan to efficiently dissipate heat and extend system life. · Lithium battery activation design, allowing access of lead-acid battery and lithium battery.

 $\cdot$  360 ° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.

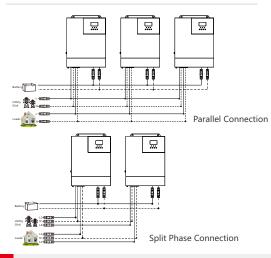
 $\cdot$  Supply of a variety of user-friendly communication modules, such as RS485(GPRS, WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations. · Available for 6 units parallel connection.

· Available for split phase connection.

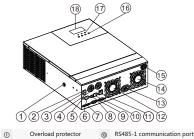
#### **Application scenarios**



#### **Product connection diagram**



#### **Product characteristics**



2	ON/OFF rocker switch	1	Dry contact port
3	AC input port	12	Cooling fan
4	AC output port	13	Battery port
6	Grounding screw hold	14	Cooling fan
6	RS485-2 communication port	15	PV PORT
7	Current sharing port (parallel module only)	16	Touch the key lightly
8	Parallel communication port (parallel module only)		Indicator light
9	USB communication port	18	LCD screen

Models	SDPO 5kw 48v	SDPO 3.5kw 48v	
AC mode			
Rated input voltage	220/230Vac	110/120Vac	
Input voltage range	(170Vac~280Vac) ±2%/(90Vac-280Vac)±2%	(90Vac~140Vac) ±2%	
Frequency	50Hz/ 60Hz(Au		
Parallelable/Split Phase units	Max. parallela	ble unit: 6pcs	
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/	57±0.3Hz ~ 65±0.3Hz (60Hz);	
Overload/short circuit protection	Circuit b	oreaker	
Efficiency	>95	5%	
Conversion time (bypass and inverter)	10ms (t	ypical)	
AC reverse protection	Avail	able	
Maximum bypass overload current	40	A	
Inverter mode			
Output voltage waveform	Pure sin	e wave	
Rated output power (VA)	5000	3500	
Rated output power (W)	5000	3500	
Power factor			
Rated output voltage (Vac)	230Vac	120Vac	
Output voltage error	250Vac ±5		
Output frequency range (Hz)	50Hz ± 0.3Hz/		
Maximum Efficiency	>92%	>91%	
Overload protection	(102% < load <125%) ±10%: report error and turn off the output after 5 minutes;(125% < load < 150%) ±10%: report error and turnoff the output after 10 seconds;Load >150% ±10%: report error and turn off the output after 5 seconds;	$(102\% < load < 110\%) \pm 10\%$ report error and turn off th output after 5 minutes; $(110\% < load < 125\%) \pm 10\%$ rep error and turn off the output after 10 seconds; $(load > 12 \pm 10\%)$ report error and turn off the output after 5 seconds;	
Peak power	10000VA	6000VA	
Loaded motor capability	4HP	2HP	
Output short circuit protection	Circuit b	oreaker	
Bypass breaker specifications	40	A	
Rated battery input voltage	48V (Minimum sta	rting voltage 44V)	
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage a	larm /overvoltage recovery settable on LCD screer	
Power saving mode AC charging	Load s	≤50W	
Battery type	Lead acid or	lithium battery	
Maximum charge current	60A	40A	
Charge current error	± 5/	Adc	
Charge voltage range	40Vdc~58Vdc	40Vdc~60Vdc	
Short circuit protection	Circuit breaker		
Circuit breaker specifications	40		
Overcharge protection	Alarm and turn off ch		
PV charging		arging arter 1 millitle	
Maximum PV open circuit voltage	145		
PV operating voltage range	60-14		
MPPT voltage range	60-11		
Battery voltage range	40-60		
Maximum output power	420		
PV charging current range (can be set)	0-8		
Charging short circuit protection	Blown	fuse	
Wiring protection Certified specifications	Reverse polarity protection		
Certification	CE(EN62	2040-1)	
EMC certification level	EN6204	0-2, C2	
Operating temperature range	-15°C t	o 55°C	
Storage temperature range	-25°C -	~ 60°C	
Humidity range	5% to 95% (Conforma	al coating protection)	
-	≤60		
Noise	SOUGB Forced air cooling, variable speed of fan		
Noise Heat dissipation	Forced air cooling. v	ariable speed of fan	
Heat dissipation	5.		
	Forced air cooling, v USB/RS485(WiFi/GPF 426*322	RS)/Dry node control	

SDPO 3kw 24v 220v pv 100v MPPT 60a



#### **Performance characteristics**

· Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave. · Two output modes: mains bypass and inverter output; uninterrupted power supply. · Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging. · Advanced MPPT technology with an efficiency of 99.9%. · With the charging requirement (voltage, current, mode) settings, and suitable for various types of energy storage batteries. · ON/OFF rocker switch for AC output control. · Power saving mode available to reduce no-load loss. · Intelligent variable speed fan to efficiently dissipate heat and extend system life. · Lithium battery activation design, allowing access of lead-acid battery and lithium battery. · 360 ° all-round protection with a number of protection functions. Such as overload, short circuit and over current. · Supply of a variety of user-friendly communication modules, such as

RS485(GPRS,WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remoteoperations.

