Powerware 9170+ 3–18 kVA

- True online, double-conversion design for maximum reliability
- Modular, scalable design allows for future growth by enabling battery and/or power modules to be added
- N+X power and logic redundancy eliminates single point-of-failure
- Optional EBMs prolong runtimes
- Ideal protection for mid-range computers, critical servers, telecommunications equipment, generator sites and ISP applications

Powerware 9355 10–30 kVA

- Protects connected equipment from all nine of the most common power problems with true online, double-conversion topology
- Delivers maximum power density in a compact tower design
- Provides more real power in less space with a 0.9 output power factor
- Delivers extra capacity or redundancy through patented Powerware Hot Sync paralleling of multiple modules
- Optimizes battery life and recharge time with exclusive ABM technology
- Provides a 0.99 input power factor and generator-friendly <5% total harmonic distortion
- Ensures data and system integrity with complete power management software

Powerware 9390 40–160 kVA

- High efficiency of up to 94 percent reduces overall cost of ownership by reducing the cost of power to support protected loads
- Low total input harmonic current distortion (THD) of less than 4.5 percent enhances compatibility with upstream power systems
- Input power factor of 0.99 reduces the input kVA required to power the UPS
- Output power rated at 0.9 power factor accommodates high power factor load requirements
- Double-conversion design completely isolates equipment from all types of power contamination, creating clean, perfect sine-wave power for downstream systems

Powerware BladeUPS Power System 12 kW

- Achieves the highest power density in the marketplace
- Requires only 6 rack units (6U) per module
- Reduces single points of failure with an intelligent bypass design that eliminates human error
- Provides the ultimate in reliability through a 'peer-to-peer' paralleling relationship

Powerware Enclosure Solutions

- Highly functional and stylish, value packed and competitively priced
- Perforated doors exceed server air flow requirements
- Split rear doors minimize floor space requirements and provide ease of installation and maintenance
- Floating 19" rails provide more room for zero U cable management and PDU installations
- Internal door hinges offer a high level of cabinet security
- Tool-free accessories improve ease of installation and reduce installation time and costs

Why Choose a Powerware® UPS?

In today's around-the-clock business environment, downtime just isn't an option. The ability to ensure that computer systems and mission-critical applications are up and running at all times is vital. The most frequent cause of system-wide failure stems from nine common power problems, all of which can threaten your network's functionality, as well as your company's integrity. Downtime—even a matter of seconds—can carry a staggering price tag. Studies show that businesses can lose $10,000 to several million dollars per minute when networks go down, a steep price to pay when premium power protection is available for a fraction of what you're spending on your hardware solutions.

One of the most successful means of mitigating the risks associated with power problems is the installation of a Powerware uninterruptible power system (UPS). A complete line of UPSs is available, featuring three levels of protection: Series 3, Series 5 and Series 9. Also available are products with Ferro resonant technology. Depending on which series of UPSs you choose, your equipment will be safeguarded against three, five, or all nine of the most common power problems outlined in this brochure.

Powerware premium UPS solutions offer a number of exclusive benefits, including:

- Comprehensive Product Line Ranging from 350 VA–160 kVA
- Award-winning, Technologically Advanced UPSs
- Unparalleled Service & Support
- Comprehensive Power Management Software
- Premium Warranty Coverage

Nine common power problems

1. **Power failure** A total loss of utility power. Can be caused by lightning strikes, downed power lines, grid overdemands, accidents, etc.
2. **Power sag** Short-term low voltage. Triggered by the startup of large loads, utility switching, utility equipment failure, lightning, and power service that is too small for the demand. Can cause system crashes and hardware damage.
3. **Power surge** Also known as a spike. Short-term high voltage above 110% of nominal. Surges can be triggered by a rapid reduction in power loads, heavy equipment being turned off or by utility switching. The results can damage hardware.
4. **Undervoltage** Also known as a brownout. Reduced line voltage for extended periods ranging from a few minutes to a few days. Can be caused by an intentional utility voltage reduction to conserve power or heavy loads that exceed supply capacity.
5. **Overvoltage** Increased line voltage for extended periods ranging from a few minutes to a few days. Can be caused by a lightning strike. A spike almost always results in data loss and/or hardware damage.
6. **Electrical line noise** High frequency waveform interference. Can be caused by either Line RFI or EMI interference generated by transmitters, welding devices, SCR-driven printers, and lightning.
7. **Frequency variation** A change in frequency stability, resulting from generators or small co-generation sites being loaded and unloaded. Can cause erratic operation, data loss, system crashes, and equipment damage.
8. **Switching transient** Instantaneous undervoltage (notch). Normal duration is shorter than a spike.
9. **Harmonic distortion** Distortion of the normal waveform, caused by switch-mode power supplies, variable speed motors and drives, copiers and fax machines, and other non-linear loads. Can result in communication errors, overheating, and hardware damage.

