

## ZIGOR SOLAR HIS4NG

### Single-phase hybrid inverter with N+1 redundant function

#### Description



The ZIGOR SOLAR HIS4NG hybrid system is not only an inverter, but also a powerful smart charger when AC input is in use. It has an output transformer to provide galvanic isolation to the output.

The ZIGOR SOLAR HIS4NG inverter is a heavy-duty, continuous working module generating a sinusoidal wave from a 48V - battery bank, which can supply energy to various loads such as resistive load (heater), inductive load (air conditioners, refrigerator), (vacuum cleaners), and rectifier load (computer). It also provides a rapid and complete charging process when the AC input is available.

The smart charger can be set with different charging profiles and battery capacities to match in various battery types and sizes. The switch module automatically diverts the energy transfer path between inverter and utility source. When the utility source is lower than the transfer level, the path switches to the inverter. Otherwise the load is conducted to the utility source. The high power charger (70A) can charge a 48V/700 AH battery bank in 10 hours. The ZIGOR SOLAR HIS4NG hybrid inverter is an extremely good choice for utility back up power and even for PV solar applications.

One of the main characteristics is that these hybrid inverters can be connected in parallel without almost any limit. Then we could also design the off-grid application with the safety measure of deploying N+1 hybrid inverters for redundant applications.



ZIGOR SOLAR HIS4NG

#### Features

- > Pure sine wave output
- > Additional LCD settings function
- > Continuous output inverter and high power battery charger included
- > Quiet, high-efficiency operation, high surge capacity and low idle current
- > Capable to supply energy to various loads such as resistive load, inductive load, and rectifier load
- > Seamless transfer switching (grid / generator to battery and battery to grid / generator)
- > Load sensing adjustable
- > Long backup time up to 10 hours (based on the battery bank and loads)
- > Truly N+1 redundant function up to 7 units
- > Wall mounting: vertical and horizontal

#### Required (Optional): For PV Solar application

- > ZIGOR SOLAR SA6 60A / 48VDC Regulator

on-grid solar plants

mid voltage solar plants

hybrid generation

energy saving

telecom back up

wind energy



ELECTRICAL CHARACTERISTICS	
<b>Model</b>	<b>ZIGOR SOLAR HIS4NG</b>
Reference	18922
Input DC	4000 VA/4000 W
Nominal Input Voltage	230 Vac (+/- 30 V) / 45-65 Hz
Output Voltage (configurable)	120/230/240 Vac 110-115-120 220-230-240
DC mode output Voltage Regulation	±2%
Standard Output Frequency	50 or 60Hz +/- 0.5%
Frequency Regulation	± 0.5 Hz
Power Factor	0.7 to 1
Waveform	Pure sine wave
Maximum Power Efficiency (DC mode)	92% (including transformer)
Overload Protection	4600W - 10min 6000W - 3 min 7000W - 7 secs
BATTERY	
Nominal Input Voltage	48 Vdc
Maximum charging current	70 A (Adjustable)
Auto Low Battery Protection (Heavy/Light Load)	40/42/44 Vdc (selectable)
DC Input Voltage Range	40 ~ 60 Vdc
Battery Charging Power Factor Corrected	> 0.9
DC Power at Rated Power	120 amps
DC Power at Short Circuit	360 amps
GENERAL FEATURES	
Acoustic Noise (dB)	<55
Type of Protection	IP20
Temperature Range	0°C ~ +40°C : 32 ~ 104°F
Relative Humidity	0-95% without condensationw
Data Communication	Modbus RS-485
Forced Air Cooling	Variable Speed
Dimensions (WxHxD) mm	572x229x184
Weight (Kg)	22.2
STANDARDS	
Certificates	CE Marking
Directives	73/23/CEE-93/68/CEE 2004/108/CEE

*These specifications may be changed without notice.*