

# AL Solar 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 efficiency of its battery 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.



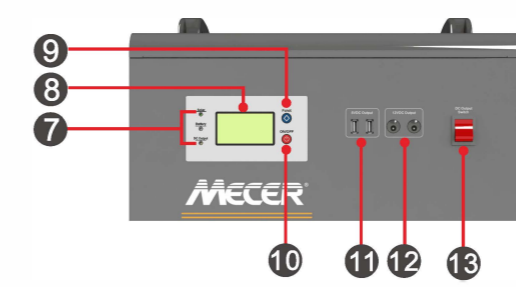
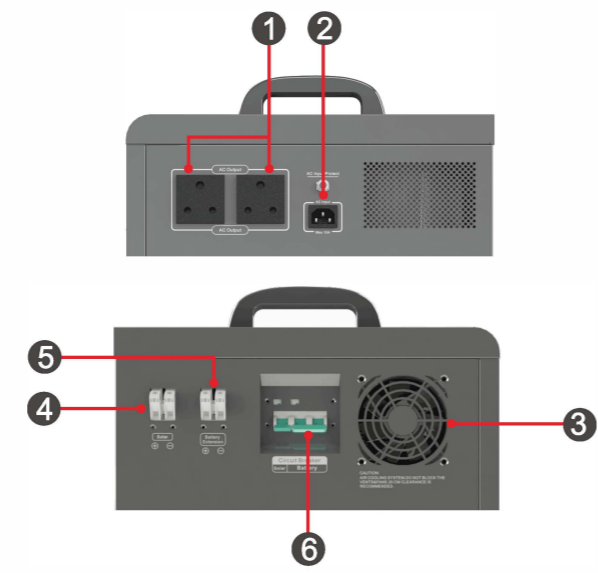
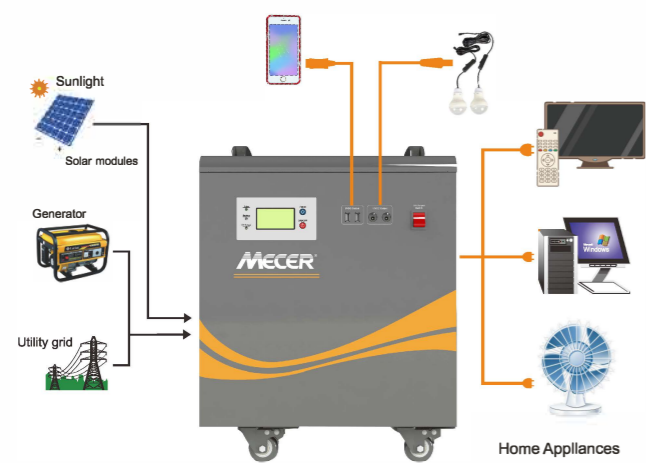
## MAIN FEATURES

- 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 common-anode system input;
- Charge by mains supply for flexible configuration (optional function);
- Overcharge protection and overdischarge protection for a longer battery 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.

## TECHNICAL INDEXES

Model: AL	SOL-I-BB-M1	SOL-I-BB-M2
Inverter		
Battery voltage	12V	24V
In-built battery specification	100AH/12V	100AH/12V*2
Rated power	1000W	1000W
Output voltage	220VAC	
Output frequency	50/60Hz	
Output waveform	Pure Sine Wave	
Charge by a mains supply		
Rated voltage	220VAC ----* (** means an optional function)	
Charge current	10A(MAX)	10A(MAX)
Solar input		
Maximum photovoltaic voltage(VDC)	≤25V	≤100V
Charge voltage(VDC)	10-25V	35V-100V
Rated charge current(A)	30A	MPPT 30A
Maximum power(Wp)	360Wp	800Wp
Voltage of overcharge protection(VDC)	14.2V	28.4V
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 2	
12VDC output port	DC ports(MAX 2A))	
Starting temperature of the exhaust fan	> 45℃	
Ambient temperature for operation	0-40℃	
Ambient temperature for storage	-25 - +55℃	
Operation/storage conditions	0-90% (no condensation)	
External dimensions: DxWxH (mm)	419 x 275 x 495	435 x 395 x 561
Packing dimension: DxWxH (mm)	510 x 350 x 510	535 x 485 x 600

## Solar system connection



## Product Information

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|----------------------|----------------------|
| 1. AC Output         | 8. LCD Display       |
| 2. AC Input          | 9. Function Buttons  |
| 3. Smart Cooling Fan | 10. ON/OFF Buttons   |
| 4. Solar PV Input    | 11. 5VDC Output      |
| 5. Battery Extension | 12. 12VDC Output     |
| 6. Battery Switch    | 13. DC Output Switch |
| 7. LED Indicator     |                      |