

ISUN

SERIES SOLAR INVERTER SPECIFICATION



MAIN FEATURES

- 1.MPPT solar charge controller built inside.
- 2.Pure sine wave solar inverter.
- 3.Output Power factor I.
- 4.Cold start function.
- 5.Auto restart while AC is recovering.
- 6.Overload and short circuit protection.
- 7.Configurable AC/Solar input priority via LCD setting.
- 8.Compatible with mains voltage or generator power.
- 9.Smart battery charge design for optimized battery performance.
- 10.Selectable AC input voltage range for home appliances and personal computers.

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Line Mode Specifications

INVERTER MODEL	ISUN 1KW	ISUN 2KW	ISUN 3KW
Input Voltage Waveform	Sinusoidal (utility or generator)		
Nominal Input Voltage	230Vac		
Low Loss Voltage	170Vac±7V (UPS); 90Vac±7V (Appliances)		
Low Loss Return Voltage	180Vac±7V (UPS); 100Vac±7V (Appliances)		
High Loss Voltage	280Vac±7V		
High Loss Return Voltage	270Vac±7V		
Max AC Input Voltage	280Vac		
Nominal Input Frequency	50Hz / 60Hz (Auto detection)		
Low Loss Frequency	40±1Hz		
Low Loss Return Frequency	42±1Hz		
High Loss Frequency	65±1Hz		
High Loss Return Frequency	63±1Hz		
Output Short Circuit Protection	Circuit Breaker		
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)		
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)		

Inverter Mode Specifications

	ISUN 1KW	ISUN 2KW	ISUN 3KW
Rated Output Power			
Output Voltage Waveform	Pure Sine Wave		
Output Voltage Regulation	230Vac±5%		
Output Frequency	50Hz/60Hz		
Peak Efficiency	93%		
Overload Protection	5s@≥150% load; 10s@105%~150% load		
Surge Capacity	2* rated power for 5 seconds		
Nominal DC Input Voltage	12.0Vdc	24.0Vdc	24.0Vdc
Cold Start Voltage	11.5Vdc	23.0Vdc	23.0Vdc

Low DC Warning Voltage

load < 50%	11.5Vdc	23.0Vdc	23.0Vdc
load ≥ 50%	11.0Vdc	22.0Vdc	22.0Vdc

Charge Mode Specifications

Charging Algorithm	3 steps		
AC Charging Current (Max)	25Amp (INPUT=230Vac)		
Voltage	14.1Vdc	28.2Vdc	28.2Vdc
Floating Charging Voltage	13.5Vdc	27Vdc	27Vdc

MPPT Solar Charging Mode

Charging Current	40Amp		50Amp
System DC Voltage	12Vdc	24Vdc	24Vdc
Operating Voltage Range	18-80VDC	36-80Vdc	36-80Vdc
Max. PV Array Open Circuit Voltage	100Vdc		
DC Voltage Accuracy	±0.3%		
Max Charging Current (AC+ solar)	65Amp		

General Specifications

Safety Certification	CE		
Operating Temperature Range	0°C-50°C		
Storage temperature	-15°C-60°C		
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Product Dimension (D*W*H), mm	343mm*250mm*122mm	343mm*250mm*122mm	473mm*297mm*107mm
Packing Size (mm)	400mm*320mm*190mm	400mm*320mm*190mm	534mm*390mm*193mm
Net Weight, kg	5.35KG	6.1KG	7.84KG
G.W. kg	5.85KG	6.6KG	9.24KG

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