· Lithium battey can be activated by both mains and PV.

RS4 4

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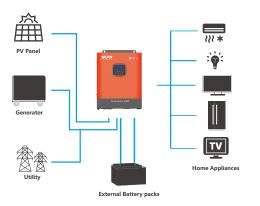
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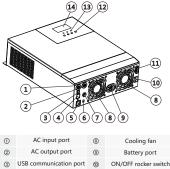
#### **Application scenarios**



#### **Product connection diagram**



#### **Product characteristics**



AC input port	8	Cooling fan
AC output port	9	Battery port
SB communication port	10	ON/OFF rocker switch
485 communication port	1	PV port
Dry node port	12	Touch button
Grounding screw hole	13	LED Indicator
AC input Overload protector	69	LCD screen

Models	SDPO 2kw 24v	SDPO 3kw 24v	
AC mode			
Rated input voltage	220/2	30Vac	
Input voltage range		5; (90Vac-280Vac)±2%	
Frequency		z (Auto detection)	
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz),	/57±0.3Hz ~ 65±0.3Hz (60Hz);	
Overload/short circuit protection		breaker	
Efficiency		5%	
Conversion time (bypass and inverter)	10ms (	typical)	
AC reverse protection		lable	
Maximum bypass overload current	31	AC	
Inverter mode			
Output voltage waveform	Pure si	ne wave	
Rated output power (VA)	2000	3000	
Rated output power (W)	2000	3000	
Power factor	:	1	
Rated output voltage (Vac)	230	Wac	
Output voltage error	±!	5%	
Output frequency range (Hz)	50Hz ± 0.3Hz	/60Hz ± 0.3Hz	
Efficiency	>9	2%	
Overload protection	(102% < load <125%) ±10%: report error (125% < load < 150%) ± 10%: report erro Load >150% ±10%: report error and turn	and turn off the output after5 minutes; r and turn off the output after 10 seconds; offthe output after 5 seconds;	
Peak power	4000	6000	
Loaded motor capability	1HP	2HP	
Output short circuit protection	Circuit	breaker	
Bypass breaker specifications	3(	A	
Rated battery input voltage	24V (Minimum sta	arting voltage 22V)	
Battery voltage range	20.0Vdc~33Vdc ± 0.6Vdc (Undervoltage alarm/shutdown voltage,		
Power saving mode		≤50W	
AC charging			
Battery type	Lead acid or I	ithium battery	
Maximum charge current	60A	80A	
Charge current error		Adc	
Charge voltage range	20.0Vdd	~33Vdc	
Short circuit protection	Circuit breaker	and blown fuse	
Circuit breaker specifications	3(	AC	
Overcharge protection	Alarm and turn off ch	narging after 1 minute	
PV charging		5.5	
Maximum PV open circuit voltage	100	Vdc	
PV operating voltage range		00Vdc	
MPPT voltage range	30-8	5Vdc	
Battery voltage range	20-3	3Vdc	
Maximum output power		00W	
PV charging current range (can be set)		50A	
Charging short circuit protection	Blow	n fuse	
Wiring protection		ity protection	
Certified specifications			
Certification	CE/ENIA	2109-1)	
EMC certification level		000, C2	
Operating temperature range		to 55°C	
		~ 60°C	
Storage temperature range Humidity range		al coating protection)	
Noise Heat discipation	≤60dB Forced air cooling, variable speed of fan		
Heat dissipation			
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control 378*280*103mm		
Size (L*W*D)	2301000	+100	

SDPO 3kw 24v 110v pv 100v MPPT 60a



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 ON/OFF rocker switch for AC output control.
 Power saving mode available to reduce no-load loss.
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 Supply of a variety of user-friendly communication modules, such as

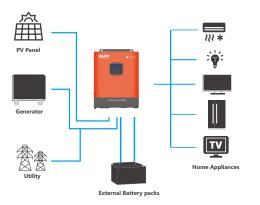
RS485(GPRS,WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remoteoperations.

 $\cdot$  Lithium battey can be activated by both mains and PV.

