**PowMr POW-HVM6.2M-48V-N**

# PowMr 6200W Hybrid Solar Inverter User Manual

Model: POW-HVM6.2M-48V-N
Brand: PowMr

## 1. Product Overview

The PowMr 6200W Hybrid Solar Inverter is a versatile power solution designed for off-grid applications, converting 48V DC to 220-230VAC. It integrates an inverter, a 120A MPPT solar charger, and a battery charger into a single compact unit, providing reliable uninterruptible power. This inverter supports a maximum PV array power of 6500W and is compatible with various battery types, including lead-acid and lithium batteries.




*Image: Front view of the PowMr 6200W Hybrid Solar Inverter, showcasing its display and branding.*

## 2. Key Features

- **Pure Sine Wave Output:** Provides stable and clean 220-230VAC power, suitable for sensitive electronics.
- **High Power Capacity:** 6200W output with a 120A MPPT charge controller, supporting up to 6500W PV input.

- **Battery Compatibility:** Works with 48V lead-acid and lithium batteries, featuring a smart battery charger design for optimized performance.
- **One-Click Restore:** Allows restoration of default system settings to prevent damage from configuration errors.
- **RBG Light Indicator:** The PowMr logo changes color to indicate the current working mode (White: Stationary, Purple: PV, Red: Battery, Blue: Utility).
- **Comprehensive Protection:** Includes short-circuit, over/under-voltage, overload, and backfeed protection for safe operation.




*Image: Infographic highlighting key specifications such as 6.2KW AC Output Power, 120A Max AC Charging Current, 500Vdc Max PV Array Open Circuit Voltage, 150V Starting Voltage, and 50W No-load Power Consumption.*




*Image: Illustration showing the inverter's compatibility with multiple battery types, including AGM, GEL, FLD, LI, SLD, and USER-defined settings.*

