PX3® INTELLIGENT RACK PDUS

SMARTER RACK POWER DISTRIBUTION

The Raritan PX3 intelligent rack power distribution unit (PDU) is a launch pad for real-time remote power monitoring, environmental sensors, and data center infrastructure management. The PX3 Series offers hundreds of models with options, including outlet switching, individual outlet metering, high power and high outlet density, and 400V three-phase power distribution.

Raritan intelligent PDUs are purpose-built to meet the needs of your unique application. We offer hundreds of cataloged models, or we can engineer a PDU designed to meet your specific requirements. See why the top 10 Fortune 500 technology companies trust Raritan to power their equipment.

XERUS™ TECHNOLOGY PLATFORM: RAISING THE BAR

Forming the backbone of all Raritan power products, Xerus is comprised of a reliable hardware and software technology platform that integrates over 30 years of data center management expertise into every PDU.

Developed and maintained by our team of technology experts, Xerus helps to maximize data center efficiency by delivering security, high compute power, intelligence, advanced alerting, and visibility into your power chain. Xerus uniquely delivers new and advanced capabilities to Raritan PDUs—not only today but far into your data center's future.

|	1000 Series	2000 Series	4000 Series	5000 Series
Inlet Metering	✔	✔	✔	✔
Branch Circuit Metering	✔	✔	✔	✔
Circuit Breaker Alarming	✔	✔	✔	✔
Outlet Level Metering			✔	✔
Outlet Level Switching		✔		✔

ENGINEERED FOR UPTIME

Trusted by the world's largest data center operators, Raritan intelligent PDUs benefit from more than 30 years of battle-tested engineering and have been perfected by our data center experts to ensure uptime and full-service availability.
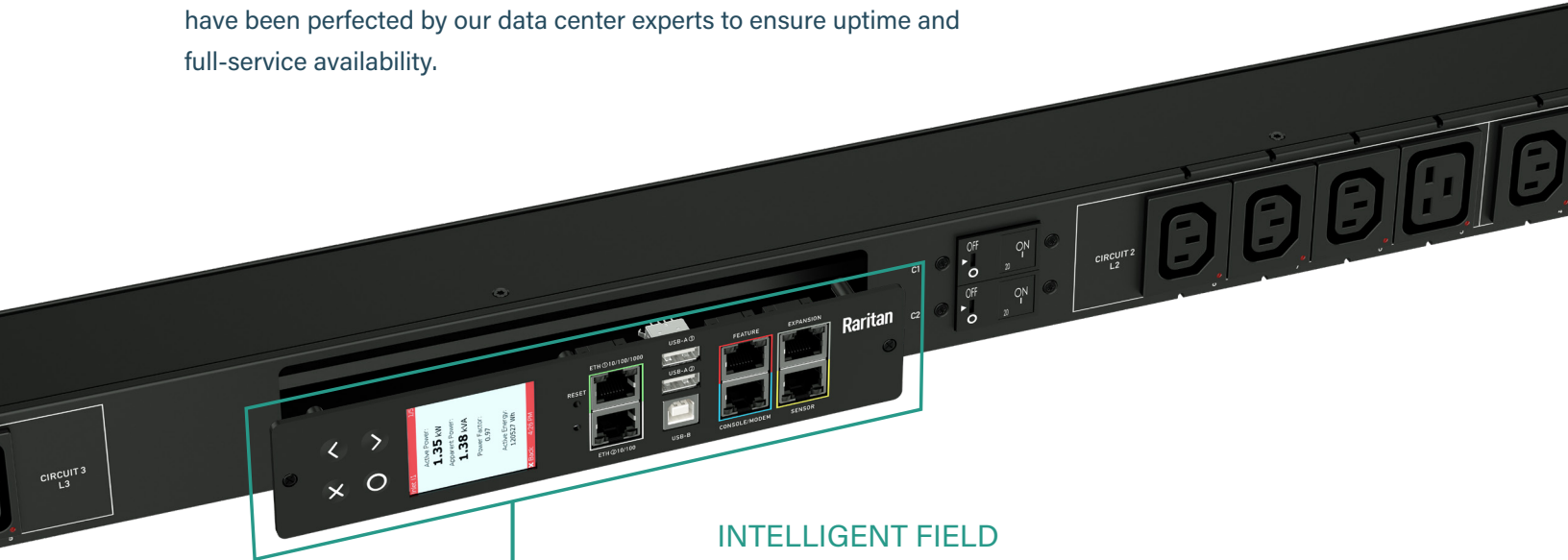
INTELLIGENT FIELD REPLACEABLE CONTROLLER

