

SDPO Off Grid Hybrid Inverter(EU Model)

1.2-12kW

-  Lithium communication
-  Photovoltaic+mains charging
-  Eight major protection functions
-  Pure sine wave output



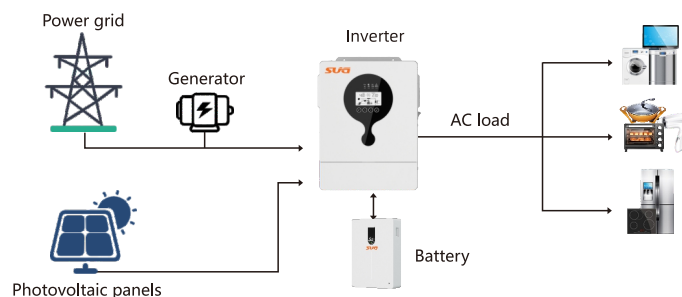
Product Introduction

The SDPO off-grid hybrid inverter integrates PV and grid charging/discharging, UPS bypass, and battery inverting functions. It can intelligently adjust operating priorities, communicate with household energy storage lithium batteries, and support parallel operation of multiple units to increase output power, making it suitable for various applications such as households, RVs, agriculture, and industry.

Product features

- 1 Advanced SPWM technology, pure sine wave output
- 2 Automatic activation of lithium batteries
- 3 Four charging modes including photovoltaic, mains, photovoltaic priority, and hybrid charging
- 4 Advanced MPPT technology with an efficiency of up to 99.9%
- 5 Three output modes: photovoltaic, inverter, and mains bypass

Product Connection Diagram



Product Parameters

MODEL	SDPO-1.2KW	SDPO-2KW	SDPO-3.6KW
AC Input			
Rated Input Voltage (VAC)	208/220/230/240;L+N+PE	230VAC;L+N+PE	208/220/230/240;L+N+PE
Voltage Range (VAC)	90~280±3 (normal mode); 170~280±3 (UPS mode)	90~280(APP mode/GEN mode); 170~264 (UPS mode)	90~280±3 (normal mode); 170~280±3 (UPS mode)
Frequency (Hz)	50 / 60 (Auto Adaptive)	40-70Hz (APP MODE/GEN MODE) ; Set Frequency (50Hz or 60Hz) ; ±10Hz (UPS MODE)	50 / 60 (Auto Adaptive)
Ac Output			
Rated Capacity (kW)	1.2	2	3.6
Surge Power (kVA)	2.4	4	7.2
Voltage (VAC)	208/220/230/240		
Power Factor (PF)	1		
Frequency	50/60Hz±0.1%		
Switch Time (ms)	10ms (APP/UPS/GEN mode)	10ms (APP/UPS/GEN MODE); 20ms(GEN MODE)	10ms(APP/UPS/GEN mode) / 20ms (GEN mode)
Wave Form	Pure Sine Wave		
Overload Capacity (Battery Mode)	60s@102%-120% load; 10s@120%-200% load;	Off grid Mode: bat+PV; Long-term @ 102% - 125% Load (No alarm reported); 10s@125%-250% load	60s@102%-110% load; 10s@110%-130% load; 3s@130%-150% load; 0.2s@>150% load
Max. Efficiency (Battery Mode)	90%@12VDC	91%@12.5VDC	92.7%@24VDC
Parallel Quantity	NA	9pcs	NA
Charger (PV/AC)			
Solar Charger Type	MPPT		
Max PV Input Current / Power	18A/800W	18A/3000W	18A/5000W
MPPT Range@Operating Voltage (VDC)	17-115	30-400	40-450
Max PV Open Circuit Voltage (VDC)	115	450	500
Max PV Charge Current (A)	50	100	100
Max AC Charge Current (A)	50	100	100
Max. Charge Current (PV+ AC) (A)	100	100	100
Battery			
Normal Voltage (VDC)	12	12.5	24
Floating Charge Voltage (VDC)	13.8	13.5	27
Overcharge Protection (VDC)	15	16	30.5
Battery Type	Lead-acid / Lithium		
Interface			
HMI	LCD		
Interface	Rs232 / RS485(optional) / CAN (optional)	Rs485 / CAN	Rs485 / CAN / RS232 / Dry Contact
Monitoring	WiFi (optional/built-in/external)	WiFi (optional/external)	WiFi (optional/external)
General Data			
Ingress Protection	IP21		
Operating Temperature	-10℃-60℃		
Relative Humidity	5%- 95%(Non-condensing)		
Storage Temperature	-15℃-60℃		
Net Weight (kg)	3.5	1.88	6.4
Dimensions (H*W*D)	301*217*97mm	287*241*64mm	420*284*94mm
Max. Operating Altitude	4000m (Derating above 1000m)		

Product Parameters

MODEL	SDPO-S6.5KW		SDPO-P6.5KW		SDPO-S12KW		SDPO-P12KW	
AC Input								
Rated Input Voltage (VAC)	208/220/230/240;L+N+PE							
Voltage Range (VAC)	90~280±3 (normal mode);170~280±3 (UPS mode)							
Frequency (Hz)	50 / 60 (Auto Adaptive)							
Ac Output								
Rated Capacity (kW)	6.5				12			
Surge Power (kVA)	12				24			
Voltage (VAC)	208/220/230/240							
Power Factor (PF)	1							
Frequency	50/60Hz±0.1%							
Switch Time (ms)	10ms(normal mode) / 10ms(UPS mode)				10ms(APP/UPS mode), 20ms(GEN mode)			
Wave Form	Pure Sine Wave							
Overload Capacity (Battery Mode)	1min@102%~110% load; 10s@> 110% load				1min@102%~125%Load 10s@>125%Load			
Max. Efficiency (Battery Mode)	94%@48VDC							
Parallel Quantity	NA		9pcs		NA		6pcs	
Charger (PV/AC)								
Solar Charger Type	MPPT							
Max PV Input Current / Power	27A/9000W				Using One MPPT: 27A/9KW; Using Two MPPTs: 22.5A/Per MPPT, 15kW/Total			
MPPT Range@Operating Voltage (VDC)	60-450				60-450			
Max PV Open Circuit Voltage (VDC)	500				500			
Max PV Charge Current (A)	120				160			
Max AC Charge Current (A)	120				160			
Max. Charge Current (PV+ AC) (A)	120				160			
Battery								
Normal Voltage (VDC)	48				48			
Floating Charge Voltage (VDC)	54				54			
Overcharge Protection (VDC)	61				61			
Battery Type	Lithium and Lead-acid							
Interface								
HMI	5 inch LCD				LCD			
Interface	RS232/RS485/CAN		RS232/RS485/CAN/ Parallel Interface		Rs232/ RS485 /CAN		RS232/RS485/CAN/ Parallel Interface	
Monitoring	WiFi (optional/built-in/external)							
General Data								
Ingress Protection	IP21							
Operating Temperature	-10°C-60°C							
Relative Humidity	5%- 95%(Non-condensing)							
Storage Temperature	-15°C-60°C							
Net Weight (kg)	8.4				15			
Dimensions (H*W*D)	410*336*110mm				495*425*120			
Max. Operating Altitude	4000m (Derating above 1000m)							