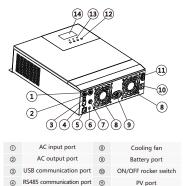
#### **Application scenarios**



#### **Product connection diagram**



#### **Product characteristics**



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(14)

Touch button

LED Indicator

LCD screen

Dry node port

Grounding screw hole

AC input Overload

protector

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Pa	ra	m	et	er	S
					-

Models	SDPO 2kw 24v	SDPO 3kw 24v	
AC mode			
Rated input voltage	110/1	L20Vac	
Input voltage range	(90Vac-14	40Vac)±2%	
Frequency	50Hz/ 60Hz (A	Auto detection)	
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)	/57±0.3Hz ~ 65±0.3Hz (60Hz);	
Overload/short circuit protection	Circuit	breaker	
Efficiency	2<	95%	
Conversion time (bypass and inverter)	10ms (	(typical)	
AC reverse protection	Ava	ilable	
Maximum bypass overload current	4	0A	
Inverter mode			
Output voltage waveform	Pure si	ne wave	
Rated output power (VA)	2000	3000	
Rated output power (W)	2000	3000	
Power factor		1	
Rated output voltage (Vac)	120	OVac	
Output voltage error	±	5%	
Output frequency range (Hz)	50Hz ± 0.3Hz	/60Hz ± 0.3Hz	
Efficiency	2<	2%	
Overload protection	(102% < load <110%) ±10%: report error (110% < load < 125%) ± 10%: report error Load >125% ±10%: report error and turn	or and turn off the output after 10 seconds;	
Peak power	3000	4500	
Loaded motor capability	1HP	2HP	
Output short circuit protection	Circuit	breaker	
Bypass breaker specifications	4	0A	
Rated battery input voltage	24V (Minimum sta	arting voltage 22V)	
Battery voltage range	20.0Vdc~33Vdc ± 0.6Vdc (Undervoltage alarm/shutdown voltage,		
Power saving mode		≤50W	
AC charging			
Battery type	Lead acid or l	ithium battery	
Maximum charge current	40A	40A	
Charge current error	± 5	Adc	
Charge voltage range	20.0Vd	c~33Vdc	
Short circuit protection	Circuit breaker	and blown fuse	
Circuit breaker specifications	4	0A	
Overcharge protection	Alarm and turn off ch	harging after 1 minute	
PV charging			
Maximum PV open circuit voltage	100	DVdc	
PV operating voltage range		00Vdc	
MPPT voltage range		35Vdc	
Battery voltage range	20-3	33Vdc	
Maximum output power		W	
PV charging current range (can be set)	0-1	60A	
Charging short circuit protection		in fuse	
Wiring protection		rity protection	
Certified specifications			
Certification	CE(EN6	52109-1)	
EMC certification level		000, C2	
Operating temperature range		to 55°C	
Storage temperature range		~ 60°C	
Humidity range		al coating protection)	
Noise		0dB	
Heat dissipation		variable speed of fan	
Communication interface	-		
Size (L*W*D)	USB/RS485(WiFi/GPRS)/Dry node control		
	378*280*103mm 6.8		

SDPO 3kw 5kw 48v 220v pv 500v MPPT 60a SDPO 5kw 48v 110v pv 500v MPPT 80a

#### **Performance characteristics**



#### ·Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave. ·Two output modes: mains bypass and inverter output; uninterrupted power

supply.

·Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.

Advanced MPPT technology with an efficiency of 99.9%.

·With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.

·ON/OFF rocker switch for AC output control.

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·Power saving mode available to reduce no-load loss.

·Intelligent variable speed fan to efficiently dissipate heat and extend system life. ·Lithium battery activation design, allowing access of lead-acid battery and lithium battery.

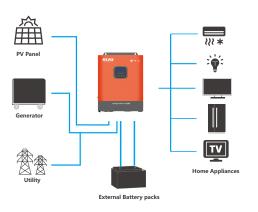
·360 ° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.

·Supply of a variety of user-friendly communication modules, such as Rs485 (GPRS,WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internetmonitoring as well as remote operations.

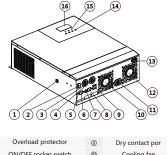
#### **Application scenarios**



#### **Product connection diagram**



#### **Product characteristics**



2	ON/OFF rocker switch	10	Cooling fan
~		~	y
3	AC input port	11	Battery port
(4)	AC output port	12	Cooling fan
5	Grounding screw hold	13	PV port
6	RS485-2 communication port	60	Touch button
7	USB communication port	6	Indicator
8	RS485-1 communication port	16	LCD screen

