

All-in-one solar charger inverter

SR-HFP4850S80-145



Technical parameters >>>

Product overview

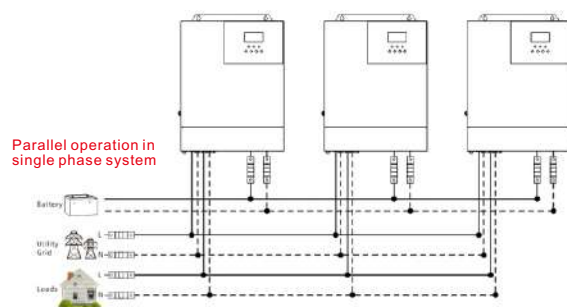
HFP series is a new all-in-one hybrid solar charge inverter, which integrates solar energy storage & means charging energy storage and AC sine wave output. Thanks to DSP control and advanced control algorithm, it has high response speed, high reliability and high industrial standard.

Performance characteristics

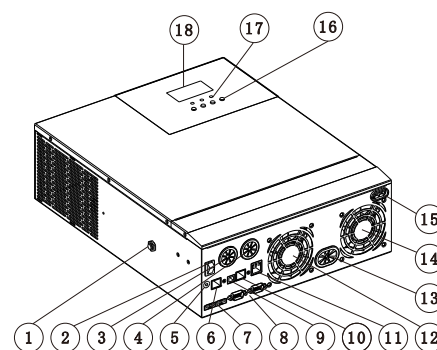
- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sinewave.
- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- 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, 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 example



Appearance



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

Models	HFP4850S80-145
AC mode	
Rated input voltage	220/230Vac
Input voltage range	(170Vac~280Vac) ±2% ; (90Vac-280Vac)±2%
Frequency	50Hz/ 60Hz (Auto detection)
Number of parallel / split phases	1-6
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)	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
Maximum Efficiency	>92%
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;
Peak power	10000VA
Loaded motor capability	3HP
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	60A
Charge current error	± 3A _{dc}
Charge voltage range	40 ~58V _{dc}
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	145V _{dc}
PV operating voltage range	60-145V _{dc}
MPPT voltage range	60-115V _{dc}
Battery voltage range	40-60V _{dc}
Maximum PV input power	4400W
Maximum PV input current	50A
Maximum charger power	4200W
PV charging current range (can be set)	0-80A
Charging short circuit protection	Blown fuse
Wiring protection	Reverse polarity protection
Certified specifications	
Certification	CE(IEC 62109-1)
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)	426mm*322mm*124mm
Weight (kg)	10.8