



ZHEJIANG HUDA NEW ENERGY EQUIPMENT CO.LTD

浙江互达新能源设备有限公司

Solar Off-Grid Inverter

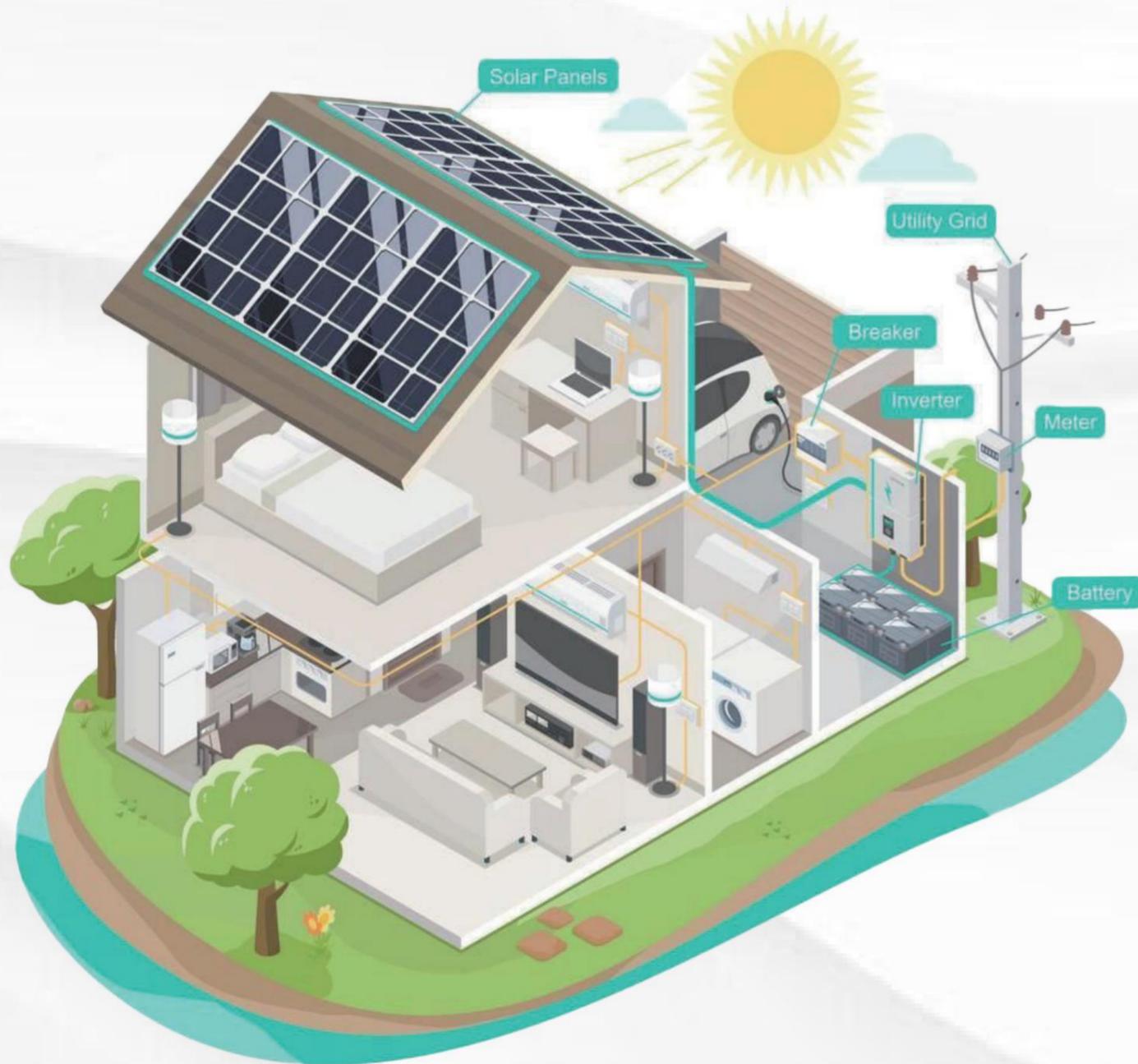


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PRODUCT SERIES

Residential Off-Grid Solar Inverter Series



| VMII Plus | 3.5KW | 5.5KW |
|---------------------|---------------|---------------|
| Power: | 3500VA/3500W | 5500VA/5500W |
| Mppt Range: | | |
| @Operating Voltage: | 120Vdc~450Vdc | 120Vdc~430Vdc |
| Battery Voltage: | 24V | 48V |
| Produce size: | 465*305*110mm | = |
| Net Weight: | 9.5kg | 10.5kg |



