

HYBRID INVERTER (OFF-GRID)

GF1-11K/12K/16KS2

The GF1 11-16KS2 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 10 parallel connections, independent ports for generator and smart load connection

Maximum charge and discharge current 290A/290A, with modern aesthetic industrial design, easy to install and simple to use



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INVERTER

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Model	GF1-11KS2	GF1-12KS2	GF1-16KS2
PV Input			
Max. PV Input Power (W)	22000	24000	32000
Max. PV Input Voltage (V)		500	
Min. PV Input Voltage (V)		60	
MPPT Voltage Range (V)		60-500	
Start-up Voltage (V)		70	
No. of MPPTs/Strings per MPPT		3/2	
Max. PV Input Current (A)		32/32/32	
Max. Short Circuit Current (A)		40/40/40	
AC Input			
Max. AC Input Power (W)	13800		20700
Max. AC Input Current (A)	60		90
Rated AC Input Voltage (V)	L/N/PE, 220/230/240		
AC Input Voltage Range(V)	0.85 - 1.1 Un		
Rated AC Input Frequency (Hz)	50 / 60		
AC Input Frequency Range (Hz)	45 - 55 / 55 - 65		
AC Output			
Rated AC Output Apparent Power (VA)	12100	13200	17600
Rated AC Output Power (W)	11000	12000	16000
Output Peak Power	2 times of rated power, 10s		
Rated Output Voltage (V)	L/N/PE, 220/230/240		
Rated Output Frequency (Hz)	50/60		
Rated Output Current (A)	50	54.6	72.7
THDv, Rated Power (%)	< 3		
On/Off-grid Switchover Time (ms)	< 10		
Generator Data			
Max. Input Power (W)	11000	12000	16000
Max. Input Current (A)	50	54.6	72.7
Rated Input Frequency (Hz)	50/60		
Efficiency			
Max. Efficiency(%)	97.60%		
Euro Efficiency(%)	96.80%		
Inverter Data			
Dimension (W*H*D mm)	496*505*225		
Weight (kg)	34		
Mounting Method	Wall Mounting		
Protection Rating	IP66		
Cooling	Forced air cooling		
Operating Temperature Range (°C)	-25°C to +60°C (derating at 45°C)		
Display	LCD + APP		
Noise (dB)	< 45		< 55
Operating Attitude	< 2000m		
Operating Humidity	0 - 95 %		
Battery			
Battery Type	Li-ion / Lead-acid		
Battery Voltage Range (V)	40 ~ 60		
Max. Charge/Discharge Current (A)	220	250	290
Communication with BMS	CAN / RS485		