

Raritan PXC

Thank you for purchasing the PXC intelligent power distribution unit (PDU).

The intended use of PXC is distribution of power to information technology equipment such as computers and communication equipment where such equipment is typically mounted in an equipment rack located in an information technology equipment room.

This Quick Setup Guide explains how to install and configure the PXC. For further details on using PXC, access online help from the application, or download the "1000/2000 Series" user guide from the PX3 section of Raritan website's **Support page** (<http://www.raritan.com/support/>). For more detailed information on this release, see the latest release notes on the Support page.

Note: All of PXC data is available on the **PX3** support page. Simply visit Support page > Choose a Product > select "PX3."

Safety Precautions

WARNING! Read and understand all sections in this guide before installing or operating this product. Failure to heed any of the following WARNINGS may result in electric shock, fire, personal injury and death. Prior to operating this product, the user should read the online help and specifically the warnings in the online help.

WARNING! Connect this product to an AC power source whose voltage is within the range specified on the product's nameplate.

WARNING! Connect this product to an AC power source that is current limited by a suitably rated fuse or circuit breaker in accordance with national and local electrical codes.

WARNING! Use this product in a dry location.

WARNING! Connect this product to a protective earth ground. Never use a "ground lift adaptor" between the product's plug and the wall receptacle.

WARNING! If this product is a model that requires assembly of its line cord or plug, all such assembly must be performed by a licensed electrician and the line cord or plugs used must be suitably rated based on the product's nameplate ratings and national and local electrical codes.

Unpacking the PXC

PXC comes in Zero U, 1U, and 2U sizes. The following describes the equipment shipped with each size.

If any pieces are missing or damaged, report this to Raritan Technical Support, or contact the Raritan partner where you purchased the product.

- One PXC
 - Buttons (Zero U), or bracket pack and screws (1U/2U)
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Before You Begin

1. Prepare the installation site. Make sure the installation area is clean and not exposed to extreme temperatures or humidity. Allow sufficient space around the device for cabling and outlet connections. Safety instructions are provided in the PXC online help.
 2. Fill out the Equipment Setup Worksheet found in the PXC online help. Record the model, serial number, and use of each IT device connected to the PDU's power outlets.
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Mounting the PDU

Use one of the mounting methods to install your PXC as appropriate.

Circuit Breaker Orientation Limitation

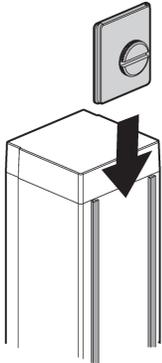
Usually a PDU can be mounted in any orientation. However, when mounting a PDU with circuit breakers, you must obey these rules:

- Circuit breakers CANNOT face down. For example, do not horizontally mount a Zero U PDU with circuit breakers on the ceiling.
- If a rack is subject to shock in environments such as boats or airplanes, the PDU CANNOT be mounted upside down. If installed upside down, shock stress reduces the trip point by 10%.

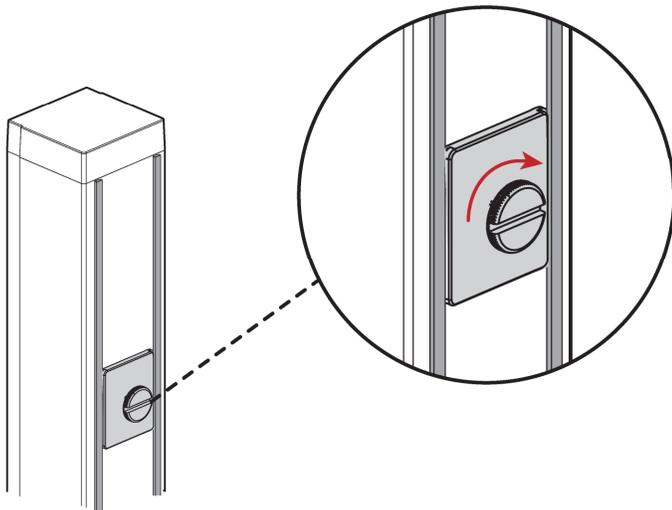
Note: If normally the line cord is down, upside down means the line cord is up.