| SC-VM III | 3.5KW | 5.5KW |
|---------------------|---------------|--------------|
| Power: | 3500VA/3500W | 5500VA/5500W |
| Mppt Range: | | |
| @Operating Voltage: | 120Vdc~450Vdc | = |
| Battery Voltage: | 24V | 48V |
| Produce size: | 465*305*110mm | = |
| Net Weight: | 9.5kg | 10.5kg |



| SC-MAX | 8KWII | 11KWII |
|---------------------|---------------|----------------|
| Power: | 8000VA/8000W | 11000VA/11000W |
| Mppt Range: | | |
| @Operating Voltage: | 80Vdc~450Vdc | = |
| Battery Voltage: | 48V | = |
| Produce size: | 600*425*150mm | = |
| Net Weight: | 20kg | 21kg |



| VMIV | 4KW | 6KW |
|---------------------|---------------|--------------|
| Power: | 4000VA/4000W | 6000VA/6000W |
| Mppt Range: | | |
| @Operating Voltage: | 60Vdc~450Vdc | = |
| Battery Voltage: | 24V | 48V |
| Produce size: | 470*305*125mm | = |
| Net Weight: | 9kg | 10kg |

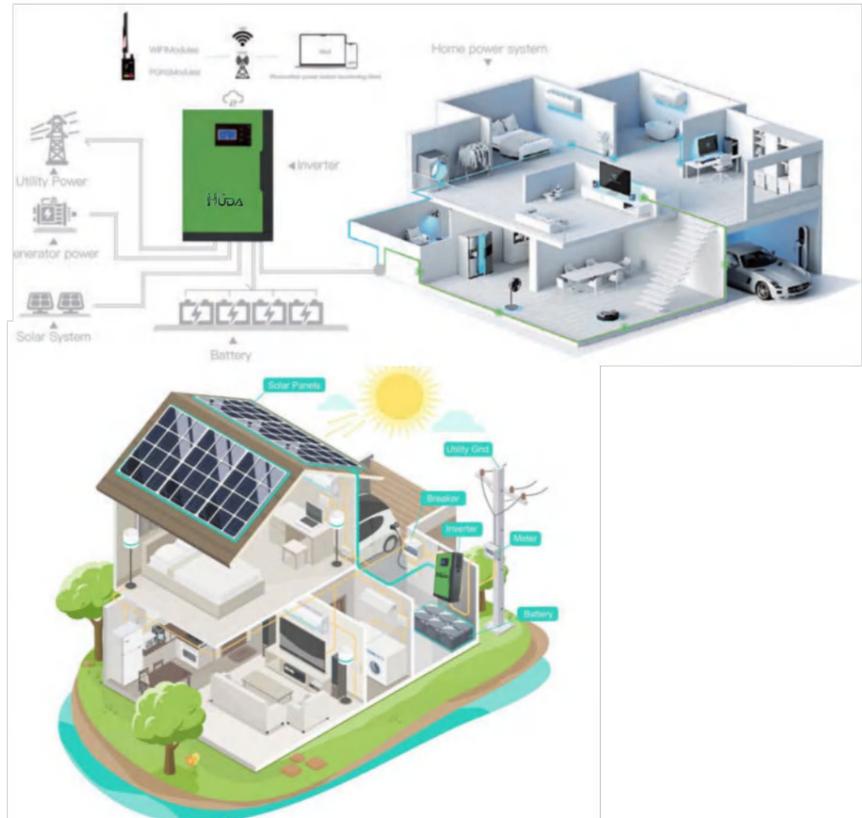


| Model | VM II Plus 3.5K | VM II Plus 5.5K |
|---|---|-----------------|
| Rated Power | 3500VA/3500W | 5500VA/5500W |
| Parallel operation: | Not supported | |
| AC Input | | |
| Voltage : | 230Vac | |
| Voltage range: | 170-280Vac(For personal computers)/90-280Vac(Suitable for household appliances) | |
| Frequency range: | 50 Hz/60 Hz | |
| Output Power | | |
| AC voltage range (battery supply power): | 220Vac/230Vac/240Vac±5%(Default230Vac) | |
| Frequency: | 50Hz/60Hz(Default50Hz) | |
| Surge Power: | 2* rate power lasts 5 seconds | |
| Efficiency (peak): | 93% | |
| Transfer time: | 10 ms(AS UPS), 20ms(Household Appliance) | |
| Over load protection: | 5s@≥150% load; 10s@110%~ 150% load | |
| Output wave form: | Pure sine wave | |
| Battery | | |
| Battery voltage: | 24Vdc | 48Vdc |
| Floating charging voltage: | 27Vdc | 54Vdc |
| Over charging protection: | 23Vdc | 63Vdc |
| PV power Charging and Utility Power charging | | |
| PV input: | MPPT | |
| Maximum PV array open circuit voltage: | 500Vdc | |