Our flush mount controller offers industrial-grade reliability, configurable firmware, disaster recovery support, and hot swap capability for maintenance or replacement without powering down connected equipment.
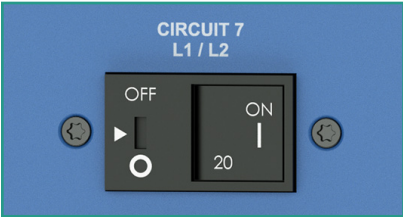
FLUSH MOUNT CIRCUIT BREAKERS

Flush-mount circuit breakers are designed to minimize accidental trips that could interrupt power to the connected load. Our low-profile design is perfectly integrated into the PDU chassis and focuses on saving space, adding no additional enclosure or dimensional requirements, facilitating mounting, and optimizing airflow.

KWH METERING ACCURACY

Incredible metering accuracy of +/-1% can be measured across real-world loads and all power load types, not just peak loads. The same measurement quality can be observed on all interfaces and sensing points of the PX3 to ensure the highest degree of reliability.

FULL COLOR CHASSIS

The full-color chassis—available in ten standard colors—makes it easy to identify power feeds, reduces errors, and lowers the risk of unplanned downtime.

WORLDWIDE CERTIFICATIONS

PX3 PDUs are put through a rigorous set of tests to ensure they are compliant with the most stringent electrical standards including FCC Part 15 Class A, UL and cUL, CE, EAC, PSE, SAA, and RoHS/WEEE; select models also meet KC (Korea Certification) standards. Raritan PX3 PDUs also qualify as CCC-exempted and a CCC Exemption Authentication waiver can be provided upon request.
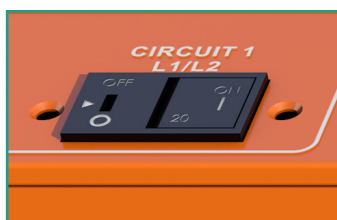
ROCK SOLID DESIGN
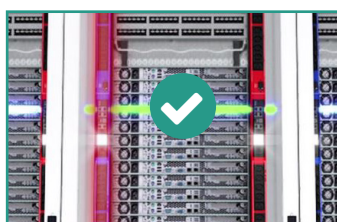
BUILT-IN FAILOVER POWER

Available on some PX3 models, an expansion port helps to maintain network connectivity and power between connected PDU controllers. If there is no power at the outlet, the PDU will still send critical alerts, providing faster mean time to repair.

CIRCUIT BREAKER TRIP ALARMING

Standard on PX3 intelligent PDUs, circuit breaker trip alarming provides an electrical and sound-based indication when a breaker has tripped due to a faulty condition, bringing immediate visibility to the fault event for faster remediation.
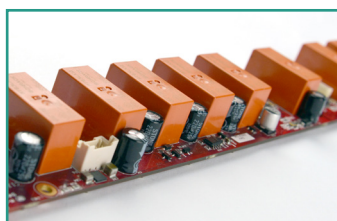
EFFICIENT LATCHING RELAYS

PX3 5000 Series PDUs are equipped with bi-stable latching relays, making outlet switching safer while consuming less energy than conventional alternatives. Sophisticated outlet-sequencing can power on outlets individually or in groups, in a prescribed order, to minimize inrush current overloading. Alternatively, latching relays can be configured to permanently retain their on/off state—so that critical power is maintained even in the case of PDU failure.

REMOTE POWER CONTROL / OUTLET LEVEL POWER MANAGEMENT

Easily control connected equipment to the PDU by switching specific outlets to off to prevent unauthorized access, ensure proper provisioning, and avoid tripped circuit breakers. Remote power controls can be used to reboot hung servers or provision outlets for new devices without ever having to step foot in the facility where the PDU is physically located.

