JJENXYYDS 6200W

JJENXYYDS Hybrid Solar Inverter 6200W User Manual

Model: 6200W

1. Introduction

This manual provides essential information for the safe and efficient operation of your JJENXYYDS Hybrid Solar Inverter 6200W. Please read this manual thoroughly before installation and use, and retain it for future reference. This inverter is designed to convert DC power from solar panels and batteries into AC power for various home and office equipment.

2. Safety Information

WARNING: Electrical shock hazard. Installation and maintenance should only be performed by qualified personnel.

- Ensure all connections are secure and correctly polarized to prevent damage to the inverter and connected devices.
- Do not operate the inverter in wet conditions or near flammable materials.
- Disconnect all power sources (solar, battery, AC grid) before performing any maintenance or wiring.
- The inverter is equipped with multiple protection features, including:
  - Power Failure Alarm
  - Overcurrent Protection
  - Overload Protection
  - Overvoltage Protection
  - Short Circuit Protection
  - Reverse Connection Protection
  - Low Voltage Protection
- Adhere to all local electrical codes and regulations during installation.

3. Product Overview

The JJENXYYDS Hybrid Solar Inverter 6200W is an all-in-one solution featuring a built-in 120A MPPT solar charge

controller, solar charger, and AC charger. It is compatible with both grid and generator power sources.

3.1 Key Features

- **Pure Sine Wave Output:** Provides a stable and clean power supply, suitable for sensitive electronics.
- **Integrated MPPT Charge Controller:** Maximizes power harvest from solar panels with a 120A MPPT controller.
- **LCD and LED Display:** Dynamically displays system data and operating status, allowing for customizable settings such as battery charging current and charging priority.
- **Comprehensive Protections:** Includes power failure alarm, overload, overcurrent, lightning, low voltage, and short circuit protection.
- **Durable Design:** Constructed with reliable aluminum alloy for efficient heat dissipation.
- **Wide Application:** Suitable for RVs, camping, boats, and home emergency power systems.



Figure 1: Pure Sine Wave Output. The inverter produces a pure sine wave output, which is consistent with the AC waveform of the municipal power grid, ensuring a safe, stable, and clean power supply for connected devices.

3.2 Product Components and Indicators



Figure 2: Inverter Rear Panel and Display Details. This image illustrates the various connection points on the rear of the inverter, including AC input/output, PV input, battery terminals, and communication ports. It also details the LCD display, charging indicator, fault indicator, status indicator, and function buttons.



Figure 3: RGB Indicator Light Effect. The inverter features an RGB indicator light that changes color to reflect the current operating mode: Red for Battery Mode, Blue for Utility Mode, and Purple for PV Mode.



Figure 4: Inverter with Remote Monitoring. This image shows the inverter alongside a smartphone, indicating its capability for remote monitoring and control via a mobile application (WIFI/GPRS communication port available).

4. Setup and Installation

Proper installation is crucial for the safe and efficient operation of your hybrid solar inverter. It is recommended that installation be performed by a certified electrician or qualified personnel.

4.1 Site Selection

- Install the inverter in a cool, dry, and well-ventilated area.
- Avoid direct sunlight, high temperatures, and high humidity.
- Ensure adequate clearance around the inverter for proper airflow and heat dissipation.
- Mount the inverter vertically on a non-flammable surface.

4.2 Wiring Connections

Refer to Figure 5 for a typical hybrid power system diagram. All wiring must comply with local electrical codes.

