

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
- · 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.
- · Power saving mode available to reduce no-load loss.
- · Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- \cdot Lithium battery activation design, allowing access of lead-acid battery and
- · 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





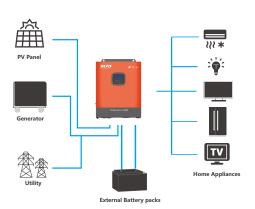




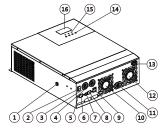




Product connection diagram



Product characteristics



1	Overload protector	9	Dry contact por
2	ON/OFF rocker switch	100	Cooling fan
3	AC input port	111	Battery port
4	AC output port	@	Cooling fan
(5)	Grounding screw hold	13	PV port
6	RS485-2 communication port	(4)	Touch button
7	USB communication port	6	Indicator
8	RS485-1 communication port	16	LCD screen

Models	SDPO-4kw 48v	SDPO-5kw 48v		
AC mode				
Rated input voltage	220/	230Vac		
Input voltage range		%/(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		t breaker		
Efficiency		95%		
Conversion time (bypass and inverter)	10ms (typical)			
AC reverse protection	Available			
Maximum bypass overload current	4	40A		
Inverter mode	node			
Output voltage waveform	Pure s	ine wave		
Rated output power (VA)	4000	5000		
Rated output power (W)	4000	5000		
Power factor		1		
Rated output voltage (Vac)	23	0Vac		
Output voltage error	±	5%		
Output frequency range (Hz)	50Hz ± 0.3H:	z/60Hz ± 0.3Hz		
Maximum Efficiency	>	92%		
Overload protection	$(102\% < load < 125\%) \pm 10\%$: report erro $(125\% < load < 150\%) \pm 10\%$: report erro Load >150 $\% \pm 10\%$: report error and turn	r and turn off the output after 5 minutes; or and turn off the output after 10 seconds; n off the output after 5 seconds;		
Peak power	8000VA	10000VA		
Loaded motor capability	3HP	4HP		
Output short circuit protection	Circuit	t 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 AC charging	Load ≤50W			
Battery type	Lead acid or	lithium battery		
Maximum charge current	6	50A		
Charge current error	±	5Adc		
Charge voltage range	40Vde	~58Vdc		
Short circuit protection	Circuit breake	r and blown fuse		
Circuit breaker specifications		10A		
Overcharge protection	Alarm and turn off o	harging after 1 minute		
PV charging				
Maximum PV open circuit voltage	14	5Vdc		
PV operating voltage range	60-1	.45Vdc		
MPPT voltage range	60-1	15Vdc		
Battery voltage range		60Vdc		
Maximum output power	4200W	4200W		
PV charging current range (can be set)	0-80A	0-80A		
Charging short circuit protection	Blov	vn fuse		
Wiring protection Certified specifications	Reverse pola	arity protection		
Certification	CE(EN62109-1)			
EMC certification leve	EN61	000, C2		
Operating temperature range	-15°C	to 55°C		
Storage temperature range	-25°C	C ~ 60°C		
Humidity range	5% to 95% (Conform	nal coating protection)		
Noise	≤6	50dB		
Heat dissipation	Forced air cooling,	variable speed of fan		
Communication interface	USB/RS485(WiFi/GF	PRS)/Dry node control		
Size (L*W*D)	426*32	2*124mm		
Weight (kg)	1	.0.8		

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

 $\cdot \textbf{Intelligent programming: the priority of the output from different energy sources can be set} \\$

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

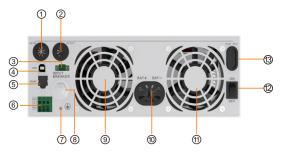
Instant viewing of operation: the LCD panel displays data and settings ,while you can also be viewed using the app and webpage

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





1	AC Input Port	9	C
2	AC Output Port	10	Ва
3	CAN Communication Port	11	C
4	USB Communication Port	12	ON/OF
(5)	RS485 Communication Port	13	Р
6	Dry Contact Port	14)	Light
7	Grounding Screw Hole	(5)	Inc
8	Overload Protector	16	L

Cooling Fan
Battery Port
Cooling Fan
ON/OFF Rocker Switch
PV Input Port
Light Touch Button
Indicator Light
LCD Screen