ROCK SOLID DESIGN

RESIDUAL CURRENT MONITORING (RCM) OPTION

An RCM detects current leaking outside its normal circuit path. Residual/ leaking current is a safety hazard that can cause electrocution and fires. There are three levels of RCM options to choose from to equip your Raritan PDUs: RCM Type A, RCM Type B Single Channel, and RCM Type B Three Channel. All levels include a patented self-test function to auto- mate when tests are executed, keeping you in control and compliant and reducing the burden of regulatory auditing in many jurisdictions.


DUAL NETWORK ACCESS

Equipped with two Ethernet ports, Raritan PDUs with iX7™ controllers can be accessed on two separate networks. Infrastructure managers, co-loca- tion facility staff, or IT administrators can all see the same critical energy and environmental data provided by your PX3 PDU, even if they are on different networks or VLANs.

INDUSTRY-LEADING INNOVATION

Leveraging the Xerus Technology Platform, PX3 intelligent PDUs are developed to be the most user-friendly devices in your power chain. Get seamless, actionable insight into your power data to manage your infrastructure better, smarter, and for less money.
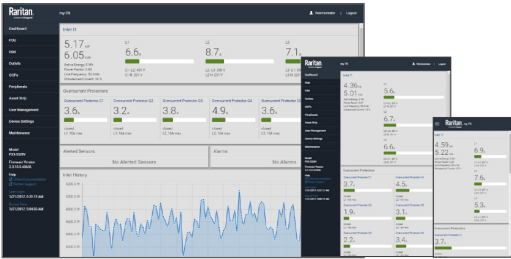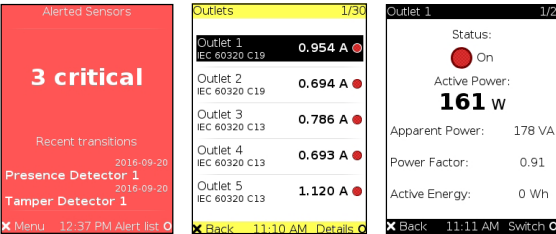

RICH, COLOR MATRIX LCD DISPLAY

The highest onboard resolution display in the industry (320x240) provides a crystal clear, at-a-glance view of your PDU data and configuration. The easy-to-use local control buttons help users navigate the display menu in manual mode.

REAL-TIME, INTUITIVE USER INTERFACE

Fast and easy to use, the PX3's web GUI can be accessed on your desktop, mobile device, or tablet. Power data collected is available from anywhere, with color indicators identifying the current state of monitoring thresholds.

INDUSTRY-LEADING INNOVATION
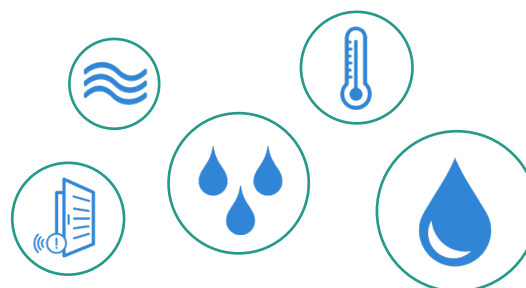
EASY POWER CAPACITY PLANNING

By leveraging the PX3 PDU's outlet level power management capabilities into DCIM software, users can quickly identify ghost servers and stranded capacity across the data center. Baseline your power utilization to accurately forecast an expansion and optimize the available capacity per rack for reduced costs.

GRANULAR ENVIRONMENTAL MONITORING

Optional plug-and-play environmental sensors for temperature, humidity, airflow, differential air pressure, dust/particles, water leaks, and others can be connected to the PX3 PDU's dedicated PDU sensor port. All sensors are built with field-replaceable heads and will alert you to potential threats that could cause downtime.
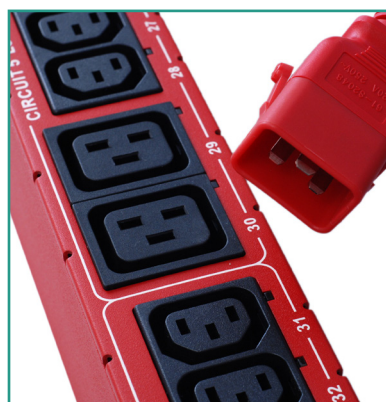
SECURE LOCKING SOLUTIONS

Raritan intelligent rack PDUs are equipped with SecureLock™ outlets, preventing SecureLock power cords from coming unplugged due to vibration or human error.

