

All-in-one solar charge inverter

CBG-HF4830S60-H/CBG-HF4850S80-H

CBG-HF4835U60-H/CBG-HF4850U80-H

Performance characteristics

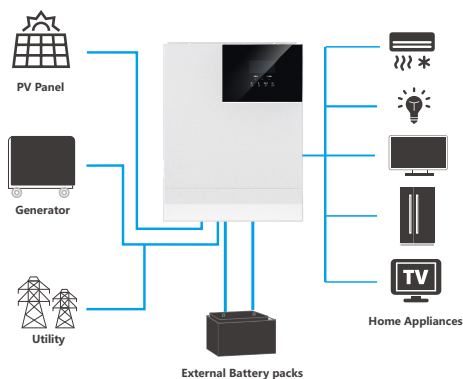
- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.
- With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- 360° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.
- Supply of a variety of user-friendly communication modules, such as RS485 (GPRS, WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.



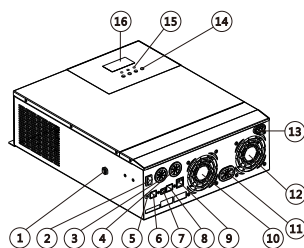
Application scenarios



Product connection diagram



Product characteristics



①	Overload protector	⑩	Dry contact port
②	ON/OFF rocker switch	⑪	Cooling fan
③	AC input port	⑫	Battery port
④	AC output port	⑬	Cooling fan
⑤	Grounding screw hold	⑭	PV port
⑥	RS485-2 communication port	⑮	Touch button
⑦	USB communication port	⑯	Indicator
⑧	RS485-1 communication port	⑰	LCD screen

Parameters

Model	CBG-HF4830S60-H	CBG-HF4850S80-H	CBG-HF4835U60-H	CBG-HF4850U80-H
AC mode				
Rated input voltage	220/230Vac		110/120Vac	
Input voltage range	(170Vac~280Vac) ±2% ; (90Vac~280Vac)±2%		(90Vac~140Vac)±2%	
Frequency	50Hz/ 60Hz (auto-sensing)			
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz);			
Overload/short circuit protection	Breaker			
Efficiency	>95%			
Conversion time (bypass and inverter)	10ms (Typical value)			
AC reverse protection	Available			
Maximum bypass overload current	40A		63A	
Inverting mode				
Output voltage waveform	Pure sine wave			
Rated output power(VA)	3000 (2600/2700/3000)	5000 (4350/4500/4800/5000)	3500(2900/3000/3200)	5000(4100/4300/4500)
Rated output power(W)	3000 (2600/2700/3000)	5000 (4350/4500/4800/5000)	3500(2900/3000/3200)	5000(4100/4300/4500)
Power factor	1			
Rated output voltage (Vac)	230Vac (200/208/220/240Vac settable)		120Vac (100/105/110Vac settable)	
Output voltage error	±5%			
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz			
Efficiency	>90%			
Overload protection	(102%<load<125%) ±10%; reporting error and turn off the output after 5 minutes; (125%<load<150%) ±10%; reporting error and turn off the output after 10 seconds; Load>150% ±10%; reporting error and turn off the output after 5 seconds;		(102%<load<110%) ±10%; reporting error and turn off the output after 5 minutes; (110%<load<125%) ±10%; reporting error and turn off the output after 10 seconds; Load>125% ±10%; reporting error and turn off the output after 5 seconds;	
Peak power	6000VA	10000VA	5000VA	7000VA
Loaded motor capacity	2HP	4HP	2HP	3HP
Output short-circuit protection	Breaker			
Specification of bypass breaker	40A		63A	
Rated battery input voltage	48V (minimum start voltage 44V)			
Battery voltage range	40.0Vdc~60Vdc (undervoltage alarm/turnoff voltage/overvoltage alarm/overvoltage restoration...settable LCD screen)			
Power saving mode	Load ≤50W			
AC charge				
Battery type	Lead acid or lithium battery			
Maximum charge current	60A		40A	
Charge current error	± 5A dc			
Charge voltage range	40Vdc~60Vdc			
Short-circuit protection	Breaker and blown fuse			
Breaker specification	40A		63A	
Overcharge protection	Turn off charge after 1min alarm			
Solar charge				
Maximum PV open-circuit voltage	500Vdc		450Vdc	500Vdc
PV operation voltage range	120-500Vdc		120-450Vdc	120-500Vdc
MPPT voltage range	120-450Vdc		120-430Vdc	120-450Vdc
Battery voltage range	40-60Vdc			
Maximum output power	4200W	5000W	4200W	5000W
Charge current range of solar energy (settable)	0-60A	0-80A	0-60A	0-80A
Charge short-circuit protection	Blown fuse			
Wiring protection	Inverse wiring protection			
Authentication specification				
Specification authentication	CE(IEC62109), RoHS			
EMC authentication grade	EN61000			
Operation temperature range	-15°C to 55°C			
Storage temperature range	-25°C ~ 60°C			
Humidity range	5% to 95% (Conformal coating protection)			
Noise	≤60dB			
Thermal dissipation	Forced cooling with adjustable air speed			
Communication interface	USB/RS485 (WiFi/GPRS)/dry node control			
Dimension (L*W*D)	426*322*126mm			
Weight (kg)	10.9		11.6	