Power IQ

Quick Setup Guide for Power IQ Hardware

Thank you for your purchase of Raritan's Power IQ. This Quick Setup Guide explains how to install and configure the Power IQ.

For additional information on any aspect of Power IQ, see Power IQ help, which can be accessed from the **Product Support** (***http://www.raritan.com/support***) section of Raritan's website.

Rack-Mounting Power IQ

The rack mount kit contains two pairs of rack rails. Each pair consists of two sections: an inner rail that attaches to the Power IQ device, and an outer rail that attaches to the rack. A sliding rail guide is positioned between the inner and outer rails. The sliding rail guide should remain attached to the outer rail.

Install Inner Rails onto Power IQ Device

1. Slide the inner rail out from the outer rail as far as it can go. Press the locking tab to release the inner rail from the outer rail and then pull the inner rail completely out. Do this for both pairs of rack rails.
2. There are five holes on each inner rail that correspond to the five rail hooks on each side of the Power IQ device. Align each inner rail's holes with the rail hooks, and then press each rail against the device to attach it.
3. Slide each rail toward the front of the device until you hear a click.
4. Attach the inner rails to the Power IQ device with short screws.

Install Outer Rails onto Rack

The outer rails attach to the rack. The outer rails fit racks that are 28-32 inches deep.

1. Attach the short front brackets to each outer rail with short screws.
2. Slide each long rear bracket into the opposite end of each outer rail. Attach the long rear brackets to the outer rails with short screws.
3. Adjust the entire rail unit length to fit the rack depth.
4. Attach each bracketed end of the outer rail to the rack with washers and long screws.

Install Power IQ into the Rack

Once the rails are attached to both the Power IQ device and the rack, install Power IQ into the rack.

1. Fully extend the rack rails, and then line up the rear of the inner rails with the front of the rack rails.
2. Slide the Power IQ device into the rack until you hear a click. You may have to depress the locking tabs when inserting the Power IQ device into the rack.
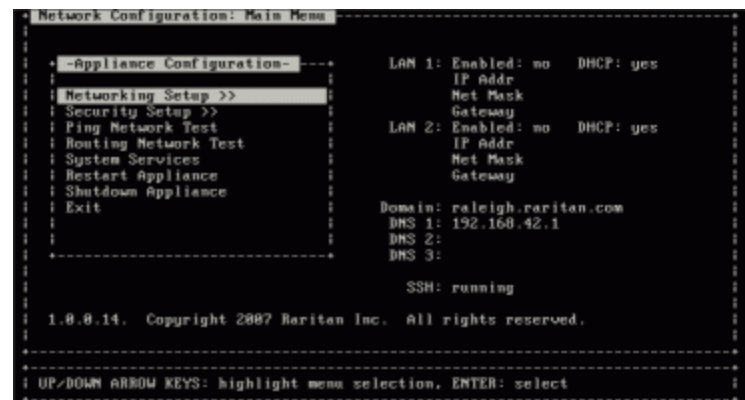
Locking Tabs

Both inner rails have a locking tab to lock the Power IQ device into place when pushed fully into the rack and to lock the Power IQ device into place when extended from the rack.

Initial Configuration of Power IQ

After installing Power IQ®, you must configure the system for access over the network.

1. Connect a keyboard, mouse, and monitor to the Power IQ device.
2. Power on Power IQ.
3. When prompted to log in, use the username *config* and the password *raritan*. The Power IQ configuration page opens.

4. Select Networking Setup, then select Setup LAN 1 to configure the primary Ethernet port.
5. Press the Space bar to select Enable this LAN Port.

6. To manually assign the network settings to Power IQ, leave Use DHCP deselected. Type the IP address, network masks, and gateway into the appropriate fields.

7. Select Accept to reset the network interface with the new values.

8. If you are using a second network interface, select Setup LAN 2 from the Network Configuration menu and configure the secondary Ethernet port in the same manner as the first. **Optional.**

9. Select Ping Network Test to ensure that Power IQ can communicate over the network. **Optional.**

10. To disable SSH remote access to Power IQ, select System Services. Then deselect Enable SSH. By default, the config account has access to Power IQ. SSH is re-enabled if a support connection is created. **Optional.**

11. Select Exit from the main menu. You can now access Power IQ from any client on the network.

Connecting to Power IQ

1. Connect to Power IQ using a web browser on any machine on the network.

2. In the browser's address bar, enter the IP address or hostname assigned to Power IQ. For example: *https://192.168.1.10*

   Answer yes to any security alerts and accept all certificates. The first time you access Power IQ, the Licensing page opens. Click Add, then select your Power IQ license file. Licenses are .LIC files. Repeat this step to add incremental licenses if needed.

   Note: Your license file can be retrieved from the Raritan web site after you have activated your registration. To activate your registration, click the link in the "Thank you for registering" email from Raritan and create your user account. Once you create your account, look for a "Your Raritan software license key is available" email containing a link to your license file download page.

3. Log in with the default username *admin* and password *raritan*.

Configuring the System Clock

Power IQ uses the system clock to time-stamp events and data records. Set the system clock as soon as possible to keep an accurate record of events.

Using an NTP server is recommended to keep the system clock synchronized between Power IQ and the PDUs it manages.

Important! You must use the same NTP server for Power IQ and all Dominion PX PDUs managed to get accurate readings from PX.

Configuring NTP Server Settings

The Configure Time Servers table lists the NTP servers Power IQ contacts to get date and time information. NTP must be enabled first.

Power IQ attempts to retrieve the date and time from the first server on the list. If this attempt fails, it proceeds down the list and attempts to contact the second server, then the third, and so on.

