KOOL ENERGY

AL Solar AC DC Power System

PRODUCT OVERVIEW

The product applies to diversified loads because its digital design, pure sine wave output and excellent overcurrent protection can withstand the loads with a large starting current; the product is provided with independent solar three-stage charge management to improve charge effciency of its battey and realize a longer life; the product provides universal 5VDC USB output port and 12VDC output to be widely applied to small solar power generation occasions including families, schools, street monitoring, forest monitoring, industrial and mining enterprises, frontier defense, sea islands, pasturing areas, etc.





- Excellent performance because of an MCU intelligent control technology;
- A wide range of applicable loads because of pure sine wave AC output;
- Convenient and practical 5VDC USB output port and 12VDC output port;
- Solar array and battery connrnon-anode system
- Charge by mains supply for flexible configuration (optional function);
- Overcharge protection and overdischarge protection for a longer battey life;
- LCD and LEDS for visualization of operation status of the equipment
- Overall automatic protection and alarms Including AC output over load protection, short circuit protection .etc .



Solar system connection



TECHNICAL INDEXES

Rated voltage

Model: AL	1KW/12V	1KW/24V							
Inverter									
Battery voltage	12V 24V								
In-built battery specification	100AH/12V	100AH/12V*2		200AH/12V*2					
Rated power	1000W	1000W	1500W	2000W	2000W				
Output voltage	220VAC 50/60Hz								
Output frequency									
Output waveform	Pure Sine Wave								

Charge by a mains supply

220VAC ---* ('*' means an optional function)

	Charge current	10A(MAX)	10A(MAX)	30A(MAX)					
	Solar input								
	Maximum photovoltaic voltage(VDC)	≤25V	≤150V						
	Charge voltage(VDC)	10-25V	35V-150V						
	Rated charge current(A)	30A	MPPT 30A	MPPT 60A					
-[Maximum power(Wp)	— 360Wp —	800Wp	1600Wp					
	Voltage of overcharge protection(VDC)	14.2V 28.4V		4V					
	Voltage of overcharge recovery(VDC)	14.0V	28.0V						
	Voltage of floating charge(VDC)	13.7V	27.4V						

DC output

Voltage of high-voltage protection(VDC)	16V 32V						
Voltage of high voltage recovery(VDC)	15.2V 30.4V						
Voltage of low voltage recovery(VDC)	12.6V 25.2V						
Voltage of low voltage protection(VDC)	11V 22V						
5VDC USB output port	2 units/MAX 2A						
12VDC output port	2 DC ports(MAX 2A))						
Starting temperature of the exhaust fan	> 45°C						
Ambient temperature for operation	0–40°C						
Ambient temperature for storage	-25 − +55°C						
Operation/storage conditions	0-90% (no condensation)						
External dimensions: DxWxH (mm)	423 x 260 x 453	380 x 380 x 520	555 x 515 x 540				
Packing dimension: DxWxH (mm)	520 x 370 x 520	510×510×640	640x600x695				



1. AC Output

8.LCD Display 2. Smart Cooling Fan 9. Function Buttons 3. AC Input

4. Solar PV Input

10.ON/OFf Buttons 11.5VDC Output

5. Battery Extension 6. Battery Switch

7. LED Indicator

12.12VDC Output 13.DC Output Switch