

## Eaton 5PX3000RTG2

# Eaton 5PX G2 3000VA 3000W 120V Line-Interactive UPS Instruction Manual

Model: 5PX3000RTG2

## 1. INTRODUCTION

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This manual provides essential instructions for the safe and efficient operation of your Eaton 5PX G2 3000VA 3000W 120V Line-Interactive Uninterruptible Power Supply (UPS). The Eaton 5PX G2 UPS is designed to provide reliable battery backup and AC power protection for critical IT equipment, safeguarding against power disturbances such as blackouts, brownouts, surges, and line noise. Please read this manual thoroughly before installation and operation.

## 2. IMPORTANT SAFETY INSTRUCTIONS

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**WARNING:** Failure to follow these safety instructions can result in fire, electric shock, or serious injury.

- This UPS contains hazardous voltages. Do not attempt to disassemble the unit. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.
- Do not connect non-computer-related equipment, such as medical devices, life support equipment, or household appliances, to the UPS.
- Ensure the UPS is connected to a properly grounded AC power outlet.
- Do not block ventilation openings. Install the UPS in an area with adequate airflow.
- Avoid installing the UPS in direct sunlight, near heat sources, or in areas with excessive dust, humidity, or corrosive substances.
- Before performing any maintenance or service, disconnect the UPS from the AC power source and ensure the internal battery is disconnected.

## 3. PACKAGE CONTENTS

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Verify that all items are present in the packaging. If any items are missing or damaged, contact your supplier.

- Eaton 5PX G2 UPS Unit
- Rack mounting hardware (rails, screws)

- Tower pedestals (for tower configuration)
- Input power cord
- Output power cords
- USB cable
- Serial cable
- Quick Start Guide and Safety Instructions

## 4. SETUP AND INSTALLATION

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### 4.1 Physical Installation

The Eaton 5PX G2 UPS can be installed in either a rack-mount or tower configuration.

#### Rack-Mount Installation:

1. Attach the provided rack mounting rails to the rack posts according to the instructions included with the rail kit.
2. Carefully slide the UPS unit onto the installed rails until it is fully seated and secured.
3. Secure the front of the UPS to the rack posts using the provided screws.

#### Tower Installation:

1. Attach the two tower pedestals to the bottom of the UPS unit. Ensure they are securely fastened to provide stability.
2. Place the UPS on a stable, level surface in an area with adequate ventilation.

### 4.2 Connecting Power and Equipment

1. **Input Power:** Connect the UPS input power cord to a dedicated, grounded 120V AC outlet. Ensure the outlet is rated for the UPS's capacity (30A for L5-30R).
2. **Output Equipment:** Connect your critical equipment (servers, networking devices, etc.) to the NEMA 5-20R and L5-30R output receptacles on the rear of the UPS.
  - The UPS features six NEMA 5-20R outlets and one L5-30R outlet.
  - Four of the 5-20R outlets are grouped into two load banks, allowing for load shedding.
3. **Communication Ports:** Connect the USB or serial cable from the UPS to your computer or server for monitoring and graceful shutdown capabilities.
4. **Optional Network Card:** If using the optional NETWORK-M2 card, install it into the expansion slot and connect an Ethernet cable for remote management.
5. **Optional External Battery Modules (EBMs):** If extending runtime, connect up to four 5PXEBM72RTG2 EBMs (sold separately) to the UPS according to their respective manuals.

### 4.3 Initial Power-Up

1. After all connections are made, press the power button on the front panel of the UPS.
2. The UPS will perform a self-test, and the display will illuminate.
3. Allow the UPS to charge its internal batteries for at least 24 hours before relying on it for extended backup runtime.

## 5. OPERATING THE UPS

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### 5.1 Front Panel Display and Controls



**Figure 1:** Front panel of the Eaton 5PX G2 Uninterruptible Power Supply. The left side features a perforated metal grille with the Eaton logo for ventilation. The right side houses a digital display showing operational status, including battery charge level, current load percentage, and estimated battery runtime. Below the display are control buttons for navigation and power management.