Model	SDPO 3kw 48v	SDPO 5kw 48v	SDPO 3.5kw 48v	SDPO 5kw 48v	
AC mode					
Rated input voltage	220/230Vac 110/120			20Vac	
Input voltage range	(170Vac~280Vac) ±29	% ; (90Vac-280Vac)±2%	(90Vac~14	l0Vac)±2%	
Frequency	50Hz/ 60Hz (auto-sensing)				
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz);				
Overload/short circuit protection	Breaker				
Efficiency		>95	i%		
Conversion time (bypass and inverter)		10ms (Typi	cal value)		
AC reverse protection		Availa	able		
Maximum bypass overload current		40A		63A	
Inverting mode					
Output voltage waveform		Pure sin	e wave		
Rated output power(VA)	3000 (2600/2700/3000)	5000 (4350/4500/4800/5000)	3500(2900/3000/3200)	5000(4100/4300/450	
Rated output power(W)	3000 (2600/2700/3000)	5000 (4350/4500/4800/5000)	3500(2900/3000/3200)	5000(4100/4300/450	
Power factor		1			
Rated output voltage (Vac)	230Vac (200/208/	220/240Vac settable)	120Vac (100/105	/110Vac settable)	
Output voltage error	250440 (200/200/2	+5		,110 vac Settable)	
Output frequency range (Hz)		50Hz ± 0.3Hz/			
Efficiency					
Overload protection	(102% <load<125%) rep<br="" ±10%:="">output after 5 minutes; (125%<load<150%) rep<="" td="" ±10%:=""><td colspan="3">&gt;90% (102% <load <125%)="" and="" error="" off="" reporting="" the<br="" turn="" ±10%:="">output after 5 minutes; (125% <load <125%)="" and<br="" error="" reporting="" ±10%:="">output after 5 minutes; (125% <load <125%)="" and<br="" error="" reporting="" ±10%:="">(125% <load <125%)="" and<br="" error="" reporting="" ±10%:="">(125% <load <125%)="" and="" error="" off="" p="" reporting="" the<="" turn="" ±10%:=""></load></load></load></load></load></td></load<150%)></load<125%)>	>90% (102% <load <125%)="" and="" error="" off="" reporting="" the<br="" turn="" ±10%:="">output after 5 minutes; (125% <load <125%)="" and<br="" error="" reporting="" ±10%:="">output after 5 minutes; (125% <load <125%)="" and<br="" error="" reporting="" ±10%:="">(125% <load <125%)="" and<br="" error="" reporting="" ±10%:="">(125% <load <125%)="" and="" error="" off="" p="" reporting="" the<="" turn="" ±10%:=""></load></load></load></load></load>			
	Load>150% ±10%: reporting e after 5 seconds;	error and turn offthe output	Load>125% ±10%: reporting after 5 seconds;	error and turn offthe outp	
Peak power	6000VA	10000VA	5000VA	7000VA	
Loaded motor capacity	2HP	4HP	2HP	3HP	
Output short-circuit protection		Brea	ker		
Specification of bypass breaker		40A		63A	
Rated battery input voltage		48V (minimum st	art voltage 44V)		
Battery voltage range	40.0Vdc~60Vdc ± 0.6Vdc (un	40.0Vdc~60Vdc ± 0.6Vdc (undervoltage alarm/tumoff voltage/overvoltage alarm/overvoltage restorationsettable LCD scree			
Power saving mode	Load ≤50W				
AC charge		Load ≤	50W		
		Load ≤ Lead acid or lit			
AC charge	6		hium battery	DA	
AC charge Battery type	6	Lead acid or lit	hium battery 40	)A	
AC charge Battery type Maximum charge current	6	Lead acid or lit	thium battery 4( Adc	A	
AC charge Battery type Maximum charge current Charge current error Charge voltage range	6	Lead acid or lit i0A ± 5A	ihium battery 4( Adc 60Vdc	DA	
AC charge Battery type Maximum charge current Charge current error Charge voltage range Short-circuit protection	6	Lead acid or lit i0A ± 5A 40Vdc~	ihium battery 4( Adc 60Vdc	0A 63A	
AC charge Battery type Maximum charge current Charge current error	6	Lead acid or lit 00A ± 5A 40Vdc~ Breaker and	hium battery 4( kdc 60Vdc blown fuse		
AC charge Battery type Maximum charge current Charge current error Charge voltage range Short-circuit protection Breaker specification	6	Lead acid or lit i0A ± 5A 40Vdc~ Breaker and 40A	hium battery 4( kdc 60Vdc blown fuse		
AC charge Battery type Maximum charge current Charge current error Charge voltage range Short-circuit protection Breaker specification Overcharge protection		Lead acid or lit i0A ± 5A 40Vdc~ Breaker and 40A	hium battery 4( kdc 60Vdc blown fuse		
AC charge Battery type Maximum charge current Charge current error Charge vortage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage	50	Lead acid or lit i0A ± 5Å 40Vdc~ Breaker and 40A Turn off charge a	thium battery 40 Adc 60Vdc blown fuse fter 1min alarm	63A	
AC charge Battery type Maximum charge current Charge current error Charge voltage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range	50 120-1	Lead acid or lit IOA ± 5A 40Vdc- Breaker and 40A Turn off charge a	hium battery 40 40 60Vdc blown fuse fter 1min alarm 450Vdc	63A 500Vdc	
