OFF-GRID SOLAR INVERTER

3 kW ~ 8 kW
PF 1.0

SPECIFICATIONS

MODEL	GF3000	GF4000	GF3000	GF5000	GF6000	GF8000
Rated power	3 kW	4 kW	3 kW	5 kW	6 kW	8 kW
Battery voltage	96 Vdc		192 Vdc			
Operating mode	PV priority / AC priority					
PV INPUT						
Input voltage range	96 ~ 200 Vdc		192 ~ 400 Vdc			
Max. charging current	10 ~ 60 A (selectable)		10 ~ 40 A (selectable)	10 ~ 60 A (selectable)		
Optimum operating voltage (Vmp)	120 ~ 142 Vdc		240 ~ 284 Vdc			
Max. PV power (Pmax)	5760 W		7680 W	11520 W		
Max. conversion efficiency	98%					
AC INPUT						
Input voltage	165 ~ 275 Vac					
Input frequency	40 ~ 70 Hz (overclocking : auto transfer to DC power supply)					
Output voltage	220 Vac ± 5%					
Input power factor	≥ 0.8					
Max. efficiency	88% (online mode)					
Max. charging current	8 A		12 A			
Short circuit	Current−limiting, transfer to bypass; air circuit−breaker					
INVERTER OUTPUT						
Output voltage	220 Vac ± 5%					
Output frequency	50 Hz / 60 Hz ± 1% (auto−sense)					
Waveform	Sinusoidal					
Output power factor	1					
Waveform distortion	≤ 5% (linear load)					
Transfer time (PV − AC)	0 ms					
Max. efficiency	92%					
Short circuit	Current−limiting, transfer to bypass or system auto shutdown					
ALARMS						
Utility power abnormal	4 s per beep , auto mute in 40 s					
Low battery	0.2 s per beep					
Overload	1 s per beep					
COMMUNICATIONS						
Communication interface	RS232, USB, RS485, SNMP (optional)					
Dry contacts	PV fault, low battery, overload, bypass, inverter fault, generator ON / OFF					
OTHERS						
Overload protections	110% for 255 s; 125% for 60 s; 150% for 10 s					
Wiring	Terminal blocks					
EMI	EN62040−2:2006; EN61000−3−2:2006; EN61000−3−3:2008					
IP rating	IP20					
Ambient temperature	0℃ ~ 40℃					
Relative humidity	10% ~ 90% (non−condensing)					
Noise	≤ 50 dB					
Operating altitude	2000 m (derating 1% for each additional 100 m)					
Dimensions (W × D × H) (mm)	265 × 560 × 725					
Packaged dimensions (W × D × H) (mm)	360 × 662 × 905					
Net weight (kg)	76	80	60	67	69	85
Gross weight (kg)	85	89	69	76	78	94

● All specifications subject to change without notice.

FEATURES

- Independent MPPT control microprocessor system
- Independent inverter control microprocessor system featured with high−speed online stabilization
- Advanced SPWM technology, high−speed power MOS
- MPPT control using PWM technology enable to bear the maximum PV open−circuit voltage
- Operating mode selectable: PV priority or utility power priority
- Charging current selectable according to configured battery
- AC input with effective online synchronous stabilization technology
- Auto−tracking mains phase to ensure that inverter output voltage has same phase with utility voltage, reducing transfer time and peak surge
- No−load auto shutdown function (optional)
- Automatic frequency selection
- Auto Power−On/Off function; real−time monitoring, test and intelligent startup / shutdown by RS232 or USB interface communicating with PC; remote monitoring by optional SNMP networks