

# All-in-one solar charger inverter

# SR-HF2430S80-H



#### 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.

 $\cdot \text{Power saving mode available to reduce no-load loss.}$ 

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.

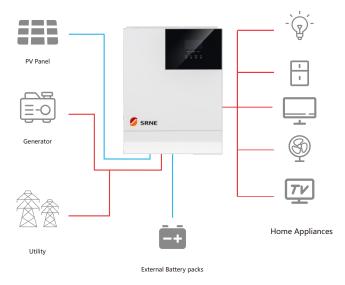
·360 ° all-round protection with a number of protection functions. Such as overload, short circuit and over current.

·Supply of a variety of user-friendly communication modules, such as RS485(GPRS, WiFi ), USB etc.,

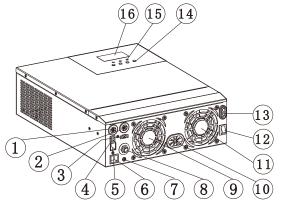
and suitable for computer, mobile phones, Internet monitoring as well as remote operations.

· 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	100	Battery port
3	CAN communication port	111	Cooling fan
4	USB communication port	12	ON/OFF rocker switch
(5)	Rs485 communication port	(3)	PV port
6	Dry contact port	(4)	Touch button
7	Grounding screw hole	15	LED Indicator
8	Overload protector	16	LCD screen

## **Technical parameters >>>**

Models	SR-HF2430S80-H		
AC mode			
Rated input voltage	220/230Vac		
Input voltage range	(170Vac~280Vac) ±2%; (90Vac-280Vac)±2%		
Frequency	50Hz/ 60Hz (Auto detection)		
Frequency Range	$47\pm0.3$ Hz $\sim 55\pm0.3$ Hz (50Hz)/57 $\pm0.3$ Hz $\sim 65\pm0.3$ Hz (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)	3300		
Rated output power (W)	3300		
Power factor	1		
Rated output voltage (Vac)	230Vac		
Output voltage error	±5%		
Output frequency range (Hz)	50Hz ± 0.3Hz		
Efficiency	>92%		
Overload protection	(102% < load <125%) $\pm$ 10%: report error and turn off the output after5 minutes; (125% < load < 150%) $\pm$ 10%: report error and turn off the output after 10 seconds; Load >150% $\pm$ 10%: report error and turn offthe output after 5 seconds;		
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 current error	± 5Adc		
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	77		
Certification	CE(IEC 62109-1)		
EMC certification level	EN61000, C2		
Operating temperature range	-15°C to 55°C		
, 5	-25°C ~ 60°C		
Storage temperature range			
Storage temperature range Humidity range	5% to 95% (Conformal coating protection)		
Humidity range	5% to 95% (Conformal coating protection)		
Humidity range Noise	≤60dB		
Humidity range Noise Heat dissipation	≤60dB Forced air cooling, variable speed of fan		
Humidity range Noise	≤60dB		