AC charge Battery type Maximum charge current Charge current error Charge voltage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range MPPT voltage range	50 120-1	Lead acid or lit 10A ± 5A 40Vdc~ Breaker and 40A Turn off charge a 0Vdc 500Vdc 450Vdc	hium battery 40 40 60Vdc blown fuse fter 1min alarm 450Vdc 120-450Vdc 120-430Vdc	63A 500Vdc 120-500Vdc	
AC charge Battery type Maximum charge current Charge current error Charge voltage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range Battery voltage range	50 120- 120-4	Lead acid or lit 10A ± 5A 40Vdc- Breaker and 40A Turn off charge a 0Vdc 500Vdc 500Vdc 40-60 40-60	hium battery 40 60Vdc blown fuse fter 1min alarm 450Vdc 120-450Vdc 120-430Vdc	63A 500Vdc 120-500Vdc 120-450Vdc	
AC charge Battery type Maximum charge current Charge current error Charge vortage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range MPPT voltage range Maximum output power	50 120- 120- 4200W	Lead acid or lit IOA ± 5.0 40Vdc- Breaker and 40A Turn off charge a 0Vdc 500Vdc 450Vdc 450Vdc 5000W	hium battery 40 40 60Vdc blown fuse 450Vdc 120-450Vdc 120-430Vdc 120-430Vdc 4200W	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Maximum charge current Charge current error Charge ourrent error Charge outdage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range MPPT voltage range Battery voltage range Maximum output power Charge current range of solar energy (setable)	50 120- 120-4	Lead acid or lit 60A ± 5 <i>A</i> 400/dc- Breaker and 40A Turn off charge a 00/dc 500/vdc 450/vdc 450/vdc 40-60 5000/w 0-80A	chium battery 4( 4(dc 60Vdc blown fuse fter 1min alarm 450Vdc 120-450Vdc 120-450Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc	63A 500Vdc 120-500Vdc 120-450Vdc	
AC charge Battery type Battery type Charge current error Charge current error Charge voltage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage Maximum PV opencircuit voltage MPPT voltage range MPPT voltage range Battery voltage range Maximum output power Charge current range of solar energy (settable) Charge schort-circuit protection Wiring protection	50 120- 120- 4200W	Lead acid or lit IOA ± 5.0 40Vdc- Breaker and 40A Turn off charge a 0Vdc 500Vdc 450Vdc 450Vdc 5000W	chium battery 40 60Vdc 60Vdc blown fuse fter 1min alarm 450Vdc 120-450Vdc 120-430Vdc 120-430Vdc 0-60A fuse	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Maximum charge current Charge current error Charge current error Charge voltage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage Maximum PV opencircuit voltage Maximum ovltage range MAPPT voltage range Maximum output power Charge current range of solar energy (settable) Charge short-circuit protection Wring protection	50 120- 120- 4200W	Lead acid or lit 10A ± 5A 40Vdc~ Breaker and 40A Turn off charge a 0Vdc 500Vdc 40-60 5000W 0-80A Blown Inverse wiring	hium battery 40 60Vdc blown fuse 20 fter 1min alarm 450Vdc 120-450Vdc 120-450Vdc 120-450Vdc 120-450Vdc 120-450Vdc 120-450Vdc 120-450Vdc 120-60A 6 fuse 9 protection 20	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Battery type Charge current error Charge current error Charge vortage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage MPV operation voltage range MPPT voltage range MPPT voltage range Maximum output power Charge short-circuit protection Wiring protection Specification authentication	50 120- 120- 4200W	Lead acid or lit iOA ± 5A 400/dc- Breaker and 40A Turn off charge a 00/dc 5000/dc 450/dc 40-60 5000/W 0-80A Blown Inverse wiring CE(IEC6210	hium battery 40 60Vdc 60Vdc blown fuse 450Vdc 120-450Vdc 120-450Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-450Vdc 120	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Maximum charge current Charge current error Charge ourrent error Charge ourdage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range MAPT voltage range MAPT voltage range Battery voltage range Maximum output power Charge current range of solar energy (settable) Charge short-circuit protection Wiring protection Authentication specification EMC authentication grade	50 120- 120- 4200W	Lead acid or lit i0A ± 5A 40Vdc- Breaker and 40A Turn off charge a 0Vdc 500Vdc 40-60 500Vdc 40-60 5000W 0-80A Blown Inverse winne CE(IEC621C EN61	chium battery 40 60Vdc 60Vdc blown fuse fter 1min alarm 450Vdc 120-450Vdc 120-450Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-300 000 4200 42000	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Charge ourrent error Charge ourrent error Charge ourrent error Charge ourger ange Short-circuit protection Breaker specification Overcharge protection Solar charge PV operation voltage range MPPT voltage range MPPT voltage range