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)	√
Solar Input		•
Maximum PV Open-circuit	FOOVEL.	
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)		
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	is Charging Efficiency >95%	
Switch Time (bypass and inverter 10ms(Typical Value)		
Maximum Bypass Overload Current	30A	
AC Output		_
Output Voltage Waveform	Pure Sine Wave	
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		
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.
- · Two output modes: mains bypass and inverter output; uninterrupted power
- · 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.
- · 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
- · 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





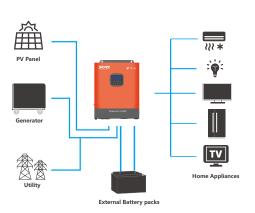




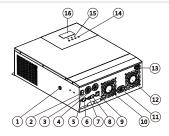




Product connection diagram



Product characteristics



1	Overload protector	9	Dry contact por
2	ON/OFF rocker switch	100	Cooling fan
3	AC input port	111	Battery port
4	AC output port	@	Cooling fan
(5)	Grounding screw hold	13	PV port
6	RS485-2 communication port	(4)	Touch button
7	USB communication port	6	Indicator
8	RS485-1 communication port	16	LCD screen

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±0.3Hz (60Hz);					
Overload/short circuit protection		Circuit breaker				
Efficiency		>95%				
Conversion time (bypass and inverter)	10ms (typical)					
AC reverse protection	Available					
Maximum bypass overload current	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		1				
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%)	$\pm 10\%$: report error and turn off the outpu $\pm 10\%$: report error and turn off the outpuper or and turn off the outpuper or turn off the output after 5	ut 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 AC charging	Load ≤50W					
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	Ala	rm and turn off charging after 1 minute	n off charging after 1 minute			
PV charging		3 3				
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	4200'		4200W			
PV charging current range (can be set)	0-80		0-80A			
Charging short circuit protection	0 00	Blown fuse	0 001			
Wiring protection		Reverse polarity protection				
Certified specifications						
Certification		CE(EN62109-1)				
EMC certification leve	EN61000, C2					
Operating temperature range	-15°C to 55°C					
Storage temperature range	-					
Humidity range						
Noise						
Heat dissipation						
Communication interface						
Size (L*W*D) 426*322*124mm						
SIEC (E VV D)		420 322 12411111				

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
- · 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.
- \cdot 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, Internet monitoring as well as remote operations.
- · Available for 6 units parallel connection.
- · Available for split phase connection.

