



## Features:

- Off Grid Hybrid Inverter/Charger
- Charge from Grid, Generator or Solar
- Built in MPPT Solar Charge Controller(s)
- Easy to Read LCD Display
- 5 Stage Adjustable AC Charger
- AC/DC Priority Modes
- Generator Autostart
- Strong surge ability (3x Output)
- Overload and Short Protection

MODEL		GS4000	GS6000	GS8000	GS12000
POWER RATING		4000W	6000W	8000W	12000W
AC Output	Input Voltage Waveform	Sinusoidal (utility or generator)			
	Nominal Input Voltage	120VAC	240VAC		
	Low Line Disconnect	85VAC± 4% (Normal) 80VAC ±4% (Wide)	184VAC±4% (Normal) or 135VAC±4% (Wide)		
	Low Line Re-Connect	95VAC±4% (Normal) 85VAC ± 4% (Wide)	194VAC±4% (Normal) or 145VAC±4% (Wide)		
	High Line Disconnect	136VAC±4% (Normal) 145VAC±4% (Wide)	263VAC±4% (Normal) or 263VAC±4% (Wide)		
	Max AC Input Voltage	150VAC	270VAC		
	Frequency	60Hz: 51-64Hz			
	1 Minute Motor Start	6000W @ 120V	9000W @ 240V	12,000W @ 240V	18,000W @ 240V
AC Charger	Nominal Charge Current	42A	50A	80A	90A
	Over Charge Protection	Bat. V ≥ 31.0, or 61.0VDC for 24, or 48V Battery; Fault w/ Alarm			
Solar Charger	Rated Charge Current	60A		120A	
	Pv Input Voltage Range	30-75VDC	60-145VDC		
	Max PV Open Curcuit Voltage	80VDC	155VDC		
	Charger Mode	MPPT	MPPT	MPPT	MPPT
	PV Low Voltage Re-Connect	PV ≥ Bat. V + 3V			
	PV Low Voltage Disconnect	PV ≤ Bat. V			
	Efficiency	≥ 97%			
Efficiency	Battery Mode	> 87%			
	Line Mode	> 98%			
Battery Voltage	Nominal DC Input Voltage	24VDC	48VDC		
	Low Battery Alarm	21VDC±0.6	42VDC±1.2		
	Low DC Input Shut-Down	20VDC±0.6	40VDC±1.2		
	High DC Input Alarm & Fault	32VDC±0.6	64VDC±1.2		
Transfer Time	AC to DC	20ms (max)			
	DC to AC	15ms (max)			
System Parameter	Over-Load Protecion	110% < Load < 150%; Alarm, Fault after 60s. If Load > 150% Alarm, Fault after 20s			
	Output Short Circuit Protection	Current Limit (Fault After 10s)			
	Surge Rating (10s)	1:3(VA)			
	Protections	Low Battery, Over Charging, Over Load, Over Temp			
	Indicators	LED + LCD Display			
General Specifications	Operating Temperature Range	0°C to 40°C (32°F to 104°F)			
	Storage Temperature	-15°C to 60°C ( 5°F to 140°F)			
	Operation Humidity	5% to 95% (Non-Condensing)			
	Audible Noise	60dB Max			
	Cooling	Forced Air, Variable Speed Fan			
	Dimensions (LxWxH)	20.4 x 17.4 x 8in		24.7 x 17.7 x 8in	
	Net Weight	67.3lbs (30.52kg)	84.9lbs (38.5kg)	108.1lbs (49.03kg)	138.9lbs (63.0kg)