

# POWER DISTRIBUTION UNIT: POWERPAK PDU

## ADVANCED POWER PROTECTION FOR NON-LINEAR LOADS

**PROTECT YOUR COMPUTERS** PDI's PowerPak PDU protects your critical computer equipment from electrical noise and spikes and acts as a single point reference ground. Each PDU can be individually configured to meet your needs for isolation, voltage transformation, harmonic reduction and voltage regulation with virtually limitless distribution options. Built-in system monitoring and diagnostics facilitate load balancing and warn of potential threats to your critical equipment.

Every PDI PowerPak goes through the toughest testing in the industry. PDI's comprehensive quality assurance program, with 100% unit inspection and testing, is just one way PDI assures that each unit will perform flawlessly day after day. Let our experienced engineers work with you to configure the optimum power distribution system for your facility.

**WIN THE RACE FOR SPACE** We designed our PDU to grow with your facility. "Sidecars" can be added to the standard cabinet to give you up to six 42-circuit panels or combinations of panels and sub-feed breakers. Up to 252 separate circuits can be installed in a single unit. These circuits can be monitored by one of PDI's BCMS systems as a factory installed component. To simplify installation and expansion, PDI also offers UL listed, computer grade power cables encased in flexible, shielded conduit.

**THE QUAD-WYE® ADVANTAGE** Your system can be further enhanced with PDI's optional Quad-Wye® technology. The Quad-Wye® solves harmonic problems by canceling destructive load-generated triplens and non-triplens. This patented technology converts three phase input power to multi-phase outputs. Distributing your loads over these internally phase-shifted outputs forces the natural cancellation of the harmonics. Although imitated by others, the individual outputs of PDI's Quad-Wye® are the highest rated in the industry, thus providing maximum performance without sacrificing system capacity.

**REduNDANCY INCREASES SYSTEM RELIABILITY** For utmost system reliability, choose one of our dual input options. PDI manufactures dual-input PowerPaks with a full range of sensing and switching options to meet the speed and budget requirements of a wide array of applications. Our Manual Dual and Static Switch Primary and Secondary PowerPak PDU Systems help you create the most reliable



power distribution system available; one that provides multiple power paths from normal and emergency electrical sources all the way to the point-of-use level. PDI's Redundant Systems will keep your critical systems running around the clock by shielding them from the effects of power disruptions while allowing preventative maintenance on upstream equipment, anytime, without affecting your load.

**MODULAR DESIGN** PDI's modular design results in higher quality due to the standardized pre testing of all modules throughout the line. This advantage allows PDI to meet the tight project deadlines that data centers demand.

**PDI SERVICE AND SUPPORT** After your equipment has been installed, call on the PDI service team for 24 - 7 support. Our industry best sales and service team will stay with you from the design of your system through the life of your data center

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## SPECIFICATIONS

### RATINGS

- kVA Ratings: 15-300 kVA
- Input: 3-phase, 3 wire plus ground
- Input Voltage @ 50 Hz: 415 or 380V  
@ 60 Hz: 600, 480 or 208V
- Output: 3-phase, 4 wire plus ground
- Output Voltage @ 50 Hz: 415/240 or 380/220V  
@ 60 Hz: 600, 480 or 208/120V

### FEATURES

- Copper wound construction - better conducting and more resilient than aluminum
- Dual electrostatic shield - attenuates high frequency noise
- Oversized neutral conductor
- Common mode noise protection
- Transverse mode noise protection
- Accurate kW, power factor and THD measurement
- True RMS metering
- Operating Efficiency: 98% typical
- Listed to UL 1950, CSA Certified
- Modbus RTU communications
- BCMS available as factory installed option

### ENCLOSURE

- NEMA 1 enclosure with removable front side & rear panels
- Removable front, side and rear panels
- Integrated two-point latch and vision panels
- Flush-mounted door handle with integral locks
- Advanced door catch assures positive closure

### OPERATING CONDITIONS

- Operating Temperature: ambient 0°C to 40°C
- Storage Temperature: ambient -10°C to +40°C
- 50 Hz Operating Range: 47-53 Hz
- 60 Hz Operating Range: 57-63 Hz

### CUSTOMIZATION

PDI offers the most comprehensive designs in the industry. Let us help you create your own for your application.

# PDI

creating the perfect wave

Power Distribution, Inc.  
4200 Oakleys Court  
Richmond, VA 23223  
800.225.4838  
804.737.1703 fax  
web site: [www.pdicorp.com](http://www.pdicorp.com)



## POWERPAK PDU OPTIONS

### BRANCH CIRCUIT MONITORING SYSTEM: CURRENT ONLY & VOLTAGE VERSION

Choose between the current only version and the voltage version. PDI's patented system allows your site manager to control loads down to the branch circuit level. See the PDI BCMS brochure for specific differences.

### BRANCH CIRCUIT MONITORING SYSTEM: LOCAL MONITOR

Add a local monitor to your RPP for the best of both worlds - remote management via SNMP or Modbus and local management and reporting of critical measures from your breakers.

### QUAD-WYE<sup>®</sup> TECHNOLOGY

Solves harmonic problems by canceling the destructive triplen and non-triplen current harmonics.

### TRANSIENT SUPPRESSION NETWORK (TSN)

An integrated system engineered to meet ANSI/IEEE category C standards for transient voltages and surge currents.

### LIGHTNING ARRESTOR/SURGE SUPPRESSOR

Protects the insulation of the system magnetics.

### DISTRIBUTION PANELBOARDS/SUB-FEED BREAKERS

Customized distribution configurations meet the demands of any facility.

### REDUNDANT POWER DISTRIBUTION SYSTEMS

#### • POWERPAK MD

Dual-Input Power Distribution Systems that allow for manual source selection to isolate upstream equipment and facilitate system maintenance and repair.

#### • POWERPAK PRIMARY & SECONDARY STATIC SWITCH SYSTEM

Static Switching, Power Conditioning and Distribution System for transparent dual power source transfers. An integrated line up that offers primary, secondary and dual-cord configurations to help optimize your system solution. The PDI static switch will sense and transfer between sources in 4 ms.