Application scenarios





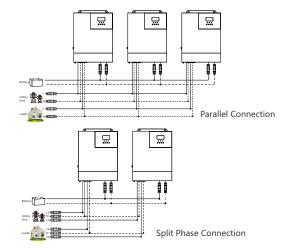




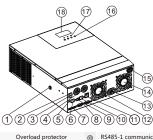




Product connection diagram



Product characteristics



1	Overload protector	10	RS485-1 communication port
2	ON/OFF rocker switch	11)	Dry contact port
3	AC input port	12	Cooling fan
4	AC output port	13	Battery port
(5)	Grounding screw hold	149	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)	177	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(Auto detection)		
Parallelable/Split Phase units Max. parallelable unit: 6pcs			
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/	/57±0.3Hz ~ 65±0.3Hz (60Hz);	
Overload/short circuit protection	Circuit	breaker	
Efficiency	>95% 10ms (typical)		
Conversion time (bypass and inverter)			
AC reverse protection	Avail	lable	
Maximum bypass overload current	40A		
Inverter mode			
Output voltage waveform	Pure sir	ne wave	
Rated output power (VA)	5000	3500	
Rated output power (W)	5000	3500	
Power factor	1	1	
Rated output voltage (Vac)	230Vac	120Vac	
Output voltage error	±5	5%	
Output frequency range (Hz)	50Hz ± 0.3Hz/	/60Hz ± 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 the output after 5 minutes(110% < load < 125%) \pm 10%: repor error and turn off the output after 10 seconds:(Load >155 \pm 10%): report error and turn off the output after 15 seconds.	
Peak power	10000VA	6000VA	
Loaded motor capability	4HP	2HP	
Output short circuit protection		breaker	
Bypass breaker specifications	40		
Rated battery input voltage	48V (Minimum starting voltage 44V)		
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage a		
Power saving mode AC charging	Load :	≤50W	
Battery type	Lead acid or	lithium battery	
Maximum charge current	60A	40A	
Charge current error	± 5.		
Charge voltage range	40Vdc~58Vdc	40Vdc~60Vdc	
Short circuit protection		and blown fuse	
Circuit breaker specifications	40		
Overcharge protection	Alarm and turn off ch	arging after 1 minute	
PV charging			
Maximum PV open circuit voltage	145		
		483.41	
PV operating voltage range	60-14		
MPPT voltage range	60-11	L5Vdc	
MPPT voltage range Battery voltage range	60-13 40-6	L5Vdc 0Vdc	
MPPT voltage range Battery voltage range Maximum output power	60-11 40-6 420	LSVdc OVdc IOW	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set)	60-11 40-6 420 0-8	1.5Vdc OVdc DOW DOA	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection	60-11 40-6 420 0-8 Blown	15Vdc OVdc DOW DOA n fuse	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection	60-11 40-6 420 0-8 Blown	1.5Vdc OVdc DOW DOA	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications	60-11 40-6 420 0-8 Blowr Reverse polar	L5Vdc 0Vdc 10W 20 A 10 fuse ity protection	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications Certification	60-11 40-6 420 0-8 Blown Reverse polar CE(EN6	L5Vdc 0Vdc 0VW 80A n fuse ity protection	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications Certification EMC certification level	60-11 40-6 420 0-8 Blown Reverse polar CE(ENG EN6204	15Vdc 0Vdc 10W 80A 1 fuse ity protection 2040-1)	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certification EMC certification level Operating temperature range	60-11 40-6 420 0-8 Blowm Reverse polar CE(ENG ENG204 -15°C t	1.5Vdc 0Vdc 0VW 100A 1 fuse ity protection 2040-1) 10-2, C2	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications Certification EMC certification level	60-11 40-6 420 0-8 Blown Reverse polar CE(ENG EN6204	1.5Vdc 0Vdc 0VW 100A 1 fuse ity protection 2040-1) 10-2, C2	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications Certification EMC certification level Operating temperature range Storage temperature range Humidity range	60-11 40-6 420 0-8 Blown Reverse polar CE(EN6 EN6204 -15°C -25°C	1.5Vdc 0Vdc 0VW 100A 1 fuse ity protection 2040-1) 10-2, C2	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications Certification EMC certification level Operating temperature range Storage temperature range	60-11 40-6 420 0-8 Blown Reverse polar CE(EN6 ENN620 1-15°C t -25°C	1.5Vdc 0Vdc 10W 10N 1 fuse 1ty protection 10-2, C2 10 55°C	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certification Certification EMC certification level Operating temperature range Storage temperature range Humidity range Noise Heat dissipation	60-11 40-6 420 0-8 Blowm Reverse polar CE(EN6 EN6204 -15°C t -25°C 5% to 95% (Conform.	LSVdc 0Vdc 0Vdc 0VW 1 fuse ity protection 2040-1) 10-2, C2 10-55°C	
MPPT voltage range Battery voltage range Maximum output power PV charging current range (can be set) Charging short circuit protection Wiring protection Certified specifications Certification EMC certification level Operating temperature range Storage temperature range Humidity range Noise	60-11 40-6 420 0-8 Blowm Reverse polar CE(EN6 EN6204 -15°C t -25°C 5% to 95% (Conform.	1.5Vdc 0Vdc 10VW 100A 10 fuse 1ity protection 2040-1) 10-2, C2 10-55°C	

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
- · 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
- · 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 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.

Application scenarios



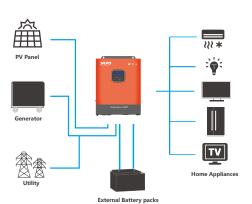




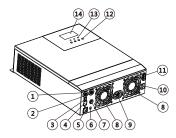




Product connection diagram



Product characteristics



1	AC input port	8	Cooling fan
2	AC output port	9	Battery port
3	USB communication port	10	ON/OFF rocker switch
4	RS485 communication port	111	PV port
(5)	Dry node port	@	Touch button
6	Grounding screw hole	13	LED Indicator
(7)	AC input Overload	(4)	LCD screen

