Low Frequency Off-grid Inverter

SIF-1~12.5KW

SIF series is mainly composed of components and hardware, which is relatively stable and durable. Especially suitable for complex power environments with high current impact, and single-phase power environments
equipped with water pumps, crushers, presses, stamping machines, pumping machines, compressors, hydraulic presses, electric clothes trucks, etc.

- Built-in Transformer, Stable Output Voltage and Save Power
- Multiple Working Mode: Photovoltaic/ Battery/AC Priority
- Pure Sine Wave Output, with Strong Load Capacity
- MPPT Efficiency > 98%, AC Charging Efficiency > 98%
- UPS Transfer Time <10ms
- Load Peak Ratio = 3:1, Strong Loading Capacity
- Slight No-load Loss

Hybrid

5 Years Design Life

Technical Data

Model	SIF-1KW	SIF-1.5KW	SIF-2KW	SIF-3KW	SIF-4KW	SIF-5KW	SIF-6KW	SIF-10KW	SIF-12.5KW
Input Data									
Rated Power	1000VA	1500VA	2000VA	3000W	4000W	5000W	6000W	10000W	12500W
Rated Input Voltage	220VAC (Standard) / 110VAC (Customized)								
Input Voltage Range	For 220VAC: 154V~264VAC ± 3V (Normal Mode) / 185V~264VAC ± 3V (UPS Mode) For 110VAC: 77V~132VAC ± 3V (Normal Mode) / 92V~132VAC ± 3V (UPS Mode)								
Input Frequency	50Hz / 60Hz ± 5%								
Max. PV Array Power	12V:800W 24V:1600W			24V:3200W 48V:6400w					
PV Input Voltage Range (MPPT / PWM)	12V:PWM 15V-50VDC 24V:PWM 30V-105VDC			24V ·MPPT 30V-150VDC 48V:MPPT 60V-150VDC					
Optimum Operating Voltage Range (Vmp)	12V:PWM 50VDC 24V:PWM 105VDC			24V:MPPT 150VDC 48V:MPPT 150VDC					
Max. Solar Charging Current	60A			120A					
Max. AC Charging Current	19A	29A	19A	30A	24A	24A	29A	48A	60A
Transfer Time	≤10ms (UPS Mode) / ≤20ms (INV Mode)								
Output Data									
Output Power	800W	1200W	1600W	2400W	3200W	4000W	4800W	8000W	10000W
Output Power Factor	PF≈0.8								
Rated Output Voltage	220VAC±10% (110VAC±10%)								
Rated Output Frequency	50Hz / 60Hz ± 1%								
MPPT Efficiency	>98%								
Efficiency(AC Charging)	>98%								
Efficiency(Battery Mode)	88%~89%								
Battery Data									
Battery Type	Lead-acid / Water / LiFePO4								
Battery voltage	12VDC	12/24VDC	12VDC	24VDC	24VDC	48VDC	48VDC	48VDC	48VDC
Battery charging voltage	13.7VDC	13.7/27.4VDC	13.7VDC	27.4VDC	27.4VDC	54.8VDC	54.8VDC	54.8VDC	54.8VDC
General Data									
Peak Load Ratio	3:1 (MAX)								
Standby Power Consumption	12V: 8W / 24V: 16W			24V: 16W / 48V: 32W					
Protection	AC: Input Overcurrent Protection with No-fuse Breaker;INV: Overload Protection,Short-circuit Protection,Low-voltage Protection,Reverse Battery Protection (Fuse)								
LED Display & Voice Alarm	To display mains supply, charging status, inverter status, fault status. The buzzer emits alarms of different length according to different fault codes.								
Operating Temperature	0℃~40℃								
Storage Temperature	-15℃~45℃								
Relative Humidity	10%~90% (Non-condensing)								
Noise	≤45dB								
Dimensions (W*D*H)	125*312*490mm 345*254*105MM(Packaged)			400*200*545mm 545×400×200MM (Packaged)					
Standard	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1								