

3000W 24V

All-in-one Solar Inverter Charger

User Manual



SUPPORT

If you are experiencing technical problems and cannot find a solution in this manual, please contact ECO-WORTHY for further assistance.

Technical parameters

AC mode		
Rated input voltage	220/230Vac	110/120Vac
Input voltage range	(90Vac~280Vac) $\pm 2\%$ / (90Vac~140Vac) $\pm 2\%$	
Frequency	50Hz / 60Hz (Auto detection)	
Frequency Range	47 $\pm$ 0.3Hz ~ 55 $\pm$ 0.3Hz (50Hz); 57 $\pm$ 0.3Hz ~ 65 $\pm$ 0.3Hz (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	40A
Inverter mode		
Output voltage waveform	Pure sine wave	
Rated output power (VA)	3000	
Rated output power (W)	3000	
Power factor	1	
Rated output voltage (Vac)	230Vac	120Vac
Output voltage error	$\pm 5\%$	
Output frequency range (Hz)	50Hz $\pm$ 0.3Hz	60Hz $\pm$ 0.3Hz
Efficiency	>92%	
Peak power	6000VA	
Loaded motor capability	2HP	
Overload Protection	For 220/230Vac model: (102% < load < 125%) $\pm 10\%$: report error and turn off the output after 5 minutes; (125% < load < 150%) $\pm 10\%$: report error and turn off the output after 10 seconds; Load >150% $\pm 10\%$: report error and turn off the output after 5 seconds;	
	For 110/120Vac model: (102% < load < 110%) $\pm 10\%$: report error and turn off the output after 5 minutes; (110% < load < 125%) $\pm 10\%$: report error and turn off the output after 10 seconds; Load >125% $\pm 10\%$: report error and turn off the output after 5 seconds	

Peak power	6000VA	6000VA
Loaded motor capability	2HP	2HP
Rated battery input voltage	24V (Minimum starting voltage 22V)	
Battery voltage range	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(can be set)	0-80A	0-40A
Charge current error	± 5Adc	
Charge voltage range	20 –33Vdc	
Short circuit protection	Circuit breaker and blown fuse	
Circuit breaker specifications	30A	40A
Overcharge protection	Alarm and turn off charging after 1 minute	
PV charging		
Maximum PV open circuit voltage	100Vdc	100Vdc
PV operating voltage range	30-100Vdc	30-100Vdc
MPPT voltage range	30-85Vdc	30-85Vdc
Battery voltage range	20 –33Vdc	
Maximum output power	1400W	1400W
PV charging current range (can be set)	0-60A	0-60A
Charging short circuit protection	Blown fuse	
Wiring protection	Reverse polarity protection	
Hybrid charging Max charger current specifications (AC charger+PV charger)		
Max charger	0-140A	0-100A

current(can be set)		
Certified specifications		
Certification	CE(IEC 62109-1)	CE(IEC 62109-1)/CETL(UL 1741/ CSA C22.2 NO.107.1)
EMC certification level	EN61000, C2	
Operating temperature range	-10°C to 55°C	
Storage temperature range	-25°C ~ 60°C	
Humidity range	5% to 95% (Conformal coating protection)	
Noise	≤60dB	
Heat dissipation	Forced air cooling, variable speed of fan	
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control	
Size (L*W*D)	378mm*280mm*103mm	
Weight (kg)	6.8	