Models	SDPO 2kw 24v	SDPO 3kw 24v		
AC mode				
Rated input voltage	,	230Vac		
Input voltage range	(170Vac~280Vac) ±2%; (90Vac-280Vac)±2%			
Frequency	50Hz/ 60H	z (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	>9<	95%		
Conversion time (bypass and inverter)	10ms	(typical)		
AC reverse protection	Ava	ilable		
Maximum bypass overload current	3	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)	230	0Vac		
Output voltage error	±	5%		
Output frequency range (Hz)	50Hz ± 0.3Hz	z/60Hz ± 0.3Hz		
Efficiency	>9	92%		
Overload protection	$(102\% < load < 125\%) \pm 10\%$: report error $(125\% < load < 150\%) \pm 10\%$: report error Load $>150\% \pm 10\%$: report error and turn	and turn off the output after5 minutes; or 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	0A		
Rated battery input voltage	24V (Minimum starting voltage 22V)			
Battery voltage range	20.0Vdc~33Vdc ± 0.6Vdc (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	80A		
Charge current error	± 5	5Adc		
Charge voltage range	20.0Vd	c~33Vdc		
Short circuit protection	Circuit breaker	and blown fuse		
Circuit breaker specifications	3	0A		
Overcharge protection	Alarm and turn off cl	harging after 1 minute		
PV charging				
Maximum PV open circuit voltage	100	0Vdc		
PV operating voltage range		00Vdc		
MPPT voltage range		35Vdc		
Battery voltage range		33Vdc		
Maximum output power		00W		
PV charging current range (can be set)		60A		
Charging short circuit protection		n fuse		
Wiring protection	=:::::	rity protection		
Certified specifications				
Certification	CE(ENG	52109-1)		
EMC certification level		000, C2		
Operating temperature range	-15°C to 55°C -25°C ~ 60°C			
Storage temperature range				
Humidity range		nal coating protection)		
Noise		60dB		
Heat dissipation		variable speed of fan		
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control			
Size (L+W+D) 378+280+103mm				
	378 280	2 2000000		

SDPO 3kw 24v 110v 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
- · 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
- · 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 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.

Application scenarios





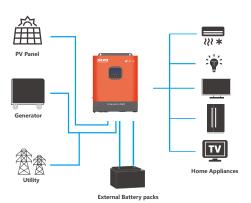




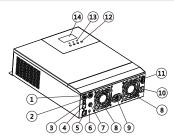




Product connection diagram



Product characteristics



1	AC input port	8	Cooling fan
2	AC output port	9	Battery port
3	USB communication port	10	ON/OFF rocker switch
4	RS485 communication port	111	PV port
(5)	Dry node port	@	Touch button
6	Grounding screw hole	13	LED Indicator
(P)	AC input Overload	M	LCD scroon

Models	SDPO 2kw 24v	SDPO 3kw 24v	
AC mode			
Rated input voltage		.20Vac	
Input voltage range	(90Vac-140Vac)±2%		
Frequency	50Hz/ 60Hz (Auto detection)		
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz);		
Overload/short circuit protection	Circuit	breaker	
Efficiency	>9	5%	
Conversion time (bypass and inverter)	10ms (typical)	
AC reverse protection	Avai	lable	
Maximum bypass overload current	40	DA .	
Inverter mode			
Output voltage waveform	Pure sir	ne wave	
Rated output power (VA)	2000	3000	
Rated output power (W)	2000	3000	
Power factor		1	
Rated output voltage (Vac)	120	Vac	
Output voltage error	±5	5%	
Output frequency range (Hz)	50Hz ± 0.3Hz,	/60Hz ± 0.3Hz	
Efficiency	>9	2%	
Overload protection	$(102\% < load < 110\%) \pm 10\%$: report error $(110\% < load < 125\%) \pm 10\%$: report erro Load >125% ± 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	3000	4500	
Loaded motor capability	1HP	2HP	
Output short circuit protection		breaker	
Bypass breaker specifications		DA.	
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 li	ithium battery	
Maximum charge current	40A	40A	
Charge current error	± 5	Adc	
Charge voltage range	20.0Vdc	~33Vdc	
Short circuit protection	Circuit breaker	and blown fuse	
Circuit breaker specifications	40		
Overcharge protection	Alarm and turn off ch	narging after 1 minute	
PV charging			
Maximum PV open circuit voltage	100	Vdc	
PV operating voltage range		00Vdc	
MPPT voltage range		5Vdc	
Battery voltage range		3Vdc	
Maximum output power	140		
PV charging current range (can be set)		· - · ·	
Charging short circuit protection		n fuse	
Wiring protection	Reverse polar	rity protection	
Certified specifications	neverse polar	71	
Certification Certifications	CEIENE	2109-1)	
EMC certification level		000, C2	
Operating temperature range		to 55°C	
Storage temperature range		~ 60°C	
Humidity range		al coating protection)	
		al coating protection) OdB	
Noise			
Heat dissipation Communication interface	Forced air cooling, variable speed of fan		
	USB/RS485(WiFi/GPI	DC) /Day and a sentral	
Size (L*W*D)		RS)/Dry node control *103mm	

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.

