Product brochure

PDI WaveStar Remote Power Panel (RPP)

Win the race for space and power

The drive for more power in less space at the server cabinet level continues. Eaton's RPP complements this change by offering the most options available in this free-standing 2′ x 2′ distribution or server-sized enclosures. Eaton has the most comprehensive lineup of RPPs in the data center business. Although your PDUs may still be able to handle the power demands of your growing facility, they may not have room for expansion. Eaton's RPP helps you win the race for space and power by providing the added pole space in a variety of power setups to meet your distribution needs in a small footprint.

Our RPPs allow you to effectively use all of your existing capacity before investing in additional distribution. The RPP can pack in dual feeds, up to 168 breakers, and branch circuit monitoring with local monitoring in the 2′ x 2′ floor tile. The RPP is fed by any standard subfeed circuit breaker of a PDU or 208V distribution board. Eaton also offers the choice of Mission Critical Dual Source RPP—225 or 400 amp modular rackmount unit to fit any 19-inch cabinet, the server line rack RPP in either 208V or new 480 V, and the server line RPP from 15–150 kVA with a custom transformer.

Intelligent monitoring

Add a WaveStar monitor to see down to the branch circuit level on all panel boards and increase your Power Distribution Intelligence Quotient (PDIQ). The PDIQ system increases the visibility of the actual loads on the raised floor which gives you a better decision-making tool that covers system-wide performance, individual output breakers power levels, and branch circuit monitoring (current and voltage). PDIQ gives you the ability to make better decisions based upon real-time reporting of load/capacity data. By adding the WaveStar monitor to your RPP, you can view linked devices and keep better control of the data center floor loads.

Simplified expansion with customized options

- **Reduces** the length of cable runs between your PDU and the individual loads
- **Optimizes** usable floor space
- **Simplifies** server consolidation plans
- **Meets** the growth demands of dual-cord equipment
- **Retrofits** to any existing distribution system
- **Minimizes** your investment risk today by allowing for incremental expansion of your future facility
- **Unobstructed** wiring access for ease of installation

Flexible packaging

Designed in an aesthetically pleasing cabinet to match the high-tech look of today's computer centers, the RPP's flexible configuration options allow it to grow with your facility. The RPP can function as a stand alone device or as part of an extensive distribution system. You can choose a single-input device or dual-power feeds to satisfy system redundancy and maintenance requirements. All RPP designs can be packaged to allow for system expansion without interruption to your loads. Each unit can be equipped with any custom monitoring package you require for your system.

Assured performance

Eaton's complete line of PowerPak technology has long delivered superior performance and protection for your computer systems and equipment. With the options now available for Eaton RPP's, you can match your 15-300 kVA PowerPak and 225-750 kVA PowerHub™ power distribution units with the best solution for your data center. The expanded RPP line allows for flexible expansion of your computer room and reflects Eaton's many years of experience in the power quality and distribution industry.

Timely product delivery and support

- Short lead time to provide timely product delivery
- 24/7 service and support
- Around the clock sales and service support from system design throughout data center life

EATON
Powering Business Worldwide

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1 RPP

- **225 and 400 amp system**
- **2 x 2**
- **Fits your data center**

2 RPP

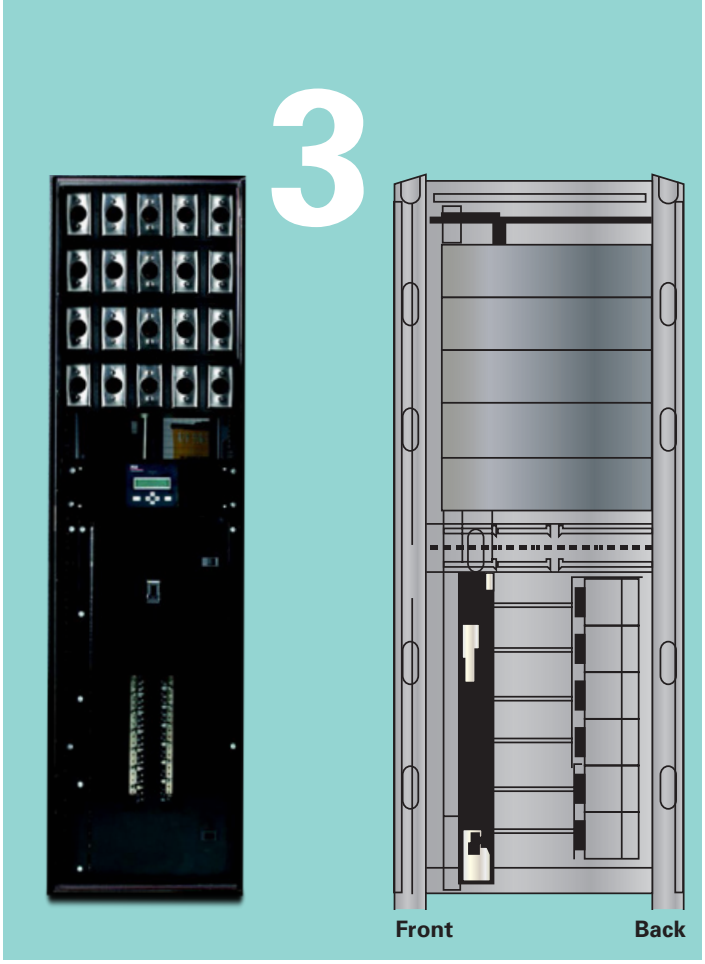
- **Mission critical**
- **225 and 400 amp system**
- **2 x 2**
- **With Kirk™ key interlocks**

