

Off-Grid Solar Inverter 10 kVA - 120 kVA (3:3)

Characteristics

- High-speed DSP digital control
- Full-bridge inverter control technology, providing secure power supply in the event of threephase 100% unbalanced loads
- Multi-string PV connected
- Inbuilt AC rectifier and MPPT control modules, configured battery parameters by operating interface, self-regulation for charging voltage and current
- Hot-swap MPPT modules for easy maintenance and power expansion
- Auto access MPP tracking states, be most probable to use PV energy in priority
- Intelligent AC and PV complementation power supply function to extend the battery life
- Using multicore control technology and auto MPP trackers, auto-start AC rectifier enable PV and AC source to supply power to the loads at the same time in the event of insufficient PV, which reduces battery discharge times and extend the battery life
- Intelligent staggering power consumption function
- Standard RS232, RS485 and optional SNMP communication port
- Multiple remote control: startup, shutdown, abnormal clearance, EPO, battery test and remote alarm port
- Staggering energy storage and power generation



MODEL	SOF3310	SOF3320	SOF3330	SOF3340	SOF3360	SOF3380	SOF33100	SOF33120
Rated power	9 kW	18 kW	27 kW	36 kW	54 kW	72 kW	90 kW	108 kW
Operating modes	AC and PV complementation							
PV INPUT								
Max. input power	25 kW		2 × 25 kW		3 × 25 kW	4 × 25 kW	5 × 25 kW	6 × 25 kW
Max. input voltage	750 Vdc							
Rated input voltage	500 Vdc							
Start-up voltage	≥ (battery voltage + 20) Vdc							
Max. input current	60 A		120 A		180 A	240 A	300 A	360 A
MPPT voltage range (Full load)	450 ~ 550 Vdc							
Number of MPPTs	1 + 1 (reserved)		2 + 1 (reserved)		3 + 1 (reserved)	4 + 2 (reserved)	5 + 3 (reserved)	6 + 2 (reserved)
AC INPUT								
Input voltage	380 Vac ± 20% (line voltage), three-phase (rectifier) 380 Vac ± 20% (line voltage) three-phase + N + PE (bypass)							
Input frequency	(50 / 60 Hz) ± 5 Hz							
OUTPUT								
Output voltage	380 / 400 / 415 Vac ± 1% (line voltage), three-phase + N + PE							
Output frequency	(50 / 60 Hz) ± 1 Hz							
Rated output current	15 A	30 A	45 A	60 A	91 A	120 A	152 A	182 A
Waveform	Sinusoidal							
THD	THDu ≤ 3% (linear load)							
BATTERIES								
Battery type	Lead-acid battery / Li-ion battery (optional)							
Rated voltage	360 Vdc							
Charging current	15 A by default, settable based on inverter model and battery capacity							
TRANSFER TIME								
PV ↔ AC	0 ms	18 kW	27 kW	36 kW	54 kW	72 kW	90 kW	108 kW
EFFICIENCY								
Max. efficiency	≥ 91%		≥ 92%		≥ 93%			
MPPT efficiency	≥ 98% (max.)							
OTHERS								
Protections	Over/under voltage, over/under-frequency, output overload, short-circuit, overtemperature, battery low voltage, overcharge, PV reverse polarity							
Communications	RS232 / RS485 / dry contacts (standard), SNMP / Wi-Fi / GPRS (optional)							
Display	LCD & LED							
Standards	EN 62040-1, EN 62040-2, IEC 62040-2							
IP rating	IP 20							
Operating temperature	0°C~ 40°C							
Relative humidity	90% (non-condensing)							
Altitude	1000 m at rated power (derating 1% for each additional 100 m); Max. 4000 m							
Noise level at 1 m	≤ 65 dB (varies with loads and temperature)							
Dimensions (W × D × H) (mm)	450 × 840 × 1100		600 × 700 × 1750			960 × 800 × 1700		
Packaged dimensions (W×D×H) (mm)	560 × 940 × 1300		700 × 800 × 1950			1060 × 900 × 1900		
Net weight (kg)	210	223	360	410	495	828	834	840
Gross weight (kg)	230	245	380	430	415	848	854	860