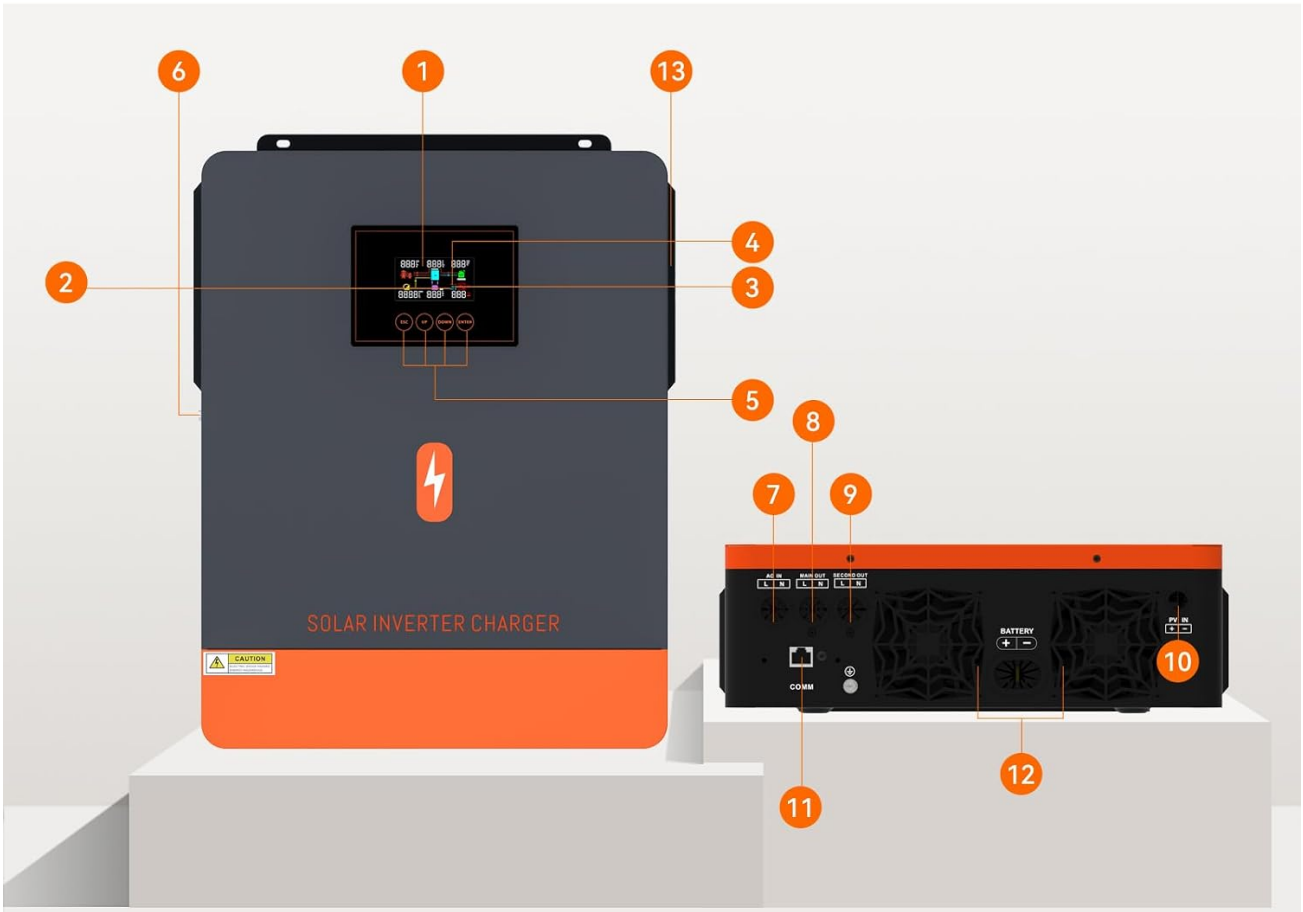



*Image: Depiction of the inverter's ability to power various household and office appliances, with a focus on its 6200W Max AC Power output.*

## 3. Setup and Installation

Proper installation is crucial for the safe and efficient operation of your PowMr Hybrid Solar Inverter. Please follow these steps carefully. It is recommended that installation be performed by a qualified professional.

### 3.1. Component Identification




| | | | | | |
|---|---|---|---|---|---|
| 1 | LCD display | 6 | Power ON/OFF switch | 11 | RS232/WIFI/Remote LCD Communication Port) |
| 2 | Status indicator | 7 | AC input | | |
| 3 | Charging indicator | 8 | Main output | 12 | Battery input |
| 4 | Fault indicator | 9 | Second output | 13 | Anti dust cover |
| 5 | Touch Function buttons | 10 | PV 1 and PV 2 input | | |

*Image: Detailed diagram of the inverter's components, including the LCD display, status indicators, touch function buttons, power ON/OFF switch, AC input, main output, second output, PV 1 and PV 2 input, RS232/WIFI/Remote LCD Communication Port, Battery input, and Anti-dust cover.*

## 3.2. Installation Steps

Refer to the installation video for a visual guide to the wiring process.

*Video: A quick installation and wiring guide for the PowMr 6200W-48V to 220VAC Hybrid Solar Inverter.*

1. **Mount on the Wall:** Securely mount the inverter to a suitable wall surface.
2. **Remove the Port Cover:** Unscrew and remove the bottom port cover to access the wiring terminals.
3. **Install and Connect the Battery Pack:** Connect the 48V battery pack to the designated battery input terminals. Ensure correct polarity.
4. **Connect to the Photovoltaic Array:** Connect your solar panel array to the PV input terminals. Observe voltage and current limits.
5. **Connect to the AC Input Power Source:** Connect the AC utility grid or generator to the AC input terminals.

6. **Connect to the First AC Output:** Wire your primary AC loads to the main AC output terminals.
7. **Connect to the Second AC Output (Optional):** If applicable, connect secondary AC loads to the second AC output terminals.
8. **Ground the Inverter:** Ensure the inverter is properly grounded to prevent electrical hazards.
9. **Cover the Port:** Replace and secure the bottom port cover.
10. **Power on the Inverter:** Activate the external circuit breaker for the battery and then the inverter's power switch.

## 4. Operating Instructions

The inverter features an intuitive LCD display and touch function buttons for monitoring and configuration.