Mounting Zero U Models with Mount Buttons

1. Turn to the rear of the PDU.
2. Align and slide the Raritan-provided mounting button to the rear rail of the PDU.



3. Turn the button clockwise until it is securely locked in place.



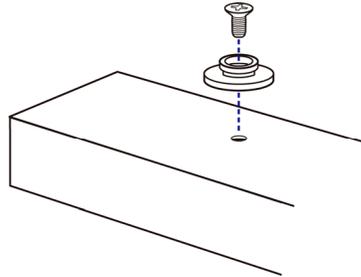
4. Repeat the same steps to install the other button onto the PDU's rear side.



5. Properly install the PDU by fitting the attached rear buttons into position of the rack.
 - a. Press the PDU toward the rack.
 - b. Push the mounting buttons through the mounting holes.
 - c. Let the PDU drop slightly.

Mounting Zero U Models with Screw Buttons

1. Turn to the rear of the PDU.
2. Locate the two screw holes on the rear panel.
3. Screw a button in each screw hole. The recommended torque for the button is 1.96 N·m (20 kgf·cm).



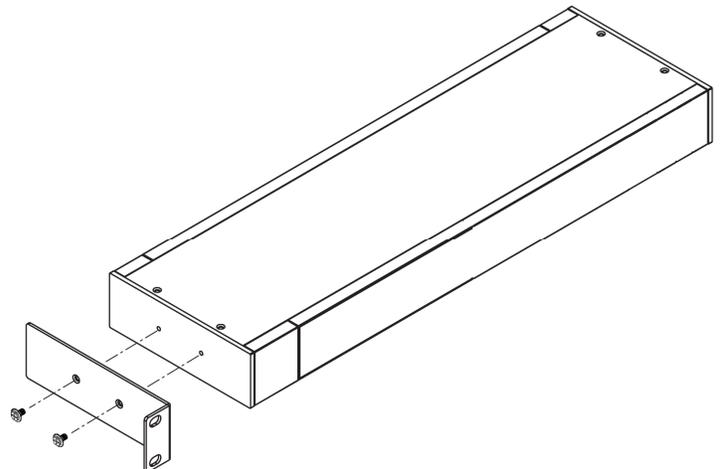
4. Press the PDU forward, pushing the mounting buttons through the mounting holes, then letting the PDU drop slightly.

Mounting 1U or 2U Models

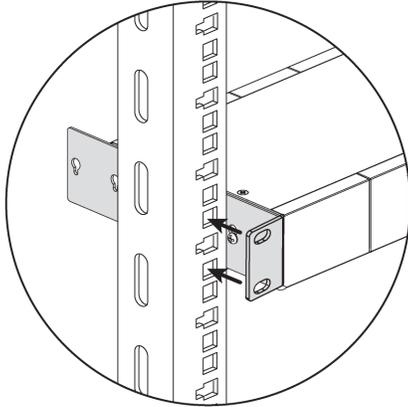
Using the appropriate brackets and tools, fasten the 1U or 2U device to the rack or cabinet.

► To mount the PXC device:

1. Attach a rackmount bracket to both sides of the PXC with the provided screws.



2. Attach PXC to the rack. Fasten the rackmount brackets' ears to the rack using your own fasteners.



Connecting the PDU to a Power Source

The distance between a PDU and its power source must be SHORTER than the PDU's line cord to avoid stretching out the cord. A locking connector used at the power source is highly recommended for a secure connection.

▶ To connect a PDU to the power source:

1. Verify that all circuit breakers on the PXC are set to ON. If not, turn them ON.

Or make sure that all fuses are inserted and seated properly. If there are any fuse covers, ensure that they are closed.

Note: Not all models have overcurrent protectors.

2. Connect each PXC to an appropriately rated branch circuit. See the label or nameplate affixed to your PXC for appropriate input ratings or range of ratings.

Note: When a PXC powers up, it proceeds with the power-on self test and software loading for a few moments.

3. When the software has completed loading, the outlet LEDs show a steady color and the front panel display illuminates. Note that outlet LEDs are only available on some PDU models.

Connecting the PDU to Your Network

PXC can be connected to a wired or wireless network.

▶ To make a wired connection:

1. Connect a standard network patch cable to either or both Ethernet ports on the PXC.
2. Connect the other end of the cable to your LAN.

Note: If connecting both ports to the LAN, you must connect them to two "different" subnets. If you are not sure whether

the device is connected to the same or different subnets, contact your IT department.

▶ To make a wireless connection:

1. Connect an appropriate USB wireless LAN adapter to the PDU.
2. Make sure the wireless LAN configuration is supported by your PDU. See **Appendix B: Wireless LAN Information** (on page 5).