| Maximum PV array power: | 5000W | 5500W |
| MPPT range@operating voltage: | 120Vdc~450Vdc | |
| MPPT rate voltage range: | 120Vdc~450Vdc | |
| Max solar charge current: | 100A | |
| MAX AC charge current: | 80A | |
| Max charge current: | 100A | |
| Inverter | | |
| Size (D/W/H): | 465x305x110mm | |
| Net Weight(Kg): | 9.5 | 10.5 |
| Communication port: | RS232/USB | |
| Environment | | |
| Operating temperature: | -10°C ~ 50°C | |
| Storage temperature: | -15°C ~ 60°C | |
| Relative humidity: | 5% ~ 95% | |
| Standard | | |
| Executive standard: | CE | |

Main Features

- Off-grid Inverter and Controller Integrated Unit;
- Supports photovoltaic, grid, and battery inputs;
- DSP digital control with PFC technology, achieving a maximum input power factor of 0.99.Utilizes high-efficiency inverter topology, providing high conversion efficiency, low energy consumption, and an output power factor of 1.DSP;
- Supports customizable output source priority, charging source priority, and customizable battery charge/discharge voltage and current values;
- Supports customizable wide input range for grid power source and customizable output source switching time;
- Supports a photovoltaic input voltage range of 120-450V DC;
- Built-in MPPT battery charging module (100A) and grid battery charging module (80A);
- Supports cold start from battery source;
- Provides protection against over-temperature, overload, and short circuits;
- Supports battery balancing function, improving energy storage efficiency, optimizing battery performance, and extending battery lifespan;
- Isolated battery source design;
- Photovoltaic inverter output supports pure sine wave output;Easy-to-maintain design with a detachable fan;
- Supports RS232/USB communication port access;
- Optional Wi-Fi module available, supporting cloud-based mobile monitoring, Supports cloud-based PC monitoring;

