The Benefits of Easy to Use PDUs
Introduction

The rapid growth in digital technology has caused data centers to expand exponentially. Data centers are pressured to keep up with the high digital data demands to maintain daily business functions. To accommodate this increase in data, their environments have adapted highly complex IT infrastructure. For example, just one of Google’s data centers had roughly 150 employees and 2.5 million servers.

With such a staggering amount of technology and IT equipment in such a sensitive environment, their operations must increase efficiency to ensure maximum throughput. One of the most practical ways to achieve improved efficiency is through devices that are easy to use and easy to deploy. These types of devices reduce the risk of human error and decrease deployment time, resulting in cost savings for your facility and business.
Mass Deployment Made Easy

What makes Raritan’s PX intelligent PDUs far superior to the competition is their unique ability to support bulk deployment and configuration through either a standard USB or TFTP via Wi-Fi or a network connection. This enables operators to save crucial time on installation and configuration. Additionally, it allows your data center to get up and running faster, while also reducing the risk of possible human error. But, the most important benefit received is the cost savings.
Seeing the Cost Saving

A recent case study conducted by Raritan compared two distinctly different phases of PDU mass deployment and lifecycle management for one particular company.

In Phase 1, the company decided to configure its PDUs through a traditional method of connecting each device physically and configuring them via CLI. To complete the installation, the company hired four technicians for 16 hours to deploy 200 PDUs via serial management ports/CLI, which totaled $1,600.

In Phase 2, the same company opted to use Raritan’s USB mass configuration method. This took two technicians just two hours to work with the same 200 PDUs, with a total cost of $200.

A cost reduction of a whopping 87.5%.
Extended Cascading: Mix and Match USB and Ethernet

Another easy to use feature of Raritan’s PX intelligent PDUs is the utilization of extended cascading. Simply put, cascading (or daisy chaining) is a wiring scheme in which multiple devices are wired together in sequence or in a ring. In reference to a PDU, this would be by network connection. Raritan has proprietary firmware and intelligence which provides users the ability to daisy-chain up to 16 devices using a single IP, all while having the option to mix and match between both USB and Ethernet connections. You can even incorporate any Raritan device into a cascading scheme, giving data centers more flexibility.

The main benefit of extended cascading is time reduction and cost saving. By cascading your PDUs in a series you are able to reduce the number of IP drops to each individual rack, saving on expensive cables and wiring. In addition, using either the USB or Ethernet connections on the PDUs will create additional room, freeing up crucial ports on the patch panel.
Acting as a solution that is both easy to use and easy to deploy, PX intelligent PDUs provide a standard Gigabit Ethernet port. The standard Gigabit Ethernet enables seamless connectivity to modern switching infrastructure, allowing for simple implementation in any data center environment as well as in future network topologies.

The Dual Networking feature provides robust flexibility, allowing you to operate your PDU on two simultaneous networks. This is especially useful for colocation deployment, as you can give access to one colocation without having to provide access to your local area network, as both will have access to the PDU on a separate network.
Industry-Leading User Interface

PX intelligent PDUs are developed to be the most user-friendly devices in your power chain. They feature a rich, color, matrix LCD display and the highest on-board resolution in the industry, making it incredibly easy to view and configure your PDU data.

The real-time, intuitive user interface is fast and easy to use, and with the updated PX web GUI, you can access your PDU from a desktop or any mobile device or tablet. The PX power data is also available from anywhere, with color indicators to offer clear updates on the current state of monitoring thresholds.
Power Decisions Made Easy

Accurate data collection and analysis is needed to manage any data center at optimal efficiency. With our easy to use PX intelligent PDUs and insightful yet intuitive PowerIQ DCIM management interface, you can examine your facility’s energy utilization, hotspots, and PUE in real time. As your PX collects more and more data from across your data center, you will be able to distinguish specifically where power is needed and redirect power loads throughout the facility accordingly.

The intelligent PDU will give you accurate sight into your facility’s power capacity, therefore making it easy to expand when you reach your limit. You can also do load shedding to distribute the power load more evenly to avoid upstream power issues such as overloading branches and UPSs.
With a rich history of innovations spanning over three decades, we at Raritan engineered our PDUs to ensure that ease of use was the main focal point because we believe in products that facilitate and simplify the user experience in deployment and day-to-day management. Furthermore, we aim to drastically reduce related operating costs at every stage of your PDU lifecycle.

Conclusion