

All-in-one solar charge inverter

CBG-HF4825U80-145/CBG-HF4830U80-145/CBG-HF4835U80-145



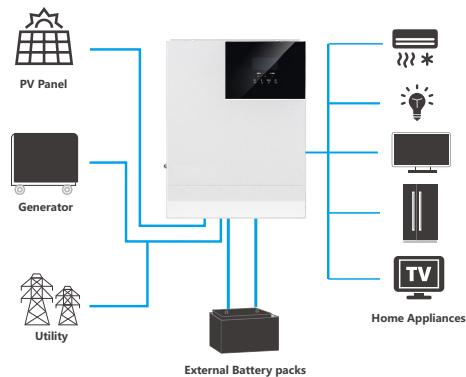
Performance characteristics

- 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.

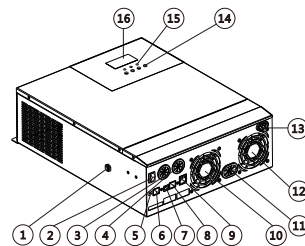
Application scenarios



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

Models	CBG-HF4825U80-145	CBG-HF4830U80-145	CBG-HF4835U80-145
AC mode			
Rated input voltage	110/120Vac		
Input voltage range	(90Vac~140Vac) ±2%		
Frequency	50Hz/ 60Hz (Auto detection)		
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		
Inverter mode			
Output voltage waveform	Pure sine wave		
Rated output power (VA)	2500	3000	3500
Rated output power (W)	2500	3000	3500
Power factor	1		
Rated output voltage (Vac)	120Vac		
Output voltage error	±5%		
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz		
Maximum Efficiency	>91%		
Overload protection	(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	4000VA	4500VA	5000VA
Loaded motor capability	1HP	2HP	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		
AC charging			
Battery type	Lead acid or Lithium battery		
Maximum charge current	40A		
Charge current error	± 5A/c		
Charge voltage range	40Vdc~60Vdc		
Short circuit protection	Circuit breaker and blown fuse		
Circuit breaker specifications	40A		
Overcharge protection	Alarm and turn off charging after 1 minute		
PV charging			
Maximum PV open circuit voltage	145Vdc		
PV operating voltage range	60-145Vdc		
MPPT voltage range	60-115Vdc		
Battery voltage range	40-60Vdc		
Maximum output power	4200W		4200W
PV charging current range (can be set)	0-80A		0-80A
Charging short circuit protection	Blown fuse		
Wiring protection	Reverse polarity protection		
Certified specifications			
Certification	CE(EN62109-1)		
EMC certification level	EN61000, 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		