Solar System Connection

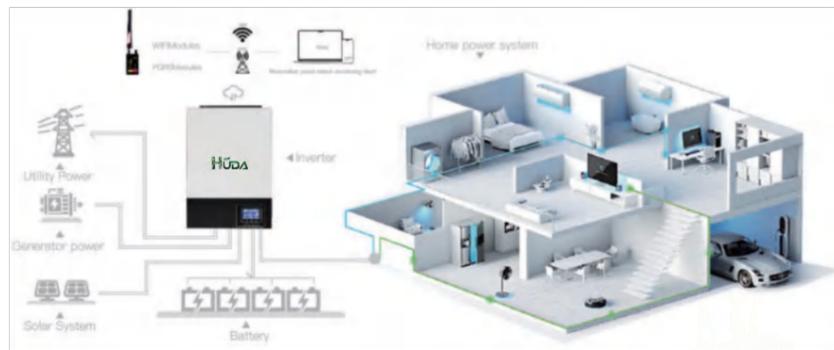




| Model | VM III 3.5KW | VM III 5.5KW |
|---|---|--------------|
| Rated Power | 3500VA/3500W | 5500VA/5500W |
| Parallel operation: | Not supported | |
| AC Input | | |
| Voltage : | 230Vac | |
| Voltage range: | 170-280Vac(For personal computers)/90-280Vac(Suitable for household appliances) | |
| Frequency range: | 50 Hz/60 Hz | |
| Output Power | | |
| AC voltage range (battery supply power): | 220Vac/230Vac/240Vac±5%(Default230Vac) | |
| Frequency: | 50Hz/60Hz(Default50Hz) | |
| Surge Power: | 2* rate power lasts 5 seconds | |
| Efficiency (peak): | 93% | |
| Transfer time: | 10ms(AS UPS), 20ms(Household Appliance) | |
| Over load protection: | 5s@≥150% load; 10s@110%~150% load | |
| Output wave form: | Pure sine wave | |
| Battery | | |
| Battery voltage: | 24Vdc | 48Vdc |
| Floating charging voltage: | 27Vdc | 54Vdc |
| Over charging protection: | 33Vdc | 63Vdc |
| PV power Charging and Utility Power charging | | |
| PV input: | MPPT | |
| Maximum PV array open circuit voltage: | 500Vdc | |
| Maximum PV array power: | 5000W | 5500W |
| MPPT range@operating voltage: | 120Vdc~450Vdc | |
| MPPT rate voltage range: | 120Vdc~450Vdc | |
| Max solar charge current: | 100A | |
| MAX AC charge current: | 80A | |
| Max charge current: | 100A | |
| Inverter | | |
| Size (D/W/H): | 465x305x110mm | |
| Net Weight(Kg): | 9.5 | 10.5 |
| Communication port: | RS232 | |
| Environment | | |
| Operating temperature: | -10°C ~50°C | |
| Storage temperature: | -15°C ~60°C | |
| Relative humidity: | 5%~95% (No condensation) | |
| Standard | | |
| Executive standard: | CE | |

Main Features

Solar System Connection



- Off-grid inverter and Controller integrated Unit
- Supports photovoltaic, grid, and battery inputs;
- DSP digital control with PFC technology, achieving a maximum input power factor of 0.99. Uses high-efficiency inverter topology, providing high conversion efficiency, low energy consumption, and an output power factor of 1.DSP;
- Support customizable output source priority, charging source priority, and customizable battery charge/discharge voltage and current values;
- Supports wide-range grid input customization and customizable output source switching time;
- Supports a photovoltaic input voltage range of 120-450V DC;
- Built-in MPPT battery charging module (100A) and grid battery charging module (80A);
- Supports cold start from the battery source;
- Includes protection against over-temperature, overload, and short circuits;
- Battery balancing function enhances energy storage efficiency, optimizes battery performance, and extends battery lifespan;
- Isolated battery source design;
- Photovoltaic inverter output supports pure sine wave output;
- Detachable fan design for easy maintenance;
- Supports RS232 communication port access;
- Optional Wi-Fi module supports cloud-based mobile monitoring (available on Android/iOS apps) and cloud-based PC monitoring;
- LCD mobile box design supports remote configuration and monitoring of all operating statuses and parameters of the photovoltaic inverter.LCD;

