

## Power Watchdog PWD30EPOW

# Hughes Power Watchdog PWD30EPOW Smart RV Portable Surge Protector

Model: PWD30EPOW | Brand: Power Watchdog

## 1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Hughes Power Watchdog PWD30EPOW Smart RV Portable Surge Protector. This device is designed to safeguard your RV's electrical system from voltage fluctuations and power surges, ensuring the longevity of your appliances and electronics. Please read this manual thoroughly before installation and operation.

## 2. SAFETY INFORMATION

**WARNING: Electrical shock hazard. Always ensure power is off before connecting or disconnecting the surge protector.**

- Do not immerse the unit in water. The unit is IP65 water-resistant, but not submersible.
- Ensure all connections are secure and dry before applying power.
- Do not use if the unit or its cables are damaged.
- Keep out of reach of children.
- Always plug the Power Watchdog into the power pedestal first, and verify correct power conditions before connecting your RV.

## 3. PRODUCT OVERVIEW

The Power Watchdog PWD30EPOW is a smart RV portable surge protector offering advanced electrical protection and monitoring capabilities. It features 2,300 Joules of surge protection and built-in circuit analysis to detect unsafe power conditions. With patented Wi-Fi and Bluetooth connectivity, you can monitor your RV's power usage in real-time via a mobile application.

### Key Features:

- 2,300 Joules of Surge Protection
- Automatic Power Shut-off for Low/High Voltage (below 104V or above 132V)
- Patented Wi-Fi and Bluetooth Connectivity for Remote Monitoring
- Real-time Voltage, Amperage, and Wattage Display via Mobile App
- Replaceable Surge Module (no need to replace entire unit after a surge)
- IP65 Water-Resistant Casing for Outdoor Use
- LED Diagnostic Lights for Immediate Status Indication
- Wireless Fault Alerts
- Compatibility with Dogbone Adapters

### **Components:**

- Power Watchdog PWD30EPOW Unit
- Attached 30 Amp Power Cable
- Locking Ring (for securing to pedestal)





Figure 3.1: The Hughes Power Watchdog PWD30EPOW Smart RV Portable Surge Protector.





Figure 3.2: The Power Watchdog unit with its protective cover open, revealing the internal components and connection points.

## 4. SETUP

### 4.1 Initial Connection

1. Ensure the power breaker at the RV pedestal is in the **OFF** position.
2. Plug the Power Watchdog PWD30EPOW directly into the 30 Amp outlet on the RV power pedestal.
3. Turn the power breaker at the RV pedestal to the **ON** position.
4. Observe the LED diagnostic lights on the Power Watchdog unit. Refer to Section 6 (Troubleshooting) for interpretation of the lights. All green lights indicate a safe connection.
5. Once safe power is confirmed, connect your RV's power cord to the Power Watchdog unit.
6. For added security, use the provided locking ring to secure the unit to the power pedestal.



Figure 4.1: Close-up view of the LED diagnostic lights on the Power Watchdog unit, indicating power status and potential faults.

## 4.2 Mobile App Connectivity (Wi-Fi & Bluetooth)

1. Download the official Power Watchdog mobile application from your device's app store.
2. Ensure Bluetooth is enabled on your mobile device.
3. Open the app and follow the on-screen instructions to pair with your PWD30EPOW unit via Bluetooth.
4. For Wi-Fi connectivity, configure the unit through the app to connect to a local Wi-Fi network (e.g., campground Wi-Fi or mobile hotspot). This enables remote monitoring.

## 5. OPERATING INSTRUCTIONS

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### 5.1 Monitoring Power Conditions

- Once connected, the Power Watchdog continuously monitors incoming power.
- Use the mobile app to view real-time voltage, amperage, and wattage readings. This allows you to track your RV's power consumption and ensure stable power delivery.
- The unit will automatically shut off power to your RV if voltage drops below 104V or rises above 132V. Power will be restored after 90 seconds of stable conditions.

### 5.2 Fault Alerts and Customization

- The mobile app will send wireless fault alerts to your device if unsafe power conditions are detected.
- Within the app, you may be able to customize certain voltage thresholds or alert preferences, depending on the app version and unit firmware.

## 6. MAINTENANCE

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### 6.1 Replaceable Surge Module

The Power Watchdog PWD30EPOW features a replaceable surge module. In the event of a significant power surge that sacrifices the module to protect your RV, the module can be easily replaced without needing to purchase a new unit. This is indicated by the surge protection LED turning off.

1. Ensure all power to the unit is disconnected.
2. Open the protective cover of the unit.
3. Carefully remove the old surge module.

4. Insert the new surge module, ensuring it is properly seated.
5. Close the protective cover and re-connect power.

## 6.2 Cleaning and Storage

- Clean the unit with a damp cloth. Do not use harsh chemicals or abrasive cleaners.
- Ensure the unit is dry before storage.
- Store in a cool, dry place when not in use.

