

## All-in-one solar charger inverter

### HFP4850S80-145



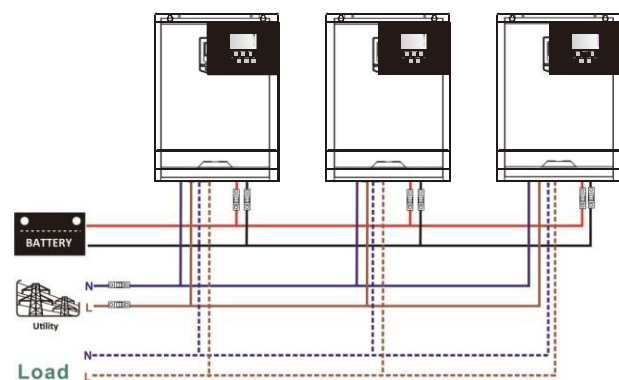
#### Product overview

HF48-H series is a new all-in-one hybrid solar charge inverter, which integrates solar energy storage & means charging energy storage and AC sine wave output. Thanks to DSP control and advanced control algorithm, it has high response speed, high reliability and high industrial standard.

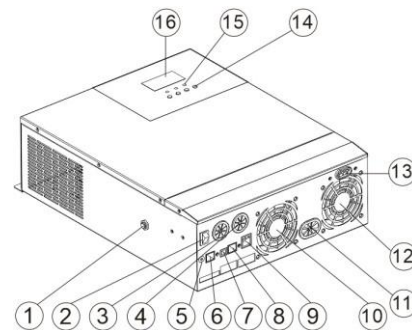
#### Performance characteristics

- 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 energy storage 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, Bluetooth), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.
- Available for 6 units parallel connection

#### Product connection diagram



#### Appearance



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

#### Technical parameters

Models	HFP4850S80-145
AC mode	
Rated input voltage	220/230Vac
Input voltage range	(170Vac~280Vac) ±2%/(90Vac-280Vac)±2%
Frequency	50Hz/60Hz (auto-sensing)
Parallel connection	Available for 6 units parallel connection
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	yes
Maximum bypass overload current	40A
<b>Inverting mode</b>	
Output voltage waveform	Pure sine wave
Rated output power(VA)	5000
Rated output power(W)	5000
Power factor	1
Rated output voltage (Vac)	230Vac
Output voltage error	±5%
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz
Efficiency	>90%
Overload protection	(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	10000VA
Loaded motor capacity	4HP
Output short-circuit protection	Breaker
Specification of bypass breaker	40A
Rated battery input voltage	48V (minimum start voltage 44V)
Battery voltage range	40.0Vdc~60Vdc ± 0.6Vdc (undervoltage alarm/turnoff voltage/overvoltage alarm/overvoltage restoration...settable LCD screen)
Power saving mode	Load ≤50W
<b>AC charge</b>	
Battery type	Lead acid or lithium battery
Maximum charge current	60A
Charge current error	± 5Adc
Charge voltage range	40 ~58Vdc
Short-circuit protection	Circuit breaker and blown fuse
Breaker specification	40A
Overcharge protection	Alarm and turn off charging after 1 minute
<b>Solar charge</b>	
Maximum PV opencircuit voltage	145Vdc
PV operation voltage range	60-145Vdc
MPPT voltage range	60-115Vdc
Battery voltage range	40-60Vdc
Maximum output power	4200W
Charge current range of solar energy (settable)	0-80A
Charge short-circuit protection	Blown fuse
Wiring protection	Reverse polarity protection
<b>Authentication specification</b>	
Specification authentication	CE(IEC/EN62109-1,-2), ROHS2.0
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 air cooling, variable speed of fan
Communication interface	USB/RS485(Bluetooth/WiFi/GPRS)/Dry node control
Dimension (L*W*D)	430mm*338mm*126mm
Weight (kg)	10