·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.

Application scenarios







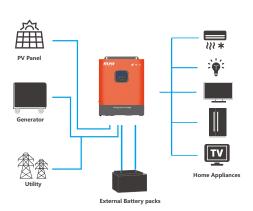




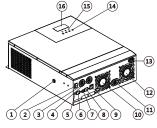


Power stati

Product connection diagram



Product characteristics



1	Overload protector	9	Dry contact por
2	ON/OFF rocker switch	100	Cooling fan
3	AC input port	111	Battery port
4	AC output port	@	Cooling fan
(5)	Grounding screw hold	13	PV port
6	RS485-2 communication port	(4)	Touch button
7	USB communication port	6	Indicator
8	RS485-1 communication port	6	LCD screen

Model	SDPO 3kw 48v	SDPO 5kw 48v	SDPO 3.5kw 48v	SDPO 5kw 48v	
AC mode					
Rated input voltage	220/2	230Vac	110/1	20Vac	
Input voltage range	(170Vac~280Vac) ±2%	6; (90Vac-280Vac)±2%	(90Vac~14	0Vac~140Vac)±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		Brea	aker		
Efficiency		>95	%		
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 sine	e wave		
Rated output power(VA)	3000 (2600/2700/3000)	5000 (4350/4500/4800/5000)	3500(2900/3000/3200)	5000(4100/4300/4500	
Rated output power(W)	3000 (2600/2700/3000)	5000 (4350/4500/4800/5000)	3500(2900/3000/3200)	5000(4100/4300/4500	
Power factor		1			
Rated output voltage (Vac)	230Vac (200/208/2	220/240Vac settable)	120Vac (100/105	/110Vac settable)	
Output voltage error		±5'			
Output frequency range (Hz)		50Hz ± 0.3Hz/			
Efficiency		>90			
Emelency	(102% < load < 125%) +10% - rer			norting error and turn off th	
Overload protection	102%-cload <125%) ±10%: reporting error and turn off the utput after 5 minutes: (102%-cload <150%) ±10%: reporting error and turn off the output after 10%: reporting error and turn off the output after 10%: reporting error and turn off the output after 10%: reporting error and turn off the output after 10%: reporting error and turn off the output after 10%: reporting error after 5 seconds; 10%: reporting error after			porting error and turn off the error and turn offthe output	
Peak power	6000VA	10000VA	5000VA	7000VA	
Loaded motor capacity	2HP	4HP	2HP	3HP	
Output short-circuit protection		Breaker			
Specification of bypass breaker		40A		63A	
Rated battery input voltage		48V (minimum st	art voltage 44V)		
Battery voltage range	40.0Vdc~60Vdc ± 0.6Vdc (und	dervoltage alarm/turnoff voltage/o	vervoltage alarm/overvoltage re	storationsettable LCD scree	
Power saving mode	Load ≤50W				
AC charge					
Battery type		Lead acid or lit	hium battery		
Maximum charge current	6	0A	40)A	
Charge current error		± 5A	.dc		
Charge voltage range		40Vdc~			
Short-circuit protection		Breaker and	blown fuse		
Breaker specification		40A		63A	
Overcharge protection		Turn off charge a	fter 1min alarm	USA	
Solar charge		ram on charge a	Tel Immadim		
Maximum PV opencircuit voltage	EO)Vdc	450Vdc	500Vdc	
PV operation voltage range		500Vdc	120-450Vdc	120-500Vdc	
MPPT voltage range		150Vdc	120-430Vdc	120-500Vdc	
Battery voltage range	120-2	40-60		120-430VUC	
	4200W	5000W	4200W	5000W	
Maximum output power	4200W 0-60A	0-80A	4200W 0-60A	0-80A	
Charge current range of solar energy (settable)	U-bUA	U-8UA Blown		U-8UA	
Charge short-circuit protection		=			
Wiring protection		Inverse wiring	g protection		
Authentication specification					
Specification authentication	CE(IEC62109)、RoHs				
EMC authentication grade	EN61000				
Operation temperature range	-15°C to 55°C				
Storage temperature range	-25°C ~ 60°C				
Humidity range		5% to 95% (Conforma			
Noise		≤60	dB		
Thermal dissipation		Forced cooling with a	adjustable air speed		
Communication interface	USB/RS485 (WiFi/GPRS)/dry node control				
Dimension (L*W*D)		426*322*	126mm		
Weight (kg)		10.9		11.6	

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 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.