## 7. TROUBLESHOOTING

### 7.1 LED Diagnostic Lights

The Power Watchdog unit features a series of LED lights that indicate the status of the incoming power. Refer to the guide on the unit itself or the table below for interpretation:



Figure 7.1: Diagram showing the LED diagnostic lights and their corresponding power conditions.

LED Indication	Condition	Action
All Green Lights	Power On / Safe Connection	Proceed with connecting RV.
Open Circle (White)	Open Neutral	Do NOT connect RV. Contact campground management.
Open Circle (White)	Open Ground	Do NOT connect RV. Contact campground management.
Yellow Light (L1)	Missing L1 120V	Do NOT connect RV. Contact campground management.
Yellow Light (L2)	Missing L2 120V	Do NOT connect RV. Contact campground management.
Red Light (L1 & Neutral)	L1 & Neutral Reversed	Do NOT connect RV. Contact campground management.
Red Light (L2 & Neutral)	L2 & Neutral Reversed	Do NOT connect RV. Contact campground management.

LED Indication	Condition	Action
No Lights	No Power	Check power pedestal breaker.

## 7.2 Common Issues

- Unit not powering on:** Ensure the power pedestal breaker is on and the unit is fully plugged in.
- App not connecting:** Verify Bluetooth is on, the unit is powered, and you are within range. For Wi-Fi, check network credentials and signal strength.
- Frequent power interruptions:** This indicates unstable power at the source. The Power Watchdog is functioning as designed to protect your RV. Consider moving to a different site or using a voltage booster if low voltage is persistent.

## 8. SPECIFICATIONS

Attribute	Detail
Model Number	PWD30EPOW
AC Adapter Current	30 Amps
Voltage	120.0V
Total Power Outlets	1
Item Weight	5.63 pounds
Package Dimensions	21.77 x 8.86 x 5.28 inches
Special Feature	Surge Protection, Bluetooth, Wi-Fi, EPO
Water Resistance Rating	IP65

## 9. WARRANTY AND SUPPORT

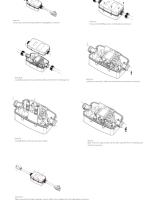
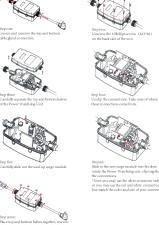
### 9.1 Limited Lifetime Warranty

The Hughes Power Watchdog PWD30EPOW is backed by a limited lifetime warranty. This warranty covers defects in materials and workmanship under normal use. For specific terms and conditions, please refer to the warranty information provided with your product packaging or contact Power Watchdog customer support.

### 9.2 Customer Support

For technical assistance, troubleshooting, or warranty claims, please contact Power Watchdog customer support through their official website or the contact information provided in your product documentation. Always have your model number and purchase date ready when contacting support.

## Related Documents - PWD30EPOW

	<p><a href="#"><u>Hughes Autoformers Power Watchdog PWD30-EPO/PWD50-EPO Installation and Operation Guide</u></a></p> <p>Comprehensive guide for Hughes Autoformers Power Watchdog surge protectors (PWD30-EPO, PWD50-EPO), covering installation, operation, technical specifications, error code explanations, and mobile app usage for RV power protection.</p>
	<p><a href="#"><u>Hughes Power Watchdog Surge Module Replacement Guide</u></a></p> <p>Detailed, step-by-step instructions for replacing the surge module in your Hughes Power Watchdog portable surge protector. Learn how to safely open the unit, disconnect wiring, swap modules, and reassemble for optimal performance.</p>
	<p><a href="#"><u>Hughes Autoformers Power Watchdog Installation and Operating Instructions</u></a></p> <p>Comprehensive guide for installing and operating the Hughes Autoformers Power Watchdog surge protector, including features, technical specifications, and troubleshooting.</p>
	<p><a href="#"><u>Hughes Autoformers Power Watchdog PWD30EPOHW/PWD50EPOHW Installation and Operating Manual</u></a></p> <p>Comprehensive guide for Hughes Autoformers Power Watchdog PWD30EPOHW and PWD50EPOHW RV surge protectors, covering installation, operation, technical specifications, and troubleshooting for RV power protection.</p>
	<p><a href="#"><u>Hughes Power Watchdog: Advanced RV Surge Protector User Guide</u></a></p> <p>Learn how to use the Hughes Power Watchdog, an advanced RV surge protector, to analyze and protect your RV from power issues. This guide covers setup, app usage, error codes, and troubleshooting.</p>
	<p><a href="#"><u>Hughes Autoformer Power Watchdog Surge Module Replacement Guide</u></a></p> <p>Step-by-step instructions for replacing the surge protection module in a Hughes Autoformer Power Watchdog EPO unit.</p>