EASY TO USE, EASY TO DEPLOY

Save costs while commissioning new racks and new equipment by increasing deployment speed and flexibility with the most connectivity features in any rack PDU.
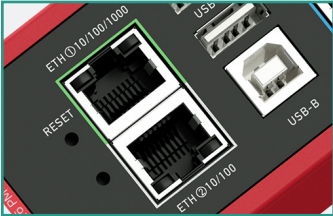
STANDARD GIGABIT ETHERNET PORT

The PX3's iX7 PDU controller provides a standard Gigabit Ethernet for seamless connectivity to modern switching infrastructure. It eases your PDU's implementation in any data center environment and allows for future network topologies.

SIMPLIFIED AND FAST MASS DEPLOYMENTS

Raritan offers two unique options for mass deployment and configuration of hundreds or thousands of PX3 PDUs. For existing infrastructures with a network, zero touch provisioning offers deployment via TFTP and DHCP server to automatically push a predetermined configuration to a PDU. When a new build is present, and no network available, mass deployment by USB flash drive allows users to upload pre-configured settings directly to the PDU.
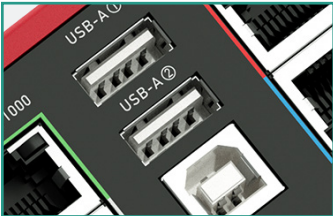
OPTIONAL WI-FI CONNECTIVITY

If there are limited, or no network drops available, by connecting an optional USB Wi-Fi accessory, Raritan PX3 intelligent PDUs can be networked and cascaded without an additional expense.

NETWORK CASCADING

Dramatically reduce the number of Ethernet ports required for deployment and reduce the time to monitor and administer devices by cascading a single network connection across multiple intelligent PX3 PDUs.

DUAL USB PORTS

Extremely versatile USB ports enable simultaneous connectivity to iPad / iPhone / Android interfaces, rapid configuration of PDUs, mass firmware updates, Wi-Fi connectivity, and built-in webcam security features. Just as importantly, the interfaces will continue to expand the PDU's capabilities well into the future, with regular and free updates to the PDU's onboard software. This hardware design enables advanced features while delivering the simplest product to use.

FOR DENSE, HIGH POWER RACKS

Whether you operate a large, medium, or small data center, it may be time for you to consider deploying high power to at least some of your racks. Good candidates are racks packed with 1U servers, network switches, blade servers, network storage devices, and other high-density applications. Consider how Raritan three-phase, high voltage rack PDUs can increase energy savings and increase capacity:

68kW

400V THREE-PHASE MODELS

The broad range of Raritan 400V three-phase high power models support up to 68kW per rack PDU. Running higher voltages at lower currents means smaller and fewer cables, less copper, less weight, less space, and lower costs. Plugs and receptacles are also less expensive at higher voltages and lower current ratings, with additional savings achieved by eliminating voltage transformations.
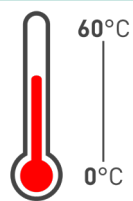
60°C (140°F) TEMPERATURE RATING

Raritan PX3 intelligent PDUs are built with a standard 60°C (140°F) temperature rating for reliable performance in dense, high-heat environments. PX3 PDUs operate in even the harshest conditions.

TERMINAL BLOCK ACCESSIBLE OPTION

PX3 PDUs with a terminal block accessible option can save operators thousands of dollars by eliminating the need for plugs, connectors, and excess cables. Simply remove the outer cover from your PDU for quick access to the terminal block and wire the unit directly to an existing power whip.
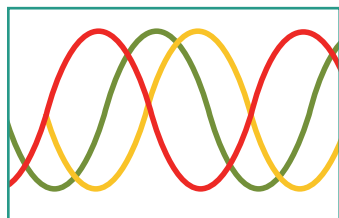
ALTERNATE PHASE SEQUENCED OUTLETS

