

# Solar Charge Inverter

## HG-IN5KWSR



### Product overview

HG-IN5KWSR 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 undervoltage protection, overload protection, back filling protection, etc.

# Product parameters

Model	HG-IN5KWSR
AC mode	
Rated input voltage	220Vac/230Vac
Input voltage range	(170Vac~280Vac) ±2%; (90Vac-280Vac) ±2%
Frequency	50Hz/ 60Hz (auto-sensing)
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(4350/4500/4800/5000)
Rated output power(W)	5000(4350/4500/4800/5000)
Power factor	
Rated output voltage (Vac)	230Vac (200/208/220/240Vac settable)
Output voltage error	±5%
Output frequency range (Hz)	50Hz ± 0.3Hz/60Hz ± 0.3Hz
Efficiency	>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	10000VA
Loaded motor capacity	4HP
Output short-circuit protection	
Specification of bypass breaker	4A
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) Load ≤50W
Power saving mode	
<b>AC charge</b>	
Battery type	Lead acid or lithium battery
Maximum charge current	60A
Charge current error	± 5A <sub>dc</sub>
Charge voltage range	40~60V <sub>dc</sub>
Short-circuit protection	Breaker and blown fuse
Breaker specification	40A
Overcharge protection	Turn off charge after 1min alarm
<b>Solar charge</b>	
Maximum PV opencircuit voltage	500V <sub>dc</sub>
PV operation voltage range	120-500V <sub>dc</sub>
MPPT voltage range	120-450V <sub>dc</sub>
Battery voltage range	40-60V <sub>dc</sub>
Maximum output power	5000W
Charge current range of solar energy (settable)	0-80A
Charge short-circuit protection	Blown fuse
Wiring protection	Inverse wiring protection
<b>Authentication specification</b>	
Specification authentication	CE(IEC 62109-1)
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 cooling with adjustable air speed
Communication interface	USB/RS485 (WiFi/GPRS)/dry node control
Dimension (L*W*D)	426mm*322mm*126mm
Weight (kg)	10.9kg