

Off-Grid Solar Inverter

100W ~ 2400W PF=1 with isolated transformer

VISION

The Vision GF series products are on the basis of green energy use and equipment electricity need for remote area, combining the electricity characteristics of household appliances, communication station equipment and computer peripheral equipment. They have the function of energy conservation and environment protection. they adopt MCU control technique, having various kinds of function such as multi-setting mode, MPPT control, voltage stabilization on line, short-circuit protection, inverter frequency adaptive, output overload, battery charging management, monitoring, etc. GF series products are the ideal power supply delivered with excellent performance, high stability, high reliability and high practical applicability.



Features

- Multi setting
 - *PV priority mode or AC priority mode
 - *Choose the charging current based on the configured capacity of the battery
- High reliability: double MCU digital control
 - *Independent MPPT (maximum power point tracking) control microprocessor system
 - *Independent inverter microprocessor control system
- Isolated and pure sine wave technology
- LCD and LED display
- Wide input range
- High speed synchronous conversion
- Friendly alarm system
- Online protection function
- Frequency auto adaptive
- Intelligent no-load auto shutdown technology (optional)
- Intelligent monitoring (RS232, USB, or SNMP card, optional)

Model	GF100	GF400	GF500	GF800	GF1000	GF1500	GF2000	GF2400
Power	100W	400W	500W	800W	1000W	1500W	2000W	2400W
Battery Voltage	12 Vdc	12 Vdc / 24 Vdc		24 Vdc	24 / 48 Vdc	48 Vdc		
Working Mode	PV priority / AC priority							
PV								
Input voltage range	12 ~ 25 Vdc	12-25Vdc (12V), 24-45Vdc (24V)		24 ~ 45 Vdc	24 ~ 48 Vdc	48 ~ 90 Vdc		
Suggested voltage range	15 ~ 17.8 Vdc	15-17.8Vdc (12V), 30-36Vdc (24V)		30 ~ 36 Vdc	30 ~ 60 Vdc	60 ~ 71 Vdc		
PV current (Imp)	≤ 20 A	≤ 40 A			≤ 40 ~ 60 A	≤ 40 ~ 60 A	≤ 80 A	
Max charge current	5 / 10 / 20 A	10 / 20 / 30 / 40 A					10 / 20 / 30 / 60 A	
Conversion efficiency	≥ 98 %							
Display								
Panel indicator	LCD + LED							
AC mode								
Input volatge range	100 / 110 / 120 / 220 / 230 / 240VAC ± 25% (customised)							
Input frequency range	45 ~ 65 Hz (automatically transfer to inverter power when overfrequency)							
Output voltage precision	100 / 110 / 120 / 220 / 230 / 240VAC ± 10%							
Input PF (AC/DC)	≥ 98 %							
Charge current	12A max							
Efficiency (mains mode)	≥ 96 %							
Overload	110% 255s transfer to bypass model; 120% 60s transfer to bypass model; 150% 10s transfer to bypass model							
Short circuit protection	Input fuse							
Inverter mode								
Inverter output voltage	100 / 110 / 120 / 220 / 230 / 240VAC ± 5%							
Output frequency	50 Hz / 60 Hz ± 1% frequency auto sense							
Wave form distortion	Linear load ≤ 5%							
PV-AC transfer time	5 ms typical value; max 8 ms							
Max efficiency	≥ 84.5%							
Inverter overload	110% 255s transfer to bypass model; 120% 60s transfer to bypass model; 150% 1s transfer to bypass model							
No-load off (optional)	Load < 5%, the system automatically shut down at 1min, transfer to bypass power supply							
Short circuit protection	Systems automatically shut down							
Alarm								
Mains abnormal	1/4s; automatic sound elimination after 40s							
Low battery	5/1s							
Overload	1/1s							
Communication interface (optional)	RS232 / USB / SNMP (setup available for regular start / shut off)							
Others								
Surge protection	Optional							
EMC	EN62040-2:2006 ; EN61000-3-2:2006 ; EN61000-3-3:2008							
IP class	IP21							
Ambient temperature	0°C ~ 40°C							
Ambient humidity	10% ~ 90% (non-condensed)							
Noise	≤ 50dB							
Dimension (WDXH) mm	315 X 458 X 147				380 X 480 X 202			
Packing dimension (WDXH) mm	380 X 500 X 195				458 X 545 X 278			
Weight (kg)	9.8	11.0	12.0	18.7	19.2 ~ 19.6	27.6	29.3	29.3
Packing weight (kg)	10.8	12.0	13.0	20.0	20.5 ~ 20.9	28.9	30.6	30.6