Certain three-phase models feature phased sequence outlets: a unique wiring scheme that simplifies the deployment of IT devices and balances the three lines to get the most power headroom. Power phases are alternated on a per-outlet rather than per-branch basis.
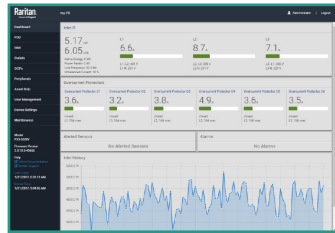
FUTURE-PROOF YOUR INVESTMENT WITH THE PERFECT FIT FOR YOUR APPLICATION
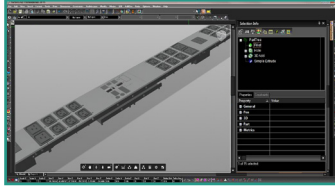
PERFECT FIT IN THE RACK

Raritan engineers use 3D modeling tools to create the perfect fit for your rack. Space-saving Zero U, 1U, 2U, and 3U form factors provide unobstructed access to your rack for faster service calls, equipment changes, and deployment of newly provisioned equipment.

XERUS TECHNOLOGY PLATFORM ANTICIPATES THE FUTURE

Xerus—our embedded technology platform integrated across all Raritan power products—ensures a long lifespan for your power infrastructure by delivering extreme amounts of computing power, together with a flexible and extensible software architecture. As your data center changes and grows and new feature requirements arise, we will continue to add capabilities to Xerus to address new application and security needs, running on top of our secure and reliable technology foundation.

DCIM MONITORING

DCIM monitoring software automatically gathers power, energy, and environmental data from your intelligent PX3 PDUs and their connected devices to help maintain uptime, improve capacity planning, and support energy efficiency initiatives.

INTEGRATE WITH DCIM AND MANAGEMENT SOFTWARE

By utilizing the RESTful API available through the Xerus Technology Platform, you will be able to leverage PX3's capabilities in most common programming languages and scripting methods to develop your own data center applications. JSON-RPC software development toolkits (SDKs) are available for Perl, Python, JavaScript, Curl, and more. The Xerus platform has already been integrated with most of the common DCIM platforms available on the market, further future-proofing your deployments.

MORE BENEFITS FROM A SINGLE SOLUTION

You can find the perfect solution for your requirements with Raritan's Custom Engineering. We will help you define your needs and find the appropriate product from hundreds of cataloged models built to order or by engineering a PDU dedicated explicitly to your application.

RANGE OF OPTIONS

- 100V, 120V, 200V, 208V, 230V, 240V, 400V and 415V Inputs
- Single-Phase and Three-Phase Power
- 12A to 100A Input
- Zero U, 1U, 2U, and 3U Form Factors
- NEMA, IEC, Clipsal® and other Plugs/ Receptacles
- Mixed Outlet and Voltage Configurations
- FCC Part 15 Class A, UL and cUL, IEC 60950, CE, EAC, plus PSE for Japan, and SAA
- RoHS/WEEE Compliant

SECURITY PROTOCOLS

- Strong Configurable Passwords
- User and User Group Permissions
- Active Directory®, LDAP, LDAP/S, RADIUS
- Up to 256-bit AES Encryption
- SSH, SSL to TLS 1.3, and HTTPS
- IEEE 802.1X PNAC

OUTLET CONTROLS

- Power-on Sequencing with Customizable Delays
- Outlet Grouping Across Multiple PDUs
- PDU-based Load Shedding
- Last Known State Power-on
- Compatible with Raritan KVM
- Remote Outlet and Outlet Group On/Off

OPTIONAL PLUG-AND-PLAY SENSORS

- Temperature/Humidity Sensor
- Airflow Sensor
- Differential Air Pressure Sensor
- Dust/Particle Sensor
- Water/Fluid Leak Sensor
- Contact Closure Sensors Supported for Use with Third-Party Sensors
- Cameras (for models with USB ports)

POWER METERING

- Individual Outlet, PDU, and Line
- Branch Circuit
- Current (A)
- Voltage (V)
- Power (W,VA)
- Power Factor (PF)
- Energy Usage (kWh)

NETWORK PROTOCOLS

- Gigabit Ethernet
- USB-A, USB-B
- Email and Syslog
- SNMPv2c, SNMPv3
- SNMP TRAPs and INFORMs
- IPv6/IPv4 Support
- JSON-RPC, MODBUS TCP
- Web Browser (HTTP, HTTPS)
- SSH Command Line Interface
- Perl, Phyton, JavaScript, and Curl SDKs

Visit www.raritan.com/px or call 1.800.724.8090 for more information

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