

zPDS™ Zonit Power Distribution System



The Zonit **zPDS** is an innovative “at-the-rack” electrical power distribution system that simplifies the distribution and management of redundant 3 phase power all the way to the cabinet. The system is designed for use in high density environments and high reliability environments.

zPDS is an A-B redundantly fed, 208V, 415V or 480V; 3 phase, wye configured input distribution device that is rack mountable. It provides statistical phase load balancing with circuit breakers for each phase of each output. It allows easy power reconfigurations at the rack with plug adaptors installed by in-house technicians and is compatible with all existing power strips and infrastructures.

zPDS1 DEPLOYMENT METHODOLOGY

- For new data center builds, expansions or equipment refreshes, install 3 ϕ power whips for maximum planned redundant power density using 208V, 415V or 480V and 20A, 30A, 40A or 60A per cabinet.
- Deploy zPDS to support from 1 to 4 powered cabinets using Zonit plug adaptors at the cabinet to configure any type of 1 ϕ , Split 1 ϕ or 3 ϕ for either 20A or 30A IT equipment load.
- As power demands shift, either plug new zPDS units into available power whips or re-configure cabinet power using existing zPDS units and Zonit plug adaptors; no need to pay for expensive power whip re-configurations.

zPDS FEATURES AND MODELS

The first generation, zPDS1 has been deployed for many years and has a rich feature set including:

- Output: 3 ϕ , 1 ϕ , and Split 1 ϕ ; reconfigurable at the rack using locking plug adapters.
- Input: A-B independently fed 208V/ 3 ϕ Wye.
- Statistical phase balancing.
- Circuit breakers for each phase of each output.
- Interoperability with all busway, EMT conduit and raceway build outs and power strips in either raised floor or overhead.
- Reduces electrical costs for labor, wiring changes and equipment.
- Reduces whip and cord tangle, clutter, and airflow blockage.
- Powers up to 4 cabinets.

The second generation, zPDS is due to be released in late 2016. Its feature set includes all the features of the first generation zPDS plus the following:

- Input options: 208V/3 ϕ Wye, 415V/3 ϕ Wye or 480V/3 ϕ Wye.
- Output options: Many 1 ϕ , Split 1 ϕ or 3 ϕ options.
- 30A, 40A or 60A rating for each of the A and B inputs.
- Maximum redundant full load VA: 49.8kVA (at 480V), 41.3kVA (at 415V) or 21.6kVA (at 208V) per input.
- Maximum non-redundant full load VA: 172.9kVA (at 480V), 149.5kVA (at 415V) or 43.2kVA (at 208V) per input.
- Circuit breakers protect each phase of each output on both A & B.

zPDS BENEFITS

- Reduces outages inherent with power distribution changes such as re-cabling and hot-changes.
- Lowers electrical costs for labor, wiring changes and equipment.
- Eases power cable management by reducing whip and cord tangle, clutter and airflow blockage.
- Supports both “build it as you go” and “build it once” power cabling methods.
- Implements best practice of distributing an IT power grid based on maximum planned power density.