Initial Network Configuration

Depending on your networking environment, the best method to initially configure your PXC differs.

- For a DHCP IPv4 networking environment, see **Using a Web Browser** (on page 3).
- For an IPv6 or "static" IPv4 networking environment, see **Appendix A: Configuration via a Mobile Device or PDView** (on page 4).

Using a Web Browser

Initial configuration using a web browser involves these two steps.

Step 1: Retrieve the IP Address (on page 3)

Step 2: Log in to the PXC Web Interface (on page 4)

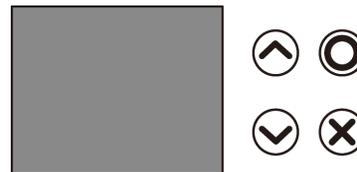
Step 1: Retrieve the IP Address

After connecting to a DHCP IPv4 network, an IPv4 address is automatically assigned to your PXC. You can operate the front panel display to retrieve the IPv4 address. See **Using the Front Panel Display** (on page 3).

Tip: You can also retrieve the IPv4 address by connecting an iOS or Android mobile device to PXC. See **Appendix A: Configuration via a Mobile Device or PDView** (on page 4).

Using the Front Panel Display

The PXC front panel display is similar to the diagram below.



▶ To retrieve the IP address:

1. Press  or  to show the "Main Menu."
2. Press  or  to select "Device Info," and press .

3. Press  or  until the device's IP address is displayed.

Step 2: Log in to the PXC Web Interface

The PXC supports common web browsers, including Microsoft Internet Explorer®, Mozilla Firefox®, and Google® Chrome.

► To access the PXC web interface:

1. Open a web browser and type the IP address of PXC.



2. Accept any security warnings that may appear.
3. Type the default user credentials and click Login.
 - User name: admin
 - Password: raritan
4. When prompted to change the password, change or ignore it.
 - To change it, type the new password and click Ok.
 - To ignore it for this time only, click Not Now.
 - To ignore it permanently, select "Do not ask again" and click Not Now.

It is highly recommended to change the default password. Make sure the new password is noted down and kept in a secure place.

What To Do Next

1. Connect IT equipment to the outlet(s) on the PXC.
2. Launch the web browser if not yet. See **Step 2: Log in to the PXC Web Interface** (on page 4).
3. Choose Device Settings > Date/Time to configure the PXC with the proper date and time or synchronize it with an NTP server. The PXC device's time must be in sync with the LDAP server to use LDAP authentication.

Note: If you are using Sunbird's Power IQ to manage the PXC, you must configure Power IQ and the PXC to have the same date/time or NTP settings.

4. To change network settings, choose Device Settings > Network.

Tip: You can enable both wired and wireless networking so that the PXC can be accessed via either wired or wireless IP address.

5. The PXC is sent from the factory with all the outlets ON. If your model is outlet-switching capable, turn OFF the outlets without devices connected.
6. Use the menu to the left to configure user profiles, privileges, security, or inlet thresholds.

Note: Detailed instructions are available in the PXC online help or user guide.

Appendix A: Configuration via a Mobile Device or PDView

An iOS or Android mobile device, such as a smartphone or tablet, can function as a local display of PXC. Note that the Android device must support USB "On-The-Go" (OTG), or this function does not work.

Step 1: Download the "PDView" App

Raritan's app "PDView" is required for the mobile device to function as a local display. It is a free app.

► To download PDView:

1. Visit either Apple App or Google Play Store.

- <https://itunes.apple.com/app/raritan-pdview/id780382738>



- <https://play.google.com/store/apps/details?id=com.raritan.android.pdview>



2. Install PDView.



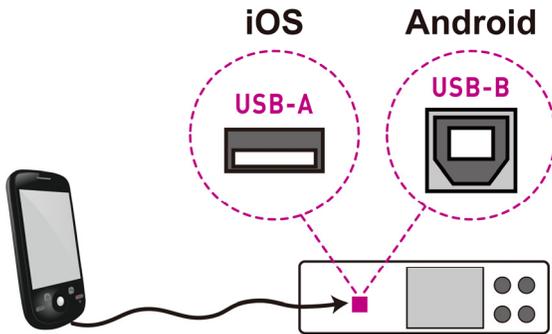
Step 2: Connect the Mobile Device to PXC

The USB cable and USB port to connect are determined by your mobile operating system.

