

HYBRID INVERTER (OFF-GRID)

GF1-8KS2M/11KS2/12KS2

The GF1 8-12KS2 series is an off-grid solar inverter combining economy and high performance, designed for backup power, off-grid, providing uninterruptible power support and ESS applications. This inverter uniquely integrates generator interface, AC coupling and smart load output interface for true versatility. The intuitive operator interface and intelligent monitoring features also make energy management easy and simple. In addition, it can handle high surge loads, and the extremely short on/off switching time ensures that critical loads continue to operate during power outages, increasing the stability and high reliability of system operation.

Product Benefits

Dual/triple MPPT, supports 182/210 solar panels

Color LCD touch screen with integrated LED light to intelligently display inverter status information

Supports 6 parallel connections, independent ports for generator and smart load connection

Maximum charge and discharge current 250A/250A, with modern aesthetic industrial design, easy to install and simple to use



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INVERTER

Model	GF1-8KS2M	GF1-11KS2	GF1-12KS2
PV Input			
Max. PV Input Power	16000W	22000W	24000W
Max. PV Input Voltage	500V		
Min. PV Input Voltage	60V		
MPPT Voltage Range	60 - 500V		
Start-up Voltage	70V		
No. of MPPTs/Strings per MPPT	2 / 2	3 / 2	3 / 2
Max. PV Input Current	32/32A	32/32/32A	32/32/32A
Max. Short Circuit Current	40/40A	40/40/40A	40/40/40A
AC Input			
Max. AC Input Power	13800W		
Max. AC Input Current	40A	55A	60A
Rated AC Input Voltage	L/N/PE, 220/230/240V		
AC Input Voltage Range	0.85 - 1.1 Un		
Rated AC Input Frequency	50 / 60 Hz		
AC Input Frequency Range	45 - 55 / 55 - 65 Hz		
AC Output			
Rated AC Output Apparent Power	8800VA	12100VA	13200VA
Rated AC Output Power	8000W	11000W	12000W
Output Peak Power	2 times of rated power, 10s		
Rated Output Voltage	L/N/PE, 220/230/240V		
Rated Output Frequency	50 / 60 Hz		
Rated Output Current	36.4A	50A	54.5A
THDv, Rated Power	< 3 %		
On/Off-grid Switchover Time	< 10 ms		
Generator Data			
Max. Input Power	8000W	11000W	12000W
Max. Input Current	36.4A	50A	54.5A
Rated Input Frequency	50 / 60 Hz		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	96.80%		
Battery			
Battery Type	Li-ion		
Battery Voltage Range	40 - 60 V		
Max. Charge/Discharge Current	190A	220A	250A
Communication with BMS	CAN / RS485		
Inverter Data			
Dimension (W*H*D)	496*505*225 mm		
Weight	34 kg		
Mounting Method	Wall Mounting		
Protection Rating	IP66		
Cooling	Forced air cooling		
Operating Temperature Range	-25°C to +60°C (derating at 45°C)		
Display	LCD + APP		
Noise	< 45 dB		
Operating Attitude	2000m		
Operating Humidity	0 - 95 %		