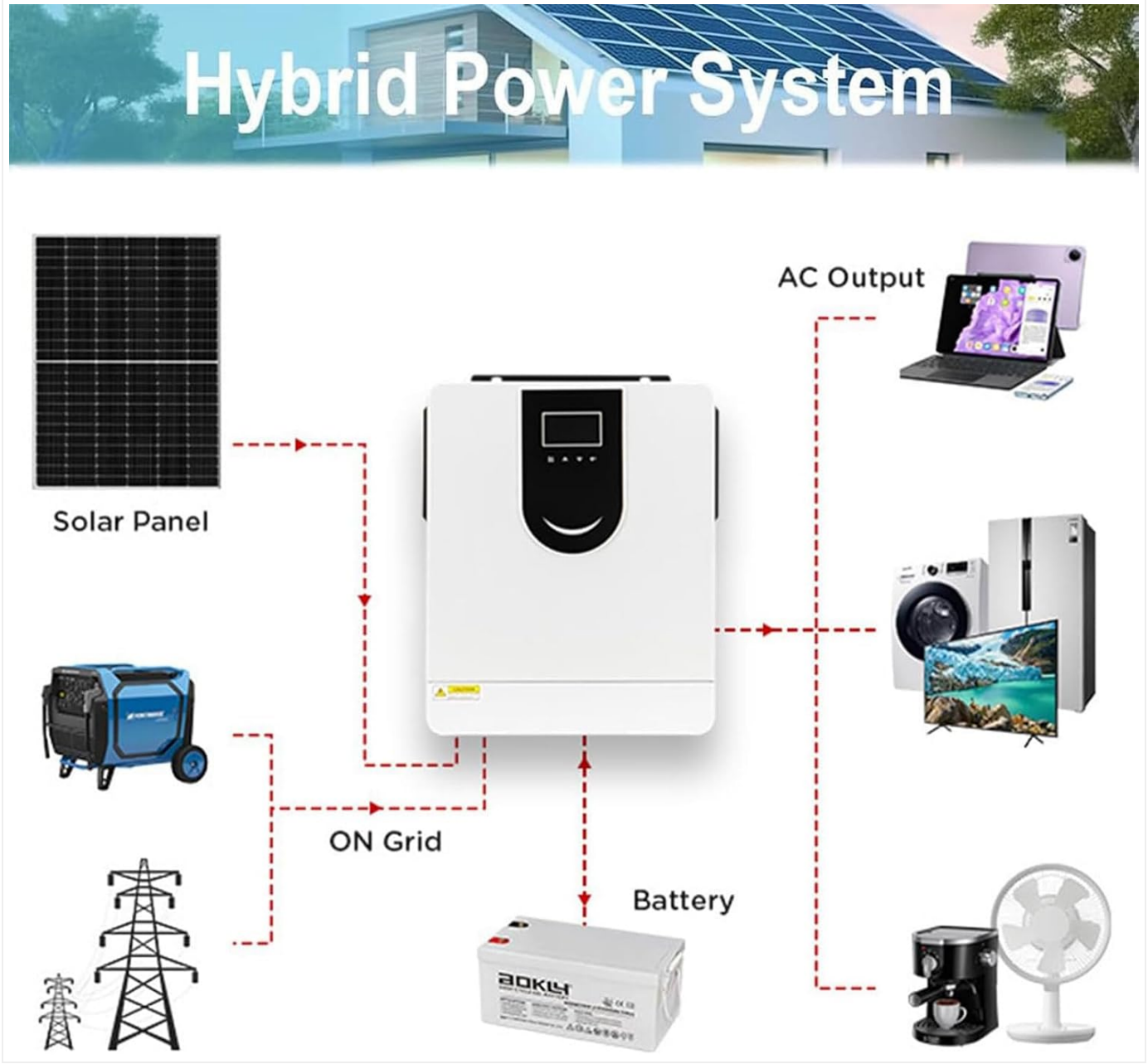


Figure 5: Hybrid Power System Diagram. This diagram illustrates how the solar panels, AC grid, battery, and AC loads connect to the hybrid solar inverter to form a complete power system.

1. **Grounding:** Connect the safety ground wire to a reliable earth ground.
2. **Battery Connection:** Connect the battery bank to the inverter's battery terminals (Battery+ and Battery-). Ensure correct polarity. The inverter supports 24V DC or 48V DC battery systems.
3. **PV Input Connection:** Connect the solar panel array to the PV input terminals. Ensure the PV voltage is within the MPPT voltage range (60VDC-450VDC) and the maximum DC voltage (500VDC) is not exceeded.
4. **AC Input Connection:** Connect the AC grid or generator power to the AC input terminals.
5. **AC Output Connection:** Connect your AC loads (e.g., ovens, rice cookers, lamps, televisions, fans) to the AC output terminals.

After all connections are made, double-check for correct wiring and secure terminals before powering on the system.

5. Operating Instructions

Once the inverter is properly installed and all connections are verified, you can begin operation.

5.1 Powering On/Off

- **To Power On:** Ensure all input sources (PV, AC grid, battery) are connected. Turn on the main AC breaker, then the battery breaker, and finally the PV array breaker. The inverter will initiate its startup sequence.
- **To Power Off:** Disconnect the AC output loads. Turn off the PV array breaker, then the AC input breaker, and finally the battery breaker. Allow the inverter to fully shut down before disconnecting any wiring.

5.2 LCD Display and Settings

The LCD display and function buttons allow you to monitor system status and configure various parameters.



Figure 6: LCD Display and Function Buttons. The LCD provides real-time data, while the buttons allow navigation through menus to adjust settings such as battery charging current, AC/solar charging priority, and charging current priority.

