

10kW Off-Grid Solar Power System

This 10kW off-grid solar power system utilizes solar energy to generate electricity for homes or businesses. It operates independently of the electrical grid, providing a sustainable and reliable power source.



Overview



A typical residential installation providing complete energy independence through high-efficiency solar panels.

10kW Off-Grid Solar Home System

This 10kW off-grid solar power system is a complete energy solution designed to convert solar radiation into reliable electrical energy using high-efficiency photovoltaic technology. Ideal for residential or industrial applications in areas without grid access, it provides total energy independence through a robust combination of solar panels, a pure sine wave inverter, and a high-capacity battery bank. The system is engineered for durability and ease of use, featuring intelligent control technology to ensure a sustainable and stable power supply.

System Performance

System Capacity

10 kW

Power Output

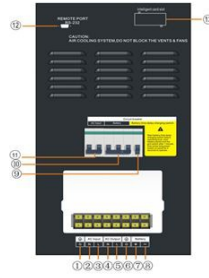
240 VDC

System Voltage

220 VAC

Output Voltage

Inverter Specifications



The system features a dedicated air cooling system and clearly labeled terminals for AC and battery connections.

Inverter Features

- Double BRU intelligent control technology
- Pure sine wave AC output for all load types
- Imported IGBT module driver for high inductive load resistance
- Flexible Solar/Grid power priority modes
- Real-time LCD parameter display
- Intelligent fan cooling control

Energy Storage

Battery Bank Configuration

Component	Specification
Battery Type	12VDC / 200AH
Quantity	20 PCS
Total Bank Voltage	240VDC

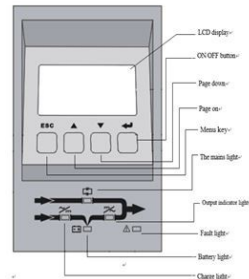
System Protection

Safety Protections

Output Overload, Short Circuit, Battery Over-Voltage, Battery Low-Voltage, Over-Temperature (85), AC Charge Voltage Protection

Connectivity & Control

- | | |
|-------------------------------------|-------------------------------------|
| 1--- The mains input ground wire | 2---The Mains input zero line |
| 3---The Mains input Fire Wire | 4--- Output zero line |
| 5 ---Fire wire output | 6--- Output Ground |
| 7 --- Battery positive input | 8--- Battery negative input |
| 9 --- Battery charging delay switch | 10--- Battery input switch |
| 11 --- The Mains input switch | 12--- RS232 communication interface |
| 13 ---BRMP communication card | |



User-friendly interface featuring an LCD display, status indicator lights, and navigation buttons for real-time monitoring.

Communication Interfaces

RS232 • BRMP • Remote Port • Intelligent Control Port

Technical Specifications

Solar Charge Controller	50 A
Output Frequency	50 Hz
Phase	Single Phase

Installation & Logistics

Packaging	Export wooden case for transportation safety
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