Battery voltage range Gharge current range of solar energy (settable) Charge short-circuit protection Wiring protection Authentication specification Specification authentication ENC authentication grade Operation temperature range	50 120- 120- 4200W	Lead acid or lit i0A ± 5 <i>A</i> 404/dc- Breaker and 40A Turn off charge a 0V/dc 40-60 500/Vdc 40-60 500/Vdc 40-60 500/Vdc 40-60 Blown Inverse wiring CE(IEC6210 EN61 CE(IEC6210 EN61	chium battery 40 40 60Vdc 60Vdc 60Vdc 120-450Vdc 120-430Vdc 120-30Vdc	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Battery type Charge ourrent error Charge outlage range Short-circuit protection Breaker specification Overcharge protection Solar charge W operation voltage range W operation voltage range MPPT voltage range MPPT voltage range Gattery voltage range Maximum output power Charge solar energy (settable) Charge solar charge of solar energy (settable) Charge solar charge in the	50 120- 120- 4200W	Lead acid or lit 10A ± 5A 40Vdc- Breaker and 40A Turn off charge a 10Vdc 500Vdc 400-60 5000W 0-80A Blown Inverse wiring CE(EC6210 EN61 -1.15°C tu	hium battery 40 40 40 40 40 40 40 40 40 40 40 40 40	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Battery type Charge current error Charge current error Charge vortage range Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range MAPPT voltage range MAPPT voltage range Maximum output power Charge current range of solar energy (settable) Charge short-circuit protection Wiring protection Authentication specification ENC authentication grade Operation temperature range Humidity range	50 120- 120- 4200W	Lead acid or lit iOA ± 5A 4004c- Breaker and 40A Turn off charge a 0Vdc 500Vdc 40-60 500Vdc 40-60 5000W 0-80A Blown Inverse wiring CE(IEC6210 EN61 -15°C tt -25°C c 5% to 95% (Conforma	hium battery 4( 4(dc 60Vdc blown fuse 450Vdc 120-450Vdc 120-450Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-430Vdc 120-450Vdc	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Battery type Charge current error Charge ourrent error Charge ourger ange Short-circuit protection Breaker specification Overcharge protection Breaker specification Overcharge protection Maximum PV opencircuit voltage PV operation voltage range MAPT voltage range MAPT voltage range MAPT voltage range MART woltage range Shott-circuit protection Wring protection Wring protection Specification authentication EMC authentication grade Operation temperature range Noise Noise	50 120- 120- 4200W	Lead acid or lit i00A ± 5.4 400/dc Breaker and 40A Turn off charge a 00/dc 500/vdc 400-60 500/vdc 450/vdc 400-60 5000W 0-80A Blown Inverse wing CE(IEC6210 EN61 -15°C tt -2°C *C 5% to 95% (Conformations)	chium battery 40 44 45 60Vdc 60Vdc 450Vdc 120-450Vdc 120-450Vdc 120-430Vdc 4200W 4200W 0-60A 10 90, RoHs 000 555°C 60°C 41 coating protection) 48	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Battery type Charge current error Charge ourrent error Charge ourrent error Charge ourge arge Short-circuit protection Breaker specification Overcharge protection Solar charge PV operation voltage range PV operation voltage range MPPT voltage range MPPT voltage range Battery voltage range MPPT voltage range Charge short-circuit protection Minimg protection Authentication specification EMC authentication grade Operation temperature range Storage temperature range Humidity range Noise Thermal dissipation	50 120- 120- 4200W	Lead acid or lit i0A ± 5A 404/dc- Breaker and 40A Turn off charge a 10Vdc 500Vdc 500Vdc 40-60 500Vdc 40-60 5000W 0-80A Blown Inverse wiring CE(IEC621C EN61 -15°C tc -25°C - 5% to 95% cofforman sé00 Forced cooling with a	chium battery  tide  tide tide	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	
AC charge Battery type Battery type Charge current error Charge ourrent error Charge ourger ange Short-circuit protection Breaker specification Overcharge protection Solar charge Maximum PV opencircuit voltage PV operation voltage range MAPT voltage range MAPT voltage range MAPT voltage range Charge short-circuit protection Wring protection Wring protection Specification authentication EMC authentication grade Operation temperature range Noise Noise	50 120- 120- 4200W	Lead acid or lit i00A ± 5.4 400/dc Breaker and 40A Turn off charge a 00/dc 500/vdc 400-60 500/vdc 450/vdc 400-60 5000W 0-80A Blown Inverse wing CE(IEC6210 EN61 -15°C tt -2°C *C 5% to 95% (Conformations)	chium battery 40 hium battery 40 kdc 60Vdc blown fuse 7 fter 1min alarm 7 450Vdc 120-450Vdc 120-430Vdc 7 120-430Vdc 7 120	63A 500Vdc 120-500Vdc 120-450Vdc 5000W	