► To connect your mobile device to PXC:

1. Get an appropriate USB cable for your mobile device.
 - *iOS:* Use the regular USB cable shipped with your iOS mobile device.
 - *Android:* Use an **USB OTG** adapter cable.
2. Connect the mobile device to the appropriate USB port on the PXC.
 - *iOS:* USB-A port.

- *Android:* USB-B port



Step 3: Launch PDView

You can access the PXC web interface via PDView to view or change the settings.

▶ To access the PXC web interface:

1. Launch PDView on your mobile device.
2. Wait until PDView detects the connected PXC and shows the word "Connected" in green.

Connected

3. If the factory-default user credentials "admin/raritan" remain unchanged, PDView automatically logs in to the web interface of PXC.
If they have been changed, the login screen displays instead and you must enter appropriate user credentials for login.
4. (Optional) For initial login, you are prompted to change the password. See **Step 2: Log in to the PXC Web Interface** (on page 4).
5. Now you can view the data or change any PXC settings.
 - For details, refer to the user guide or online help on the Raritan website.

Appendix B: Wireless LAN Information

USB Wireless LAN Adapters

The PXC supports the following USB Wi-Fi LAN adapters.

Wi-Fi LAN adapters	Supported 802.11 protocols
SparkLAN WUBR-508N	A/B/G/N
Proxim Orinoco 8494	A/B/G
Zyxel NWD271N	B/G
Edimax EW-7722UnD	A/B/G/N
TP-Link TL-WDN3200 v1	A/B/G/N
Raritan USB WIFI	A/B/G/N

Connecting the Wireless LAN Adapter

You can connect the wireless LAN adapter either to the PDU or to a USB hub attached to the PDU.

▶ To make a wireless connection:

Do one of the following:

- Plug a supported USB wireless LAN adapter into the USB-A port on your PXC.
- Connect a USB hub to the USB-A port on the PXC. Then plug the supported USB wireless LAN adapter into the appropriate USB port on the hub.

Supported Wireless LAN Configuration

If wireless networking is preferred, ensure that the wireless LAN configuration of your PXC matches the access point. The following is the wireless LAN configuration that the PXC supports.

- Network type: 802.11 A/B/G/N
- Protocol: WPA2 (RSN)
- Key management: WPA-PSK, or WPA-EAP with PEAP and MSCHAPv2 authentication
- Encryption: CCMP (AES)

Tip 1: Supported 802.11 network protocols vary according to the wireless LAN adapter being used with the PXC. See *USB Wireless LAN Adapters* (on page 5).

Tip 2: You must configure PXC to enable its wireless LAN interface. See the topic titled *Configuring Network Settings in the User Guide*.

Appendix C: More Information

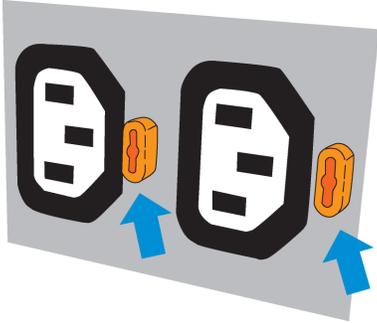
Disconnecting Devices from 'Locking' Outlets

Not every PXC is implemented with locking outlets.

Locking outlets, if available on your PXC, help secure the connection of power cords from your IT equipment to PXC.

► **To remove an IT device from a locking outlet:**

1. Press and hold down the tiny button adjacent to the PXC outlet.



2. Unplug the power cord now.

Identifying the Sensor Port

Warning: If you purchase Raritan's environmental sensor packages, make sure you connect them to the correct port on the PXC, or damages may be caused to PXC and/or connected sensor packages.

► **How to identify the SENSOR port:**

- The correct port is labeled SENSOR.
- The SENSOR port is marked with YELLOW color, as shown below.

SENSOR



OR



SENSOR

Threaded Grounding Point

If the PXC model you purchased is designed to have a threaded grounding point, you can identify it via the grounding symbol as shown below:



Wire this point to an electrical system in order to protectively ground the PXC.

Additional Information

For more information about PXC and the entire Raritan product line, see Raritan's website (www.raritan.com). For technical issues, contact Raritan Technical Support. See the Contact Support page in the Support section on Raritan's website for technical support contact information worldwide.

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(<http://www.raritan.com/about/legal-statements/open-source-software-statement/>) on Raritan's website.