SC-MAX 8KW II/11KW II



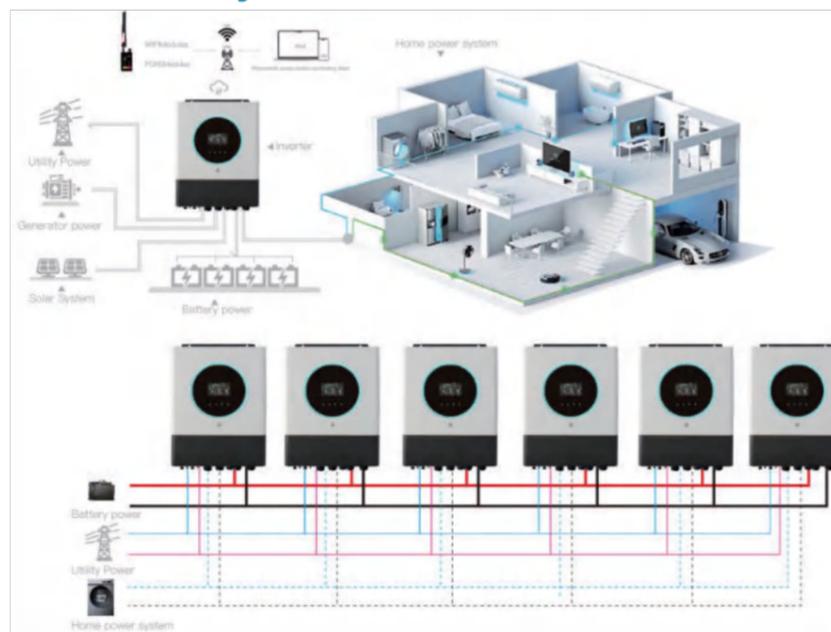
Specifications

| Model | SC-MAX 8KW II | SC-MAX 11KW II |
|---|---|-----------------------------------|
| Rated Power | 8000VA/8000W | 8000VA/8000W |
| Parallel operation: | up to 6 units | |
| AC Input | | |
| Voltage : | 230Vac | |
| Voltage range: | 170-280Vac(For personal computers)/90-280Vac(Suitable for household appliances) | |
| Frequency range: | 50 Hz/60 Hz | |
| Output Power | | |
| AC voltage range (battery supply power): | 220Vac/230Vac/240Vac±5%(Default230Vac) | |
| Frequency: | 50Hz/60Hz(Default50Hz) | |
| Surge Power: | 2* rate power lasts 5 seconds | |
| Efficiency (peak): | 93% | |
| Transfer time: | 10ms(AS UPS), 20ms(Household appliance) | |
| Over load protection: | 5s@≥150% loads; 10s@110%~150% loads | 5s@≥120%loads; 10s@105%~120%loads |
| Output wave form: | Pure sine wave | |
| Battery | | |
| Battery voltage: | 48Vdc | |
| Floating charging voltage: | 54Vdc | |
| Over charging protection: | 66Vdc | 63Vdc |
| PV power Charging and Utility Power charging | | |
| PV input: | MPPT | |
| Maximum PV array open circuit voltage: | 500Vdc | |
| Maximum PV array power: | 8000W | 11000W |
| MPPT range@operating voltage: | 80~450Vdc | |
| MPPT rate voltage range: | 240Vdc~430Vdc | 360Vdc~450Vdc |
| Max solar charge current: | 120A | 150A |
| MAX AC charge current: | 120A | 150A |
| Max charge current: | 120A | 150A |
| Inverter | | |
| Size (D/W/H): | 600mmx425mmx150mm | |
| Net Weight(Kg): | 20 | 21 |
| Communication port: | USB/RS232/RS485/WiFi/Dry Contact | |
| Environment | | |
| Operating temperature: | -10°C ~50°C | |
| Storage temperature: | -15°C ~60°C | |
| Relative humidity: | 5% ~95%(No condensation) | |
| Standard | | |
| Executive standard: | CE | |

