All-in-one solar charger inverter

ISolar-SMX-II-3.6KW

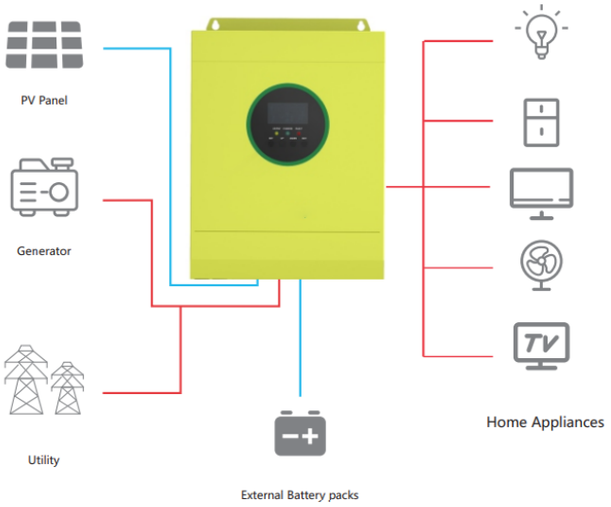
Product overview

HF 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 controlalgorithm, it has high response speed, high reliability and high industrial standard.

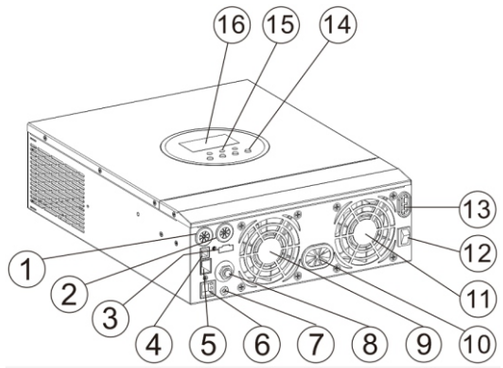
Performance characteristics

·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 over current.
·Supply of a variety of user-friendly communication modules, such as RS485(GPRS, WiFi), USB etc.,
and suitable for computer, mobile phones, Internet monitoring as well as remote operations.
· Lithium battey can be activated by both mains and PV.

Product connection diagram



Appearance



①	AC input port	⑨	Cooling fan
②	AC output port	⑩	Battery port
③	CAN communication port	⑪	Cooling fan
④	USB communication port	⑫	ON/OFF rocker switch
⑤	Rs485 communication port	⑬	PV port
⑥	Dry contact port	⑭	Touch button
⑦	Grounding screw hole	⑮	LED Indicator
⑧	Overload protector	⑯	LCD screen

Technical parameters >>>

Models	ISolar-SMX-II-3.6KW
AC mode	
Rated input voltage	220/230Vac
Input voltage range	(170Vac~280Vac) ±2% ; (90Vac-280Vac)±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	30A
Inverter mode	
Output voltage waveform	Pure sine wave
Rated output power (VA)	3600
Rated output power (W)	3600
Power factor	1
Rated output voltage (Vac)	230Vac
Output voltage error	±5%
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz
Efficiency	>92%
Peak power	6000
Loaded motor capability	2HP
Output short circuit protection	Circuit breaker
Bypass breaker specifications	30A
Rated battery input voltage	24V (Minimum starting voltage 22V)
Battery voltage range	20.0Vdc~33Vdc ± 0.6Vdc (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	80A
Charge voltage range	20.0Vdc~33Vdc
Short circuit protection	Circuit breaker and blown fuse
Circuit breaker specifications	30A
Overcharge protection	Alarm and turn off charging after 1 minute
PV charging	
Maximum PV open circuit voltage	500Vdc
PV operating voltage range	120-500Vdc
MPPT voltage range	120-450Vdc
Battery voltage range	20-33Vdc
Maximum intput power	4000W
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/CAN/RS485(WiFi/GPRS)/Dry node control
Size (L*W*D)	378mm*280mm*103mm
Weight (kg)	6.9