### 4.1. Working Modes Indication

The PowMr logo on the inverter changes color to indicate its current operational mode:

- **White Light:** Stationary Mode
- **Purple Light:** PV Mode (Solar power is actively being used)
- **Red Light:** Battery Mode (Power is being drawn from the battery)
- **Blue Light:** Utility Mode (Power is being drawn from the AC utility grid)




*Image: Visual representation of the inverter's RGB light patterns corresponding to different working modes: Stationary, PV, Utility, and Battery.*

## 4.2. Charging Modes and Output Priority

The inverter offers flexible charging and output priority settings to optimize energy usage:

- **4 Charging Modes:** Utility priority, Solar priority, Hybrid (Utility/Solar), and Battery+Solar.
- **3 Output Source Priorities:** Utility Source, Solar Power, and Solar+Battery.

## 4.3. Remote Monitoring

Monitor and control your inverter remotely via the 'SMARTESS' mobile application. Download the app from the App Store or Google Play. Note that a WiFi module and GPRS data may need to be purchased separately for this functionality.

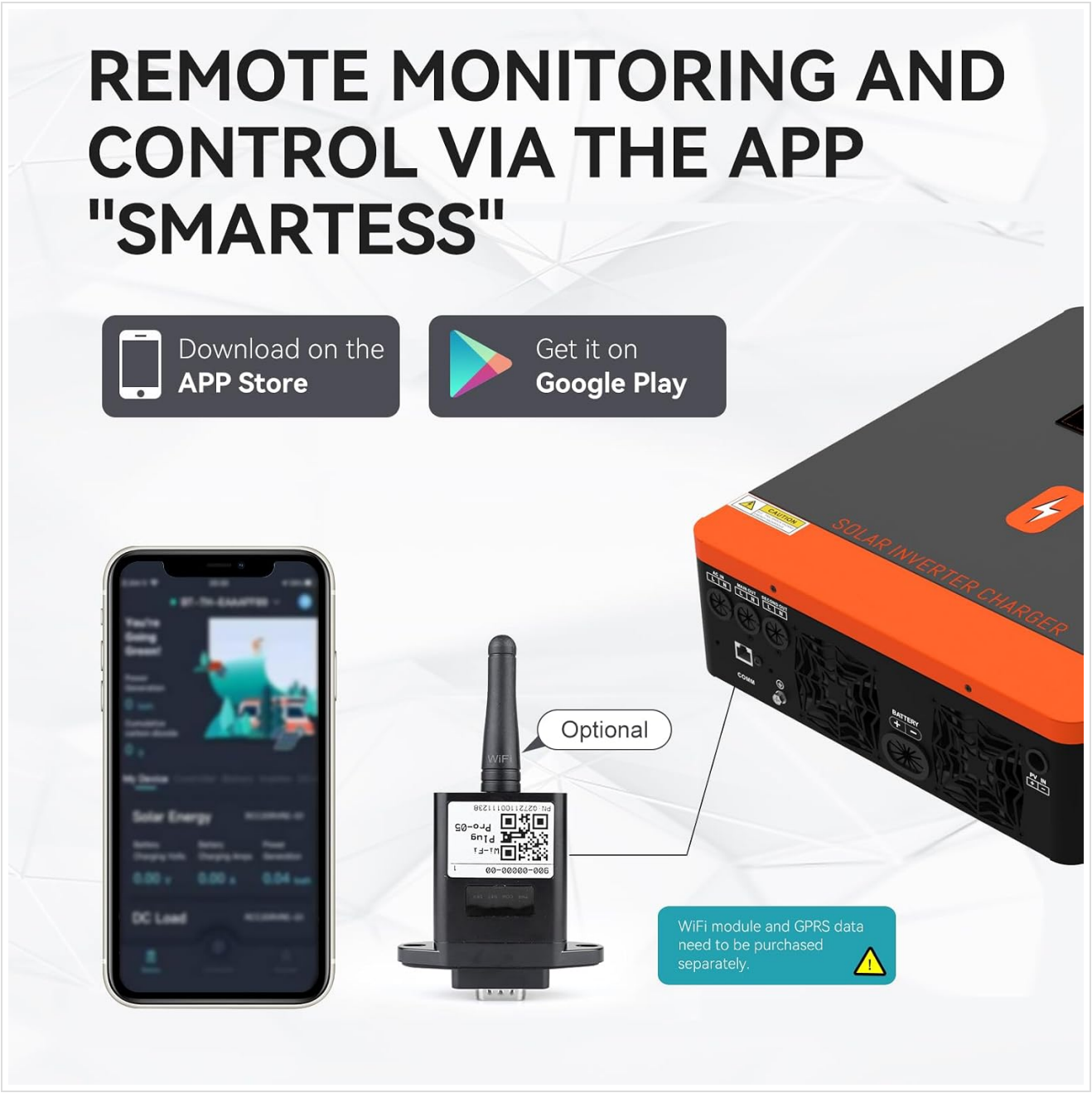



*Image: Diagram illustrating the remote monitoring and control capabilities of the inverter through the 'SMARTESS' app, showing the optional WiFi module connection.*
Download SMARTESS App

## 5. Maintenance

Regular maintenance ensures the longevity and optimal performance of your PowMr Hybrid Solar Inverter.

- **Periodic Inspection:** Regularly check all connections for tightness and signs of corrosion.
- **Clean Ventilation Openings:** Ensure the inverter's ventilation openings are free from dust and debris to prevent overheating.
- **Battery Health Check:** Monitor battery voltage and health according to battery manufacturer guidelines.
- **Environmental Conditions:** Ensure the inverter is operating within its specified temperature and humidity ranges.
- **Software Updates:** Check the manufacturer's website for any available firmware updates.

## 6. Troubleshooting

This section provides guidance on common issues you might encounter with your inverter. For complex problems, contact customer support.

### 6.1. Common Issues and Solutions

| Problem | Possible Cause | Solution |
|---|---|---|
| Inverter not powering on | No DC input from battery/PV; Power switch off; Loose connections | Check battery and PV connections; Ensure power switch is ON; Verify circuit breakers. |