- Use the function buttons to navigate through the display menus.
- Common adjustable settings include:
  - Battery charging current (Maximum solar charging current: 120A, Maximum AC charging current: 100A)
  - AC/solar charging priority
  - Charging source priority
  - Output voltage and frequency (50/60Hz auto sensing)

- Refer to the detailed menu structure in the full user manual for specific parameter adjustments.

5.3 Remote Monitoring (WIFI/GPRS)

The inverter supports remote monitoring and control via RS232/WIFI/GPRS communication ports. This allows users to monitor system performance and adjust settings from a compatible mobile application (available for iOS and Android).

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your inverter.

- **Cleaning:** Keep the inverter's ventilation openings clear of dust and debris. Use a dry, soft cloth to clean the exterior. Do not use liquid cleaners.
- **Connections:** Periodically check all electrical connections for tightness and corrosion. Loose connections can cause overheating and damage.
- **Battery Inspection:** If using lead-acid batteries, check electrolyte levels and terminal condition as per battery manufacturer guidelines.
- **Environment:** Ensure the installation environment remains within specified temperature and humidity ranges.
- **Performance Monitoring:** Regularly monitor the inverter's performance via the LCD display or remote monitoring app to detect any anomalies early.

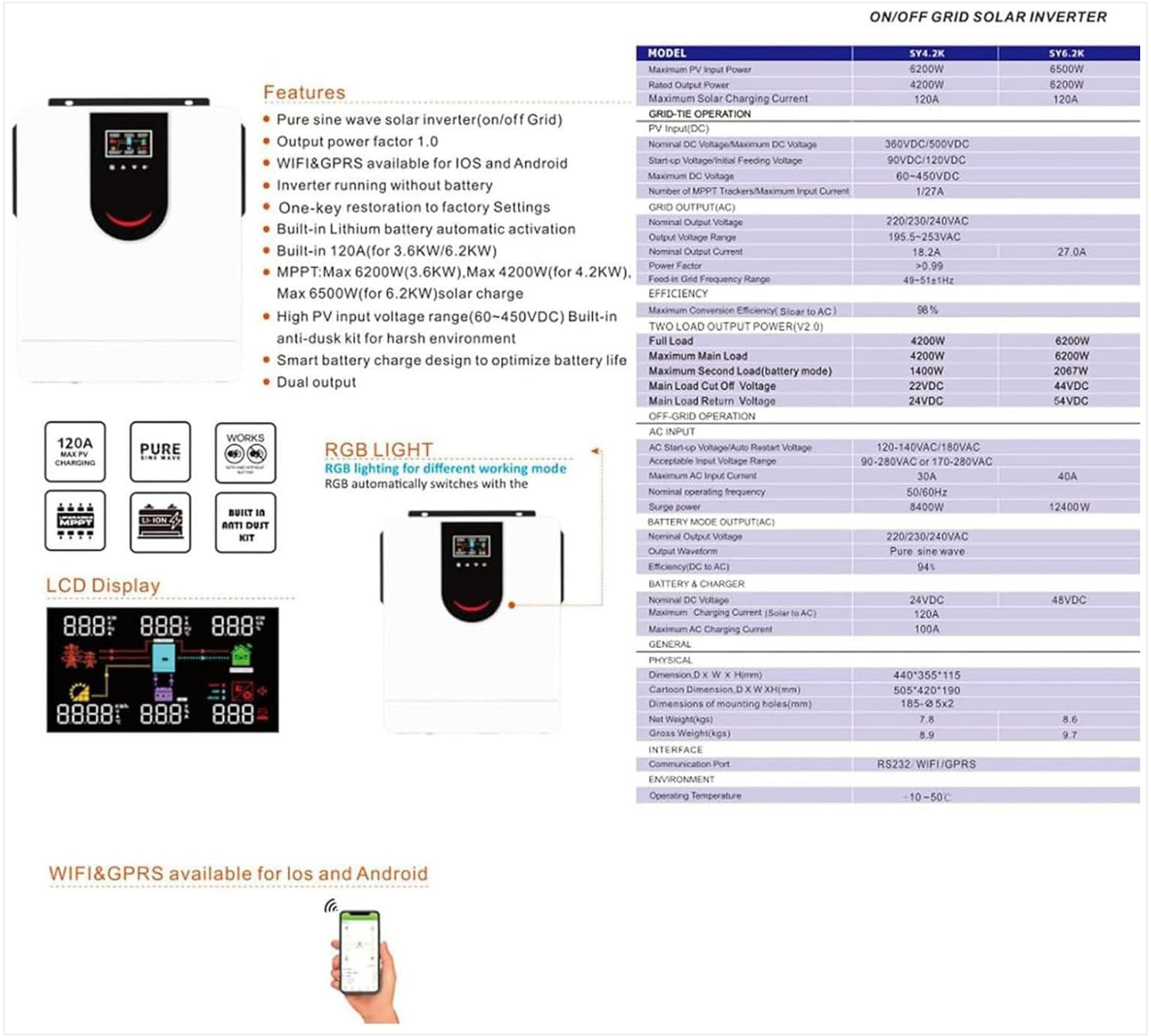
7. Troubleshooting

This section provides solutions to common issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Inverter not powering on	No battery connection, low battery voltage, AC input not present, PV input too low.	Check battery connections and voltage. Verify AC input and PV input. Ensure all breakers are on.
No AC output	Overload, short circuit, inverter fault, output breaker tripped.	Reduce load. Check for short circuits in wiring. Reset output breaker. Check LCD for fault codes.
Battery not charging	PV input too low, AC input not present, charging settings incorrect, battery fault.	Verify PV array output and AC input. Check charging current and priority settings on LCD. Inspect battery health.
Inverter making unusual noises	Loose components, fan obstruction, internal fault.	Power off and inspect for loose parts or fan obstructions. If noise persists, contact support.

8. Specifications

The following table details the technical specifications for the JJENXYYDS Hybrid Solar Inverter 6200W.



MODEL	SY4.2K	SY6.2K
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W	6200W
Maximum Solar Charging Current	120A	120A
GRID-TIE OPERATION		
PV Input(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
Maximum DC Voltage	60~450VDC	
Number of MPPT Trackers/Maximum Input Current	1/27A	
