

# All-in-one solar charge inverter

CBG-HFP4850S80/CBG-HFP4835U80-145



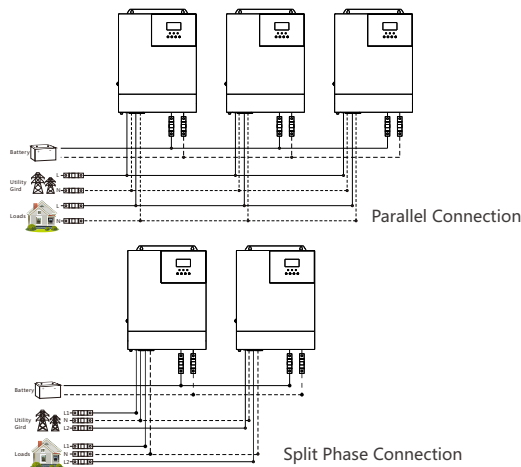
## Performance characteristics

- 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.
- Available for 6 units parallel connection.
- Available for split phase connection.

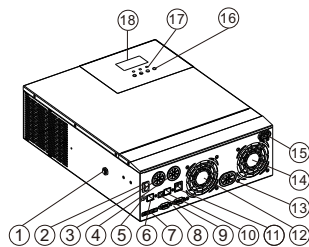
## Application scenarios



## Product connection diagram



## Product characteristics



① Overload protector	⑩ RS485-1 communication port
② ON/OFF rocker switch	⑪ Dry contact port
③ AC input port	⑫ Cooling fan
④ AC output port	⑬ Battery port
⑤ Grounding screw hold	⑭ Cooling fan
⑥ RS485-2 communication port	⑮ PV PORT
⑦ Current sharing port (parallel module only)	⑯ Touch the key lightly
⑧ Parallel communication port (parallel module only)	⑰ Indicator light
⑨ USB communication port	⑱ LCD screen

## Parameters

Models	CBG-HFP4850S80	CBG-HFP4835U80
<b>AC mode</b>		
Rated input voltage	220/230Vac	110/120Vac
Input voltage range	(170Vac~280Vac) ±2%/(90Vac~280Vac)±2%	(90Vac~140Vac) ±2%
Frequency	50Hz/ 60Hz(Auto detection)	
Parallelable/Split Phase units	Max. parallelable unit: 6pcs	
Frequency Range	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz);	
Overload/short circuit protection	Circuit breaker	
Efficiency	>95%	
Conversion time (bypass and inverter)	10ms (typical)	
AC reverse protection	Available	
Maximum bypass overload current	40A	
<b>Inverter mode</b>		
Output voltage waveform	Pure sine wave	
Rated output power (VA)	5000	3500
Rated output power (W)	5000	3500
Power factor	1	
Rated output voltage (Vac)	230Vac	120Vac
Output voltage error	±5%	
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz	
Maximum Efficiency	>92%	>91%
Overload protection	(102% < load <125%) ±10%: report error and turn off the output after 5 minutes;(125% < load < 150%) ±10%: report error and turnoff the output after 10 seconds;Load >150% ±10%: report error and turn off the output after 5 seconds;	(102% < load <110%) ±10%: report error and turn off the output after 5 minutes;(110% < load < 125%) ±10%: report error and turn off the output after 10 seconds;Load >125% ±10%): report error and turn off the output after 5 seconds;
Peak power	10000VA	6000VA
Loaded motor capability	4HP	2HP
Output short circuit protection	Circuit breaker	
Bypass breaker specifications	40A	
Rated battery input voltage	48V (Minimum starting voltage 44V)	
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen)	
Power saving mode	Load ≤50W	
<b>AC charging</b>		
Battery type	Lead acid or lithium battery	
Maximum charge current	60A	40A
Charge current error	± 5A <sub>dc</sub>	
Charge voltage range	40V <sub>dc</sub> ~58V <sub>dc</sub>	40V <sub>dc</sub> ~60V <sub>dc</sub>
Short circuit protection	Circuit breaker and blown fuse	
Circuit breaker specifications	40A	
Overcharge protection	Alarm and turn off charging after 1 minute	
<b>PV charging</b>		
Maximum PV open circuit voltage	145V <sub>dc</sub>	
PV operating voltage range	60-145V <sub>dc</sub>	
MPPT voltage range	60-115V <sub>dc</sub>	
Battery voltage range	40-60V <sub>dc</sub>	
Maximum output power	4200W	
PV charging current range (can be set)	0-80A	
Charging short circuit protection	Blown fuse	
Wiring protection	Reverse polarity protection	
<b>Certified specifications</b>		
Certification	CE(EN62040-1)	
EMC certification level	EN62040-2, C2	
Operating temperature range	-15°C to 55°C	
Storage temperature range	-25°C ~ 60°C	
Humidity range	5% to 95% (Conformal coating protection)	
Noise	≤60dB	
Heat dissipation	Forced air cooling, variable speed of fan	
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control	
Size (L*W*D)	426*322*124mm	
Weight (kg)	10.8	