SDPO 5kw 48v 220v pv 500v with parallel MPPT 80a



#### Performance characteristics

·Load friendly: Stable sine wave AC output via SPWM modulation

-Supports a wide range of battery technology: GEL, AGM, Flooded, LFP, and program. -Dual LFP battery activation method: PV&mains

-Uninterrupted power supply: simultaneous connection to utility grid/generator and  $\mbox{PV}$  .

Intelligent programming: the priority of the output from different energy sources can be set.

·High energy efficiency: up to 99.9% MPPT capture efficiency.

Instant viewing of operation: the LCD panel displays data and settings ,while you can also be viewed using the app and webpage.

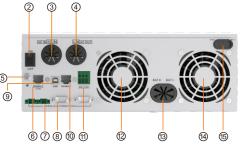
Power saving: power saving mode automatically reduces power consumption at zero-load.

-Efficient heat dissipation: via intelligent adjustable speed fans -Multiple safety protection functions: short circuit protection, overload protection, reverse olarity protection, and so on.

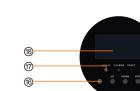
-under-voltage and over-voltage protection and reverse polarity protection. -Supports up to 6 devices of the same model connected in parallel (forming a single-phase,split-phase,three-phase electrical system)

#### **Product characteristics**





1	Overload Protector	10	RS485-1 Communication Port
2	ON/OFF Rocker Switch	1	Dry Contact Port
3	AC Input Port	12	Cooling Fan
4	AC Output Port	13	Battery Port
5	Grounding Screw Hole	14	Cooling Fan
6	RS485-2 Communication Port (For BMS)	15	PV Port
7	Current Sharing Port (only apply to parallel modules)	16	Light Touch Button
8	Communication Port (only apply to parallel modules)	1	Indicator Light
9	USB Communication Port	18	LCD Screen



Model	SDPO-5kw 48v	Adjustable
Battery Input		
Battery type	Sealed、FLood、GEL、LFP、Ternary	√
Rated Battery Input Voltage	48V ( Minimum Startup Voltage 44V)	
Hybrid Charging Maximum Charging Current	80A	√
Battery Voltage Range	40Vdc~60Vdc ± 0.6Vdc(Undervoltage Warning/Shutdown Voltage/ Overvoltage Warning/Overvoltage Recovery)	√
Solar Input		
Maximum PV Open-circuit Voltage	500Vdc	
PV Working Voltage Range	120-500Vdc	
MPPT Voltage Range	120-450Vdc	
Maximum PV Input Current	22A	
Maximum PV Input Power	5500W	
Maximum PV Charging Current	80A	√
AC Input ( generator/grid )		
Mains Maximum Charging Current	60A	√
Rated Input Voltage	220/230Vac	
Input Voltage Range	UPS Mains Mode : (170Vac~280Vac)±2% APL Generator Mode : (90Vac~280Vac)±2%	~
Frequency	50Hz/ 60Hz (Automatic Detection)	
Mains Charging Efficiency	>95%	
Switch Time (bypass and inverter)	10ms(Typical Value)	
Maximum Bypass Overload Current	40A	
AC Output		-
Output Voltage Waveform	Pure Sine Wave	
Rated Output Voltage (Vac)	230Vac (200/208/220/240Vac )	√
Rated Output Power (VA)	5000 ( 4350/4500/4750/5000 )	
Rated Output Power(W)	5000 ( 4350/4500/4750/5000 )	
Peak Power	10000VA	
On-load Motor Capacity	4HP	
Output Frequency Range(Hz)	50Hz±0.3Hz/60Hz±0.3Hz	√
Maximum Efficiency	>92%	
No-load Loss	Non Energy-saving Mode: ≤50W Energy-saving Mode : ≤25W (Manual Setup )	
General		1
Number of parallel/split phases	1-6PCS	
Certificate	CE(IEC62109-1)/CETL(UL 1741 C22.2 NO.107.1)	
EMC Certification Level	EN61000, C2	
Working Temperature Range	-10°C ~ 55°C	
Storage Temperature Range	-25°C ~ 60°C	
Humidity Range	5% to 95%(Conformal Coating Protection)	
Dimensions	426mm*322mm*124mm	
Weight (KG)	10.5	



#### Product overview

HF series is a new all-in-one hybrid solar charge inverter, which integrates solar energy storage &means charging energy storage and AC sine wave output. Thanks to DSP control and advanced controlalgorithm, it has high response speed, high reliability and high industrial standard.

#### Performance characteristics

Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
Two output modes: mains bypass and inverter output; uninterrupted power supply.
Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
Advanced MPPT technology with an efficiency of 99.9%.
With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.

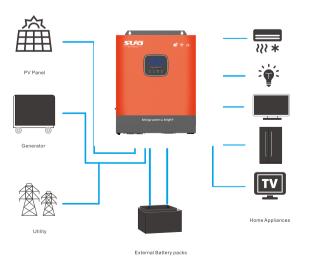
- ·ON/OFF rocker switch for AC output control.
- ·Power saving mode available to reduce no-load loss.

Intelligent variable speed fan to efficiently dissipate heat and extend system life.
 Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
 360 ° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.

Supply of a variety of user-friendly communication modules, such as RS485(GPRS, WiFi, Bluetooth), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.