Main Features

- Off-grid inverter, support photovoltaic, mains, battery hybrid input;
- DSP digital control, input PFC technology with power factor up to .99, high-efficiency inverter topology technology for high efficiency output and low self-energy consumption, output power factor is 1;
- Configurable output source prioritization /battery charge current and discharge voltage value via LCD setting;
- Configurable input voltage range for home appliance and personal computer via LCD setting ;
- High PV input voltage range 80-450Vdc;
- 2 strings PV input max power8000W (2 tracker each 4000W)/11000W(2 tracker each 5500W);
- Built-in 120A/150A MPPT Solar charger and 120A AC charger;
- Parallel operation up to 6 units;
- Over temperature/overload/short circuit protection;
- Smart battery charger design for optimized battery performance;
- Customization status and color of ring LED with RGB light;
- Touchable button with 5 inch colored LCD, inverter state and parameter is in evidence;
- Support reviewing daily record of PV generation and load ;
- Compatible to Utility mains or generator input;
- BMS(RS485)/RS232/Dry Contact port available;
- Built-in WIFI for mobile monitoring (Android/IOS APP is available)and PC monitoring;
- Built-in anti-dust kit;

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VM IV 4KW/6KW



Specifications

| Model | VM IV 4K | VM IV 6K |
|---|---|--------------|
| Rated Power | 4000VA/4000W | 6000VA/6000W |
| Parallel operation: | Not supported | |
| AC Input | | |
| Voltage : | 230Vac | |
| Voltage range: | 170-280Vac(For personal computers)/90-280Vac(Suitable for household appliances) | |
| Frequency range: | 50 Hz/60 Hz | |
| Output Power | | |
| AC voltage range (battery supply power): | 220Vac/230Vac/240Vac±5%(Default230Vac) | |
| Frequency: | 50Hz/60Hz (Default50Hz) | |
| Surge Power: | 10ms(AS UPS), 20ms(Household appliance) | |
| Efficiency (peak): | 93% | |
| Transfer time: | 10 ms(Typical UPS), 20ms(Home appliances) | |
| Over load protection: | 5s@~110%loads; 10s@105%~110%loads | |
| Output wave form: | Pure sine wave | |
| Battery | | |
| Battery voltage: | 24Vdc | 48Vdc |
| Floating charging voltage: | 27Vdc | 54Vdc |
| Over charging protection: | 33Vdc | 63Vdc |
| PV power Charging and Utility Power charging | | |
| PV input: | MPPT | |
| Maximum PV array open circuit voltage: | 500Vdc | |
| Maximum PV array power: | 5000W | 6000W |
| MPPT range@operating voltage: | 60Vdc~450Vdc | |
| MPPT rate voltage range: | 320~450Vdc | 360~450Vdc |
| Max solar charge current: | 120A | |
| MAX AC charge current: | 120A | |
| Max charge current: | 120A | |
| Inverter | | |
| Size (D/W/H): | 470mmx305mmx125mm | |
| Net Weight(Kg): | 9 | 10 |
| Communication port: | USB/RS232/RS485/WIFI/Dry Contact | |
| Environment | | |
| Operating temperature: | -10°C ~50°C | |
| Storage temperature: | -15°C ~60°C | |
| Relative humidity: | 5% ~95%(No condensation) | |
| Standard | | |
| Executive standard: | CE | |

Main Features

- Hybrid on/off grid inverter, support PV/AC, Battery connection;
- DSP digital control technology, input PFC technology, input PF up to 0.99"High efficiency output inverter topology technology high efficiency conversion,low energy consumption.Output PF is 1" ;
- User-defined output method priority, battery charging and discharging,User-defined voltage and current;
- Configurable AC/PV output usage timer and prioritization;
- User-defined input range, output transfer time;
- High PV voltage input range 60-450vdc;
- Built-in 120A MPPT charger, AC charger 100A;
- Cold start function;
- Over-temperature , overload, short circuit protection;
- Battery equalization function to optimize battery performance and extend life cycle;
- Isolated battery design;
- Pure sine wave;
- Dual output.AC output power ;
- Customized status LED ring with RGB lights;
- Touchable button with 5" colored LCD, checking all status, parameters by it;
- Support reviewing the record daily generation power and output load;
- Compatible AC/generator, Generator self-starting;
- Support BMS(RS485)/Rs232/USB/Dry contact interface;
- Built-in Wi-Fi for mobile monitoring (Android/IOS APP is required) PC monitoring available;
- Built-in anti-dust kit;

Solar System Connection