The front panel LCD provides real-time information about the UPS status, load, battery, and events. Use the navigation buttons (ESC, Up, Down, Enter, Power) to browse menus and configure settings.

- **Power Button:** Turns the UPS ON/OFF.
- **ESC Button:** Exits the current menu or cancels an action.
- **Up/Down Arrows:** Navigate through menu options.
- **Enter Button:** Selects a menu option or confirms a setting.

## 5.2 Understanding Indicators

The LCD will display various icons and messages to indicate the UPS's operational status. Common indicators include:

- **Utility Power:** Indicates the UPS is operating on incoming AC power.
- **Battery Mode:** Indicates the UPS is supplying power from its batteries.
- **Battery Charge Level:** Shows the remaining battery capacity.
- **Load Level:** Displays the percentage of the UPS's capacity being used by connected equipment.
- **Alarms/Warnings:** Specific icons or text messages will appear for events like overload, battery fault, or high temperature.

## 5.3 Load Shedding

The Eaton 5PX G2 allows you to manage power to connected devices through load shedding. This feature enables you to prioritize critical equipment by automatically shutting down non-essential loads during a power outage to extend runtime for essential devices. Refer to the UPS's internal menu or the full user manual for detailed configuration of load segments.

# 6. MAINTENANCE

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## 6.1 Battery Replacement

The Eaton 5PX G2 UPS features field-replaceable, hot-swappable internal battery modules. This allows for battery replacement without powering down connected equipment.

- The UPS's Advanced Battery Management (ABM) technology monitors battery health and provides advanced notice when batteries are nearing the end of their service life.
- When a battery replacement notification appears, order genuine Eaton replacement battery modules.
- Follow the specific instructions provided with the replacement battery kit for safe and proper installation.
- Always dispose of old batteries properly according to local regulations.

## 6.2 Cleaning

Periodically clean the exterior of the UPS with a soft, dry cloth. Do not use liquid or aerosol cleaners. Ensure ventilation

openings remain clear of dust and debris.

## 7. TROUBLESHOOTING

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This section provides solutions to common issues you may encounter. For more complex problems, refer to the full user manual or contact Eaton technical support.

Problem	Possible Cause	Solution
UPS does not turn on.	No input power; Battery deeply discharged.	Verify input power cord is securely connected to a live outlet. Allow UPS to charge for several hours.
UPS beeps continuously.	Overload condition; On battery power with low battery.	Reduce connected load. Allow UPS to recharge or shut down equipment gracefully.
Connected equipment loses power.	UPS battery depleted; UPS fault.	Check UPS display for fault codes. Ensure total load does not exceed UPS capacity.
Battery runtime is shorter than expected.	Batteries are aging; Excessive load.	Consider replacing batteries. Reduce connected load.

## 8. SPECIFICATIONS

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Feature	Detail
Model Number	5PX3000RTG2
Capacity (VA/W)	3000VA / 3000W
Input Voltage	120 Volts
Output Receptacles	6 x NEMA 5-20R, 1 x L5-30R
Battery Type	Lead Acid
Form Factor	2U Rack/Tower
Product Dimensions (D x W x H)	23.7" x 17.2" x 3.4" (60.2 cm x 43.7 cm x 8.6 cm)
Item Weight	74.5 pounds (33.8 kg)
Cybersecurity Standard	UL 2900-1 and IEC 62443-4-2 (with optional NETWORK-M2 card)
ENERGY STAR Certified	Yes (ENERGY STAR 2.0)

## 9. WARRANTY AND SUPPORT

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### 9.1 Warranty Information

Eaton products are backed by a manufacturer's warranty. For specific warranty terms and conditions applicable to your Eaton 5PX G2 UPS, please refer to the warranty card included with your product or visit the official Eaton website. Keep your proof of purchase for warranty claims.

### 9.2 Technical Support

If you encounter issues that cannot be resolved using the troubleshooting guide, or require further assistance, please contact Eaton technical support.

- Before contacting support, have your UPS model number (5PX3000RTG2) and serial number ready.
- Visit the official Eaton website for contact information, FAQs, and additional resources.