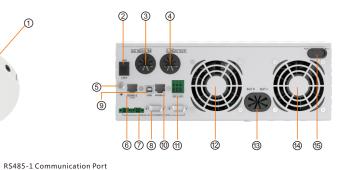
·under-voltage and over-voltage protection and reverse polarity protection.

Supports up to 6 devices of the same model connected in parallel (forming a single-phase,split-phase,three-phase electrical system)

Product characteristics



11)



1)	Overload Protector
2	ON/OFF Rocker Switch
3	AC Input Port
_	A.C. O

AC Input Port

AC Output Port

Grounding Screw Hole

RS485-2 Communication

(6)

Port (For BMS)

Current Sharing Port (only apply to parallel modules)

Communication Port (only apply to parallel modules)

USB Communication Port (®)

Battery Port
Cooling Fan
PV Port

Light Touch Button
Indicator Light
LCD Screen

Dry Contact Port Cooling Fan



Model	SDPO-5kw 48v	
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	overvoltage vianning, overvoltage necovery,	
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		'
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	

SDPO 3kw 48v 220v pv145v mppt60a



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.

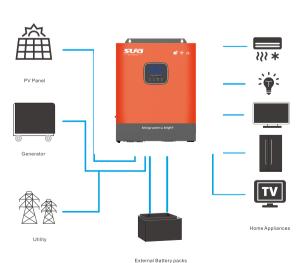
·Intelligent variable speed fan to efficiently dissipate heat and extend system life.

Lithium battery activation design, allowing access of lead-acid battery and lithium battery. $360\,^\circ$ all-round protection with a number of protection functions. Such as overload,

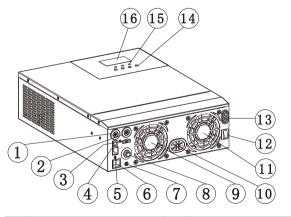
360 ° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.

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.

Product connection diagram



Appearance



1	AC input port	9	Cooling fan
2	AC output port	10	Battery port
3	CAN communication port	111	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
7	Grounding screw hole		LED Indicator
8	Overload protector	16	LCD screen

Technical parameters >>>

Models	S DPO 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	Jun	
Output voltage waveform	Pure sine wave	
Rated output power (VA)	3300	
Rated output power (W)	3300	
	1	
Power factor		
Rated output voltage (Vac)	230Vac	
Output fraguency range (Ha)	±5%	
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz	
Maximum Efficiency	>92%	
Overload protection	(110% < load <125%) \pm 10%: report error and turn off the output after 5 minutes;(125% \times load <150%) \pm 10%: report error and turn off the output after 10 seconds;Load >150% \pm 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	
	-15°C to 55°C	
Operating temperature range	13 € 10 55 €	
Operating temperature range	-25°C ~ 60°C	
Storage temperature range	-25°C ~ 60°C	
Storage temperature range Humidity range	5% to 95% (Conformal coating protection)	
Storage temperature range Humidity range Noise	5% to 95% (Conformal coating protection) ≤60dB	
Storage temperature range Humidity range Noise Heat dissipation	5% to 95% (Conformal coating protection) ≤60dB Forced air cooling, variable speed of fan	
Storage temperature range Humidity range Noise	5% to 95% (Conformal coating protection) ≤60dB	

MODEL	SDPO 8kw	SDPO 10kw	CAN B SET
	INVERTER OUTPU	JT	
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	\checkmark
Waveform	P	Pure Sine Wave	
Switch Time	1	0ms (typical)	
Parallel capacity		I	
	BATTERY		
Battery Type	L	.i-ion/Lead-Acid	\checkmark
Rated Battery Voltage		48Vdc	
Voltage Range		40-60Vdc	\checkmark
Max.MPPT Charging Current		200A	\checkmark
Max.Mains/Generator Charging Current	100A	120A	√
Max.Hybrid Charging Current	180A	200A	\checkmark
	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	INPUT	
Input Voltage Range		90-140Vac	
requency Range		50/60Hz	
Bypass Overload Current		63A	
	EFFICIENCY		
MPPT Tracking Efficiency		99.9%	
Max. Battery Inverter Efficiency		92%	
	GENERAL		
Dimensions	620*435*	*130mm (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/	CAN/USB/Dry contact	√
	CERIFICATION		
Safety	IEC62109	9-1, IEC62109-2,UL1741	
EMC	EN61000-6-1, E	EN61000-6-3, FCC 15 class B	
RoHS	Yes		