| No AC output | Overload; Short circuit; Inverter fault; AC output breaker tripped | Reduce load; Check for short circuits; Restart inverter; Reset AC output breaker. |
| Low battery voltage alarm | Insufficient charging; Excessive load; Battery degradation | Check PV input and charging settings; Reduce load; Inspect battery health. |
| Over-temperature alarm | Poor ventilation; High ambient temperature; Overload | Ensure adequate airflow; Relocate inverter if necessary; Reduce load. |

### 6.2. Fault Indicators

If the fault indicator light is on, consult the inverter's display for specific error codes and refer to the detailed troubleshooting section in the complete manual (if available) or contact customer support.

## 7. Specifications

Detailed technical specifications for the PowMr 6200W Hybrid Solar Inverter (Model POW-HVM6.2M-48V-N).




*Image: Product label displaying detailed electrical specifications and model information.*

View Product Label Details

| Specification | Value |
|---|---|
| Product Dimensions | 17.4 x 4.57 x 14.09 inches |
| Item Weight | 19.58 pounds |
| ASIN | B0F38GH5FH |
| Item model number | POW-HVM6.2M-48V-N |
| Date First Available | May 1, 2025 |
| Manufacturer | PowMr |
| Brand | PowMr |
| Recommended Uses For Product | Ideal for homes, cabins, RVs, boats, and off-grid backup |
| Power Source | Solar Powered |
| Wattage | 6200 watts |
| Model Name | POW-HVM6.2M-48V-N |

## 8. Warranty and Support

PowMr stands behind the quality of its products. For specific warranty information, please refer to the warranty card included with your product or visit the official PowMr website.

### 8.1. Protection Plans

Extended protection plans are available for purchase to provide additional coverage for your inverter:

- 2-Year Protection Plan
- 3-Year Protection Plan
- Complete Protect: One plan covers all eligible past and future purchases (monthly billing option available).

### 8.2. Customer Support

For technical assistance, troubleshooting, or warranty claims, please contact PowMr customer support through their official channels. Have your model number (POW-HVM6.2M-48V-N) and purchase details ready for faster service.

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**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**

Anonymous

**Email**

you@example.com

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**