

# So Series 1KW - 12KW

## Pure Sine Wave Inverter Charger Series

Series 1KW - 12KW (1ph in / 1ph out)

### Key Features:

- Pure sine wave output.
- Rated power: 1KW to 12KW(12V/24V/48V/96V)
- Big AC Charging current 5-35A,5-40A,5-50A,5-70A(optional)
- With UPS function AC to DC automatic conversion
- Wide AC voltage& frequency for AC and generator input
- Adjustable battery voltage for different types of batteries, such as LD: lead-acid battery (default), GEL: gel battery, LI: lithium battery.
- DC Start & Automatic Self-Diagnostic function ,  
5 working modes can choose
  - 01: Mains priority /
  - 02: Energy saving /
  - 03: Battery priority /
  - 04: Unattended mode /
  - 05: Solar priority
- High Efficiency Design & "Power Saving Mode" to Conserve Energy
- Smart LCD display and setting(Working modes, Charge Current, Charge Voltage, AC range input , Battery voltage ,Battery low voltage shutdown etc.)
- High-low voltage protection,overload, short-circuit Protection, under-voltage and over-temperature protection,over voltage, battery reverse connection(optional)etc.
- Support RS232, RS485 monitoring function with free program, remote monitoring (optional)
- Wifi remote management is optional



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# Technical Specification:

## So Series Inverter

Model		1KW	1.5KW	2KW	3KW	4KW	5KW	6KW	8KW	10KW	12KW	
Input	Rated Capacity	1KW	1.5KW	2KW	3KW	4KW	5KW	6KW	8KW	10KW	12KW	
	Peak Power	3KW	4.5KW	6KW	9KW	12KW	15KW	18KW	2KW	30KW	36KW	
	Commercial Power Range	110VAC:83V - 137VAC 120VAC:90V - 150VAC 220VAC:165V - 275VAC 230VAC:173V - 287VAC							110VAC:88V - 132VAC 120VAC:96V - 144VAC 220VAC:176V - 264VAC 230VAC:184V - 276VAC			
	AC Frequency Range	45 - 65Hz										
	Efficiency	> 85%										
Battery	Type	Lead-acid Battery / GEL Battery / Lithium Battery										
	DC Voltage	12VDC / 24VDC			24VDC / 48VDC			48VDC / 96VDC				
	Input Voltage Range	12VDC:10.5 - 15VDC 24VDC:21 - 30VDC 48VDC:42 - 60VDC 96VDC:84 - 120VDC										
	Floating Charge Set	12V:12.9 ~ 13.6V 24V:25.8V ~ 27.2V 48V:51.6V ~ 54.4V 96V:103.2V ~ 108.8										
	Low Voltage Restored	12VDC:12.6 - 14.4VDC 24VDC:25.2 - 28.8VDC 48VDC:50.4 - 57.6VDC 96VDC:100.8 - 115.2VDC										
	Low Voltage Shutdown Set	12VDC:10 - 10.9V 24VDC:20 - 21.8V 48VDC:40 - 43.6V 96VDC:80V - 87.2V										
	Over Voltage Protection	12VDC:16.7VDC 24VDC:33.4V 48VDC:66.8V										
	Over Voltage Alarm	12VDC:15VDC 24VDC:30V 48VDC:60V										
	AC Charging	5A - 35A (40A, 50A, 60A, 70A, optional)										
Output	Capable of Starting Electronic Motor	0.5HP	1HP	1.5HP		2HP			3HP			
	AC Mode Output	With AVR: 110 / 120 / 220 / 230 / 240Vac ±10% (Auto Sensing)							Without AVR: Synchronizing with AC			
	DC Mode Output	110 / 120 / 220 / 230 / 240Vac ±3% (Auto Sensing)										
	Power Factor	1										
	Transfer Time	Typical: 5 - 10ms (Including Detection Time)										
	Temperature Protection	≥85°C Alarm ≥90°C Machine Shut Off										
	Overlord	IPS automatically shut down if overload exceeds 110% - 120% of normal value for 30 seconds, IPS automatically resume work if overload comes to rated load										
	Wave Form	Pure sine wave										
	Frequency	Commercial power supply: shared frequency with the commercial inversion state: 50/60Hz±0.5										
	Output Frequency Range(Electronic Supply Mode)	Tracking Automatically										
	Protection	Overload, Short Circuit, Battery High and Low Voltage, AC Input High and Low Voltage Protection										
	Conversion Method	Interactive										
	Solar MPPT Controller (Optional)	MPPT Solar Controller	30A / 50A			50A / 60A / 80A				80A / 100A		
Solar Input Power		360W / 720W / 1200W			1200W / 1440W / 2400W / 2880W / 3840W				3840W / 4800W / 9600W			
Solar Input Voltage(Max)		12VDC / 24VDC:100V 48VDC:160V 96VDC:200V or 280V										
Temperature	Operating Temperature	0°C ~ 70°C										
	Thermal Method	Cooling fan in intelligent control ≤42°C fan rotates slowly to ≥45°C fan rotates fast										
Appearance	External Size(mm) (L*W*H)	510*325*215 mm				645*325*215 mm			765*320*250 mm			
	Gross Size(mm) (L*W*H)	560*380*280 mm				730*400*290 mm			840*405*320 mm			
	Net Weight(KG)	14	15	18	20	31	34	35	52	54	56	
	Gross Weight(KG)	16	17	20	22	35	37	38	56	58	60	

Note : Product Specification are Subject to Change Without Further Notice.