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
Feed-in Grid Frequency Range	48~51±1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(Sloar to AC)	98%	
TWO LOAD OUTPUT POWER(V2.0)		
Full Load	**4200W**	**6200W**
Maximum Main Load	**4200W**	**6200W**
Maximum Second Load(battery mode)	**1400W**	**2067W**
Main Load Cut Off Voltage	**22VDC**	**44VDC**
Main Load Return Voltage	**24VDC**	**54VDC**
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	30A	40A
Nominal operating frequency	50/60Hz	
Surge power	8400W	12400W
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Charging Current (Solar to AC)	120A	
Maximum AC Charging Current	100A	
GENERAL		
PHYSICAL		
Dimension,D X W X H(mm)	440*355*115	
Cartoon Dimension,D X W XH(mm)	505*420*190	
Dimensions of mounting holes(mm)	185-Ø5x2	
Net Weight(kgs)	7.8	8.6
Gross Weight(kgs)	8.9	9.7
INTERFACE		
Communication Port	RS232/ WIFI/GPRS	
ENVIRONMENT		
Operating Temperature	-10~50℃	

Figure 7: Inverter Dimensions. This image displays the physical dimensions of the inverter, including height (44 cm / 17.3 in), width (35.5 cm / 14 in), and depth (11.5 cm / 4.5 in).



Figure 8: Inverter Technical Specifications. This image provides a comprehensive table of the inverter's electrical and physical specifications.

Category	Parameter	Value (6200W Model)
General	Product Name	Solar Hybrid Inverter
	Rated Output Power	6200W
PV Input (DC)	Rated DC Voltage/Maximum DC Voltage	360VDC/500VDC
	Start-up Voltage/Initial Supply Voltage	90VDC/120VDC
	MPPT Voltage Range	60VDC~450VDC
	Number of MPPT Trackers	1
	Maximum Input Current	27A

Category	Parameter	Value (6200W Model)
GRID OUTPUT (AC)	Rated Output Voltage	220/230/240VAC
	Output Voltage Range	195.5-253VAC
	Rated Output Current	27.0A
TWO-POWER OUTPUT LOADS	Maximum Second Load (Battery Mode)	2067W
	Main Load Cut-off Voltage	44VDC
	Main Load Return Voltage	54VDC
AC INPUT	AC Start-up Voltage/Auto-Restart Voltage	120-140VAC/180VAC
	Acceptable Input Voltage Range	90-280VAC or 170-280VAC
	Maximum AC Input Current	40A
	Rated Operating Frequency	50/60Hz
Battery Mode Output (AC)	Output Waveform	Pure Sine Wave
	Efficiency (DC to AC)	94%
Battery & Charger	Rated DC Voltage	48V DC
	Maximum Solar Charging Current	120A
	Maximum AC Charging Current	100A
Physical	Product Size (L*W*H)	440*355*115mm
	Weight	8.6kg
	Communication Port	RS232/WIFI/GPRS
Environment	Operating Temperature	-10~50°C

9. Warranty and Support

For warranty information, technical support, or service inquiries, please contact your point of purchase or the manufacturer directly. Keep your purchase receipt as proof of purchase.
Please feel free to contact us with any questions you may have.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Email

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question