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Model: RD6030W + S800 Case + RD-1500-68 PSU

1. PRODUCT OVERVIEW

The RD RD6030W is a high-performance, stabilized lab power supply designed for adjustable voltage and current output. It supports up to 60V, 30A, and 1140W, making it suitable for various applications including battery charging. This package includes the RD6030W module, an S800 metal case, and an RD-1500-68 PSU, provided unassembled for user customization.



Image: Overview of the RD6030W power supply components and key specifications.

The device features a user-friendly interface with keypad control and customizable display styles. It supports

PC software connectivity via a USB micro cable and RUIDENG tech APP for enhanced control and monitoring.

Excellent Performance · Wildly Applied

Ruideng series power supplies are wildly used because of the high precision and excellent performance, they can be used independently or be embedded in the device.



Image: Ruideng series power supplies are widely used in various professional and industrial settings due to their high precision and excellent performance.

2. SETUP AND ASSEMBLY

2.1 Unpacking and Initial Inspection

Upon receiving your RD6030W kit, carefully unpack all components. The package includes the RD6030W module, S800 metal case, and RD-1500-68 PSU. Please check for any visible damage during transit.

2.2 Power Supply Unit (PSU) Configuration

The RD-1500-68 PSU is set to 110V AC input by default. If you are operating in a region with 220V AC power, you must adjust the input gear on the PSU accordingly. Failure to do so may damage the unit. You will also need to prepare an AC power cable to connect the PSU to a wall outlet.

2.3 Module Assembly

The RD6030W module, S800 case, and RD-1500-68 PSU are not pre-assembled. Refer to the detailed assembly instructions or video provided by the manufacturer to correctly assemble the components into a complete unit. A CR1220 battery is required for the time display function and needs to be prepared by the user.

2.4 Backup Fuse

A backup fuse is included in the box. Do not discard it. It is intended for replacement only if the original fuse is damaged.

3. OPERATING INSTRUCTIONS

3.1 Basic Operation and Interface

The RD6030W features a user-friendly interface with keypad control and an encoder potentiometer for precise adjustments. The 2.4-inch big screen displays real-time voltage, current, and power output.



Image: The RD6030W offers multiple display styles including Classic, Detailed, and Curve for user preference.

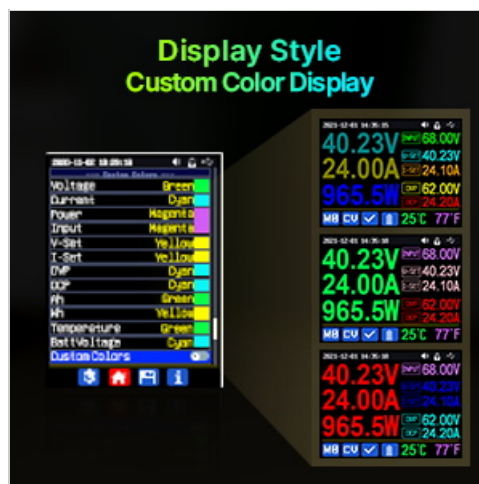


Image: Users can customize the color of different display elements for improved readability.

3.2 Output Control and Battery Charging

The device supports a maximum output of 60V, 30A, and 1140W. For battery charging, ensure you use the dedicated green battery charging terminal as the positive output. The power supply is suitable for charging multiple types of batteries.



Image: The RD6030W features green charging terminals specifically designed for safe and efficient battery charging.

3.3 Data Storage and Recall

The RD6030W allows for convenient data storage and recall of frequently used settings. This feature helps streamline repetitive tasks and ensures consistent output parameters.



Image: The data storage and call out functions enable users to save and quickly retrieve up to 8 sets of output parameters.

3.4 PC Software and APP Control

The RD6030W supports PC software via a USB micro cable connection and a dedicated RUIDENG tech APP (Android 8.0 and above). This allows for remote control, monitoring, and advanced functionality. Ensure your phone system is compatible with the APP before purchase.



Image: The power supply supports firmware updates via PC software, ensuring access to the latest features and

improvements.

3.5 Firmware Update

The device supports firmware upgrades for continuous improvement and new features. Follow the instructions provided with the PC software for a convenient update process.

3.6 Protection Features

The RD6030W includes multiple protection mechanisms to ensure safe and reliable operation, including Over Voltage Protection (OVP), Over Current Protection (OCP), and Over Temperature Protection (OTP). Abnormal status indications are displayed on the screen.



Image: The display provides clear indications for normal operation and alerts for abnormal conditions such as overcurrent, overvoltage, and overtemperature.

3.7 Product Video Overview

Watch this video for a quick overview of the RD6030W's features and capabilities.

Video: A fast view of the RD6030/RD6030W power supply, highlighting its key functionalities and design.

4. MAINTENANCE

To ensure optimal performance and longevity of your RD6030W power supply, regular maintenance is recommended. Keep the device clean and free from dust. Ensure proper ventilation around the unit to prevent overheating. Periodically check all connections for security.

5. TROUBLESHOOTING

5.1 Common Issues and Solutions

- **No Power:** Check the AC power cable connection and ensure the PSU's input gear is correctly set (110V or 220V). Verify the power switch is on.
- **No Output:** Ensure the output is enabled on the device. Check for any active protection (OVP, OCP, OTP) indicated on the display.

- **Inaccurate Readings:** Verify all connections are secure. If using PC software or APP, ensure proper communication setup.
- **APP/PC Software Connectivity Issues:** For PC software, ensure it supports Windows 7 or above. For the APP, ensure your Android version is 8.0 or above. Download the latest drivers and software from the official RUIDENG website.
- **Buzzing Noise:** If the PSU makes a loud pulsing buzzing noise, especially under load, it may indicate a fault. Disconnect power immediately and contact support.

6. SPECIFICATIONS

Specification	Value
Model Number	RD6030W+S800+RD-1500-68PSU
Input Voltage Range (PSU)	100-120V AC (default 110V)
Output Voltage Range (RD6030W)	0-60.00V
Output Current Range (RD6030W)	0-30.00A
Output Power Range (RD6030W)	0-1140W
Output Voltage Accuracy	±(0.3%+3 digits)
Output Current Accuracy	±(0.5%+5 digits)
Output Ripple Typical	50mV@15A, 90mV@30A VPP
Working Temperature Range	-10°C~40°C
Constant Voltage Mode Response Time	2ms (0.1A-5A load)
Capacity and Energy Statistical Error	±2%
Item Weight	8.05 pounds
Package Dimensions	14.17 x 9.45 x 7.87 inches
Cooling Method	Air

7. WARRANTY AND SUPPORT

For any issues or questions regarding your RD6030W power supply, please contact the RuiDeng Official Store directly. Refer to your purchase documentation for specific warranty terms and conditions.