▶ **To enable NTP and configure NTP servers:**

1. In the Settings tab, click Application Settings in the Appliance Administration section.

2. In the Time Settings box, click the arrow to expand the NTP Settings

3. Select the Enable NTP checkbox.

4. Click Add.

5. Type the time server's IP address in the Time Server field then click OK.

6. Click Save Time Settings.

Configuring Polling Intervals

At each polling interval Power IQ collects data from PDUs under its management.

▶ **To configure the polling interval:**

1. In the Settings tab, click Power IQ Settings in the Appliance Administration section.

2. In the Polling Settings box, select a time period from the "Polling interval" drop-down list. The time period indicates how much time passes before Power IQ starts a new polling cycle

3. Click Save Poller Settings.

Note: When managing a large number of PDUs you may need to configure a longer time period for the polling interval. Setting a longer time period helps ensure that all PDUs are polled within a given cycle. A warning message appears if Power IQ is unable to poll all PDUs within the configured time period. See Recommended Polling Intervals for details on settings that help Power IQ poll faster.

Gathering Buffered Data

If you plan to manage Dominion PX PDUs, version 1.2.5 or later, Power IQ can gather buffered data from these devices. This allows Power IQ to retrieve many more samples each time it polls a Dominion PX. See the User Guide for more details.

Adding PDUs to Power IQ Management

Once Power IQ is configured, add Raritan PX or other PDUs to its management. Power IQ can then gather data from these PDUs. If you're adding a PDU that uses a custom dynamic plugin, see Adding PDUs with Custom Dynamic Plugins.

You can also add PDUs to Power IQ by uploading a CSV file containing the information. See **Adding PDUs in Bulk with CSV Files** (on page 3) in the Power IQ User Guide.

▶ **To add PDUs to Power IQ management:**

1. In the PDUs tab, click Add.
2. Enter the IP address of the PDU.
3. If the PDU is in a daisy-chained configuration or console server configuration, enter the PDU's position number in the chain or serial port number in the Proxy Index field. You can also specify branch circuit monitors using the Proxy Index field. See Adding Veris Branch Circuit Monitors with Acquisuite.

   Note: If the PDU is not in this type of configuration, leave the Proxy Index field blank.

4. Enter an asset tag number or other asset management code in the External Key field. **Optional.**
5. Enter data in Custom Field 1 and Custom Field 2. **Optional.** The labels may have been changed in Power IQ to identify these fields.
6. If the PDU is a Raritan PX, enter a valid Username and Password for the PDU in the PDU Administrative Credentials section. Re-enter the password in the Password Confirm field.
7. Select the SNMP Version.
   - For SNMP version 1/2c PDUs, enter an SNMP Community String that has at least READ permissions to this PDU. This enables polling the PDU for data. Enter an SNMP community string that has both READ and WRITE permissions to the PDU to enable power control, outlet naming, sensor naming, and buffered data retrieval.
   - For SNMP version 3 PDUs, enter the Username and select an Authorization Level. The authorization levels are:
     - noAuthNoPriv - No Authentication Passkey, No Encoding Passkey
     - authNoPriv - Authentication Passkey, No Encoding Passkey
     - authPriv - Authentication Passkey, Encoding Passkey
   a. Depending on the Authorization Level selected, you must enter additional credentials for Authorization and Privacy.
   b. Authorization Protocol: Select MD5 or SHA.
   c. Enter the PDU's Authorization Passkey, then re-enter the passkey in the Authorization Passkey Confirm field.
   d. Privacy Protocol: Select DES or AES.
   e. Enter the PDU's Privacy Passkey, then re-enter the passkey in the Privacy Passkey Confirm field.

   Note: You must enable the SNMP agent on all PDUs added to Power IQ.

8. Select "Validate and wait for discovery to complete before proceeding" to check credentials and view the discovery process status as you add this PDU. **Optional.** See Validating PDU Credentials in the Power IQ User Guide.
9. Click Add.

Note: PDU discovery is complete once the PDU model type is determined. SNMP fields such as contact or location values are not determined until this device is polled for the first time.

   Once added, the PDU appears in the PDU list. Power IQ begins polling the PDU for sensor data. You can configure how often Power IQ polls PDU. See **Configuring Polling Intervals** (on page 2) in the Power IQ User Guide.

Adding PDUs in Bulk with CSV Files

You can add PDUs in bulk by uploading a CSV file.

Power IQ does not check the credentials of the PDU while adding it during a CSV import. If the credentials are incorrect, an event called PDUCredentialsInvalid is logged.

Importing more than 100 PDUs at a time causes polling to suspend while the import is in progress.

You can download a step-by-step CSV template file in the Support section of Raritan's website, under Firmware and Documentation. See http://www.raritan.com/support/power-iq/.

See Structure of the Add PDUs CSV File for file requirements.

▶ **To add PDUs in bulk with CSV files:**

1. In the PDUs tab, choose Activities > Import PDUs from CSV file. The Import PDUs page opens.
2. Click Browse and select the CSV file.
3. Select "View progress of the import as each PDU is discovered" to view the discovery progress and the resulting status. **Optional.**
4. Click Begin Import.

What to Do Next

After adding PDUs to Power IQ management, you may want to perform additional activities.

- Perform bulk PDU configuration, if you have deployed several Dominion PX PDUs of the same model type.
- Configure security settings such as web user session timeouts and IP-based access control.
- Change the administrator password.
- Add users.
- Configure an Enterprise Data Model, mapping PDUs and outlets to the IT equipment they power.
- Create reports and charts of your power usage.

See the Power IQ User Guide for detailed instructions.

Additional Information

For more information about the Power IQ® 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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