Appearance

#### Product connection diagram



1	AC input port	9	Cooling fan
2	AC output port	10	Battery port
3	CAN communication port	1	Cooling fan
4	USB communication port	12	ON/OFF rocker switch
5	Rs485 communication port	13	PV port
6	Dry contact port	14	Touch button
0	Grounding screw hole	15	LED Indicator
8	Overload protector	16	LCD screen

#### Technical parameters >>>

Models	SDPO 3kw	
AC mode		
Rated input voltage	220/230Vac	
Input voltage range	(170Vac~280Vac) ±2%/(90Vac-280Vac)±2%	
Frequency	50Hz/ 60Hz (Auto detection)	
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz);	
Overload/short circuit protection	Circuit breaker	
Efficiency	>95%	
Conversion time (bypass and inverter)	10ms (typical)	
AC reverse protection	Available	
Maximum bypass overload current	30A	
Inverter mode		
Output voltage waveform	Pure sine wave	
Rated output power (VA)	3300	
Rated output power (W)	3300	
Power factor	1	
Rated output voltage (Vac)	230Vac	
Output voltage error	±5%	
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz	
Maximum Efficiency	>92%	
Overload protection	(110% < load <125%) ±10%: report error and turn off the output after 5 minutes;(125% < load <150%) ± 10%: report error and turn off the output after 10 seconds;Load >150% ±10%: report error and turn off the output after 5 seconds;	
Peak power	6000VA	
Loaded motor capability	2HP	
Output short circuit protection	Circuit breaker	
Bypass breaker specifications	30A	
Rated battery input voltage	48V (Minimum starting voltage 44V)	
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery settable on LCD screen)	
Power saving mode	Load ≤50W	
AC charging		
Battery type	Lead acid or lithium battery	
Maximum charge current	60A	
Charge voltage range	40 –58Vdc	
Short circuit protection	Circuit breaker and blown fuse	
Circuit breaker specifications	30A	
Overcharge protection	Alarm and turn off charging after 1 minute	
PV charging		
Maximum PV open circuit voltage	145Vdc	
PV operating voltage range	60-145Vdc	
MPPT voltage range	60-115Vdc	
Battery voltage range	40-60Vdc	
Maximum input power	3400W	
PV charging current range (can be set)	0-60A	
Charging short circuit protection	Blown fuse	
Wiring protection	Reverse polarity protection	
Certified specifications		
Certification	CE(IEC 62109-1)	
EMC certification level	EN61000, C2	
Operating temperature range	-15°C to 55°C	
Storage temperature range	-25°C ~ 60°C	
Humidity range	5% to 95% (Conformal coating protection)	
Noise	≤60dB	
Heat dissipation	Forced air cooling, variable speed of fan	
Communication interface	CAN/USB/RS485(WiFi/GPRS)/Dry node control	
Size (L*W*D)	378mm*280mm*103mm	

### SDPO 10kw 48v 120/240v pv 500v with mppt 200a

MODEL	SDPO 8kw	SDPO 10kw	CA S
	INVERTER OUTPUT	Г	
Rated Output Power	8,000W	10,000W	
Max.Peak Power	16,000W	20,000W	
Rated Output Voltage	120/240Vac(	L1/L2/N/PE split phase)	-
Load Capacity of Motors	5HP	6HP	
Rated AC Frequency		50/60Hz	-
Waveform	Pu	re Sine Wave	
Switch Time	10	ms (typical)	
Parallel capacity		1	
	BATTERY		
Battery Type	Li-	ion/Lead-Acid	-
Rated Battery Voltage		48Vdc	
Voltage Range		40-60Vdc	-
Max.MPPT Charging Current		200A	-
Max.Mains/Generator Charging Current	100A	120A	-
Max.Hybrid Charging Current	180A	200A	-
	PV INPUT		
Num. of MPP Trackers		2	
Max.PV array power		11,000W	
Max.input current		22/22A	
Max.Voltage of Open Circuit	500Vdc		
MPPT Voltage Range	-	125-425Vdc	
	MAINS / GENERATOR IN	NPUT	
Input Voltage Range		90-140Vac	
Frequency Range		50/60Hz	
Bypass Overload Current		63A	
	EFFICIENCY		
MPPT Tracking Efficiency	99.9%		
Max. Battery Inverter Efficiency		92%	
	GENERAL		
Dimensions	620*435*1	30mm (2*1.4*0.4ft)	
Weight	20kg (44lb)	21kg (46.3lb)	
Protection Degree	IP20, Indoor Only		
Operating Temperature Range	-15-55°C,>45°C derated (5-131°F,>113°F derated)		
Noise	<60dB		
Cooling Method	Internal Fan		
Warranty		2 Years	
	COMMUNICATION		
Embedded Interfaces	RS485/C	AN/USB/Dry contact	-
	CERIFICATION		
Safety	IEC62109-1	I, IEC62109-2,UL1741	
EMC	EN61000-6-1, EN	N61000-6-3, FCC 15 class B	
RoHS		Yes	