Solar inverter charger AC 220/230V 3KW 12/24V Max solar input 100V,80A AC/ 60A DC,50Hz/ 60Hz

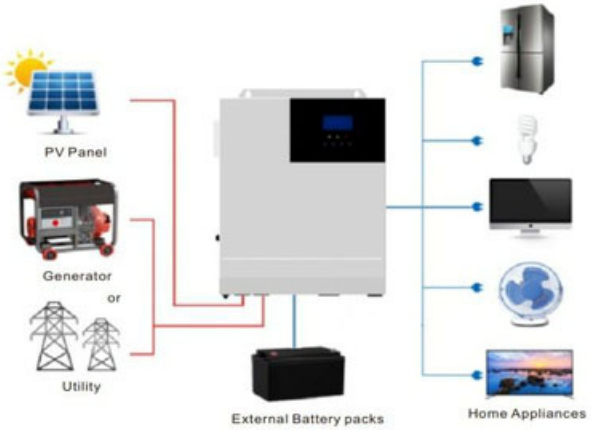
Product overview

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.

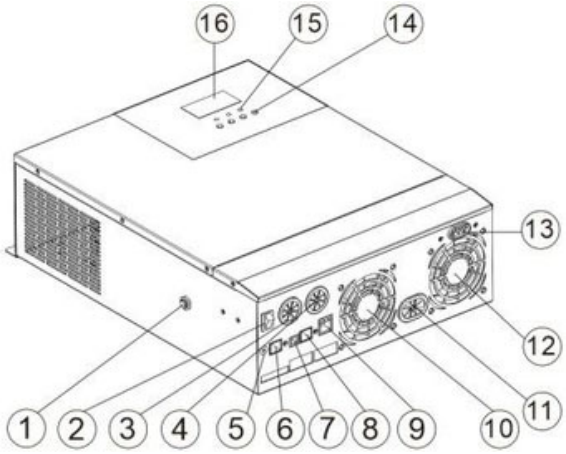
Performance characteristics

- Adopt full digital voltage and current double closed-loop control and advanced SPWM technology to output pure sine wave.
- Two output modes, i.e. mains bypass and inverter output can achieve uninterrupted power supply function.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology, with efficiency up to 99.9%.
- Wide MPPT voltage range.
- With function of activating lithium battery with solar energy and AC mains power, it supports connection of lead-acid battery and lithium battery.
- LCD screen design and 3 LED indicator lights dynamically display system data and operation states.
- ON/OFF rocker switch can control AC output.
- With power saving mode function, it can reduce no-load loss.
- Intelligent adjustable speed fan is adopted for efficient heat dissipation and extended system life.
- Possessing multiple protection functions and 360° comprehensive protection.
- Possessing complete short circuit protection, overvoltage and under voltage protection, overload protection, back filling protection, etc.

Product connection diagram



Appearance



	Overload protector		Dry contact port
	ON/OFF rocker switch		Cooling fan
	AC input port		Battery port
	AC output port		Cooling fan
	Grounding screw hold		PV port
	RS485-2 communication port		Touch the key lightly
	USB communication port		Indicator light
	RS485-1 communication port		LCD screen

Technical parameters

Model AC mode Rated input voltage	S60-H	S80-H
Input voltage range	220Vac/230Vac	
Frequency	(170Vac~280Vac) ±2%; (90Vac-280Vac) ±2%	
Frequency Range	50Hz/ 60Hz (auto-sensing)	
Overload/short circuit protection		
Efficiency	47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz);	
Conversion time (bypass and inverter)	Breaker	
AC reverse protection	>95%	
Maximum bypass overload current	10ms (Typical value)	
Inverting mode	yes	
Output voltage waveform	40A	
Rated output power(VA)		
Rated output power(W)	Pure sine wave	
Power factor	3000 (2600/2700/3000)	5000(4350/4500/4800/5000)
Rated output voltage (Vac)	3000 (2600/ 2700/3000)	5000(4350/4500/4800/5000)
Output voltage error	1	
Output frequency range (Hz)	230Vac (200/208/220/240Vac settable)	
Efficiency	±5%	
	50Hz ± 0.3Hz/60Hz ± 0.3Hz	
	>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;	
Peak power	6000VA	10000VA
Loaded motor capacity	2HP	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 (under voltage 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	
Charge current error	± 5Adc	
Charge voltage range	40~60Vdc	
Short-circuit protection	Breaker and blown fuse	
Breaker specification	40A	
Overcharge protection	Turn off charge after 1min alarm	
Solar charge		
Maximum PV opencircuit voltage	500Vdc	
PV operation voltage range	120-500Vdc	
MPPT voltage range	120-450Vdc	
Battery voltage range	40-60Vdc	
Maximum output power	4200 W	5000 W
Charge current range of solar energy (settable)	0-60 A	0-80 A
Charge short-circuit protection	Blown fuse	
Wiring protection	Inverse wiring protection	
Authentication specification		
Specification authentication		
EMC authentication grade	CE(IEC 62109-1)	
Operation temperature range	EN61000	
Storage temperature range	-15°C to 55°C	
Humidity range	-25°C ~ 60°C	
Noise	5% to 95% (Conformal coating protection)	
Thermal dissipation	≤60dB	
Communication interface	Forced cooling with adjustable air speed	
Dimension (L*W*D)	USB/RS485 (WiFi/GPRS)/dry node control	
Weight (kg)	426mm*322mm*126mm	
	10.9	