PowerPak RPP series standard features

- 2′ x 2′ footprint cabinet
- Freestanding enclosure
- Removable top, side and rear panels
- Full front inner hinged panelboard cover
- 208/120 Vac - 60 Hz or 50 Hz available
- 3-pole, 225A, 240V plug-in molded case main input switch
- Panelboard vision panels
- 400A system also available
- Square D or GE 42 pole distribution panelboard
- Listed to UL standards
- Oversized neutral for non-linear loads
- Single point grounding
- Configurable for top or bottom entry
- Compression connections on all panelboards
- Hinged side and rear panels
- Flush-mounted door handle with integral keyed locks
- Increased wiring space
- "Door-in-door" handle on dead front

Mission critical RPP standard features

- 2′ x 2′ footprint cabinet
- Enhanced RPP security
- Designed to provide an alternate feed to loads
- MLO (main lugs only) panelboards
- 400A system also available
- (2) 225A Square D mission critical circuit breakers
- Kirk™ key interlocks
- Solenoid key release
- Sync check relay
- Can be switched between two sources in a make-before-break configuration without interrupting the load
- Isolated ground and equipment ground
- Switching neutral contactor for separately derived loads
- Neutral is rated at 400A with an option for 800A



3 RPP

- **Modular rack mount**
- **225 and 400 amp system**
- **2 x 2**
- **Modular system for server-RPP for "Plug and Play"**

RPP modular rack system uses any 19-inch cabinets that you already have in your data center and you can install this modular system yourself!

Protect your computers

The data center has moved from a static environment to a highly dynamic one. Distribution panels on main PDUs are at capacity and running out of breaker space is common. IT professionals do not have the time to wait for a certified electrician to install, test and start new PDUs or add distribution to the row of racks. Eaton's Modular Rack Distribution solves these problems while meeting the growing demands of dynamic data centers and IT professionals. Installation can be performed by a customer, electrical contractor or a Eaton factory trained service technician. It is truly your choice. Modular Rack Distribution features unobstructed wiring access for ease of installation and "plug-and-play" receptacle modules for use with flexible overhead power WHIPs. Each module is designed to be installed in a standard 19-inch wide rack/enclosure.

Flexible modular design

Three basic modules:

- Input switch/BCMS-ready 42-pole panelboard
- BCMS with built-in local display
- WaveStar system with five receptacle module(s)

MRD distribution system:
Section A

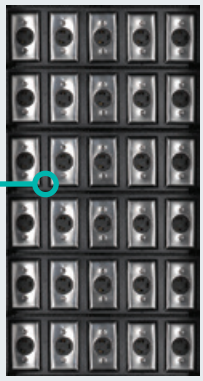
- 3-phase 225A main input breaker with integrated CT strips for branch circuit monitoring
- Full front inner hinged front cover, steel housing with cable pass-throughs and "knock-outs"

BCMS module:
Section B

- Complete branch circuit monitoring with data acquisition board and local WaveStar display
- Ribbon cable interconnection kit included

Receptacle module:
Section C

- 5-receptacle module configuration (3U)
- L5-20 and 30
- L6-20 and 30
- L21-20 and 30



Whips

- Fully terminated SO cable whips available in 10', 15', 20' and 25' lengths

Intelligent Monitors with PDUQ provide real time load management data resulting in better data center capacity utilization

- System-level monitoring (per input feed)
- Output circuit breaker monitoring
- Branch circuit monitoring—current and voltage available

Output circuit monitoring

- Monitors individual output circuit breakers power levels (optional)
- Greatly improves reliability by alerting operators before main circuit breakers exceed the trip level

WaveStar monitor

- Graphics display which captures PDU and BCMS functions for precise load management
- Control your power destiny—put this in yourself!

4

NEW!
Industry first
480 V system
available

5

4 RPP Serverline profile

- **225 and 400 amp at 208V or new 480V system**

PowerPak RPP series standard features

- Front only or front and rear in-line dual 42-pole panelboards with bolt on circuit breakers
- Single- or dual-feed via easy to accesscopper bus bar inputs
- 225A main circuit breaker per panelboard or per 2 panelboards
- 400A system also available
- Hinged dead front doors with 1/4 turn captive hardware and quick removal clip
- Lockable main door with easy view of all circuits (acrylic or solid finish)
- Branch circuit monitoring available
- Large system status display
- Top or bottom entry, ultra spacious conduit access area with 1/4 turn captive hardware
- Easy access solid copper 200% rated bus bar neutral terminal block
- Standard ground bus and optional isolated ground bus
- Solid copper input bus bars
- WaveStar monitoring package including BCMS in single monitor available

5 RPP/PDU

- **With transformer**
- **15–150 kVA**

Mission critical RPP standard features

- Input 480 Vac
- Output 208/120 Vac
- Main input breaker
- Two (2) Square D panelboards (column-width style)
- 225A secondary main circuit breakers rated 22 kAIC
- Listed to UL standards
- Six (6) compensation taps (4FCBN, 2FCAN)
- k20 copper, 150°C Class H insulation transformer
- Hinged panelboard covers with slide lock access
- Remote communication interface in modbus RTU protocol
- Advanced door catch assures positive closure
- Door locks
- 200% neutral
- BCMS
- WaveStar monitoring package including BCMS in single monitor available
- 15–150 kVA custom transformer enclosed in server line cabinet

For more information, please visit:
Eaton.com/powerpakrpp

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