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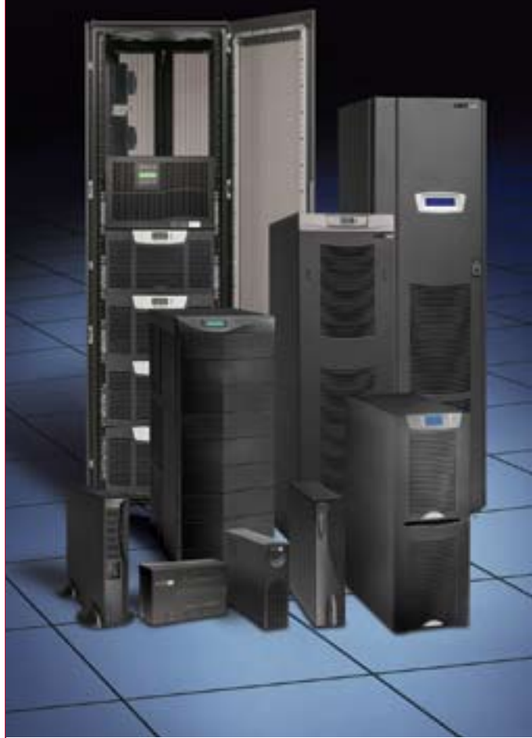
SLT12LTA
September 2006

EATON | Powerware

Premium UPS solutions:
Power protection you can count on



Series 3 power protection

The Powerware Series 3 UPS offers a cost-effective solution to solving three of the nine most common power problems.

Powerware 3105 350–700 VA

- Easy to install, compact design
- User-replaceable batteries
- Start-on-battery capability
- Audible alarms warn of power and battery problems
- Eight outlets: four with surge protection and battery backup; four with surge protection only
- Protects data lines from “back door” surges
- USB port and cables are standard

Powerware Basic PDU

- Designed for a wide range of applications: 100–240V In/Out; 12–32A Output Current
- Up to 12 output receptacles in 1U of space
- NEMA and IEC type output receptacles and input connections
- Overload protection is standard and provides an ON/OFF switch
- Visual indication of incoming power to the PDU via an LED
- Reduced installation time—1U mounting brackets are pre-installed
- Mounting flexibility—units can be mounted in 0U, wall mounted and floor mounted, in addition to 1U mounting

Series 5 power protection

Powerware Series 5 UPSs provide superior protection against five of the nine most common problems, and also offer varying degrees of protection against other power problems.

Powerware 5110 350–1500 VA

- Easy to install, compact design
- Eight outlets: four with surge protection and battery backup; four with surge protection only
- Automatic Voltage Regulation (AVR)
- Audible alarms warn of power and battery problems
- Start-on-battery capability
- USB port and cables are standard
- User-replaceable batteries

Powerware 5115 500–1500 VA

- Optimizes battery life and recharge time with exclusive ABM® technology
- Ideal protection for PCs, workstations, small-office home-office (SOHO) equipment and small internet working devices
- Rackmount models available; 500–1500 VA
- USB and serial communication ports

Powerware 5125 1000–6000 VA

- Tower and 2-in-1 form factor for rackmount (2U and 3U) configurations also available
- Optimizes battery life and recharge time with exclusive ABM technology
- Optional Extended Battery Modules (EBMs) prolong runtimes
- Individual load segment control maximizes runtime
- Ideal protection for PCs, workstations, servers, voice/data/wireless equipment, and computer telephony integration
- Select units available bundled with factory-installed ConnectUPS™-X Web/SNMP Card

Powerware FERRUPS® 500 VA–18 kVA

- Active Voltage Regulation converts power from almost any AC source into computer-grade power
- Eliminates harmful harmonic currents generated by widely used switch-mode power supplies
- Regulates output voltage without drawing power from the batteries for input voltages as low as 38 percent below nominal, enabling the batteries to remain charged in the event of power disturbances
- Designed to meet the demands of today’s computer loads, including power-factor corrected, switch-mode, and linear power supplies
- Ideal protection for midrange computer systems, application and data base servers, clustered file servers, internet working equipment, PBX and communications systems, and equipment in poor power conditions

Series 9 power protection

True online systems, such as Powerware Series 9 UPS, are the only products that completely isolate connected equipment from all nine common power problems.

Powerware 9120 700–3000 VA

- True online, double-conversion design for maximum reliability
- Optimizes battery life and recharge time with exclusive ABM technology
- Optional EBMs prolong runtimes
- Individual load segment control maximizes runtime
- Ideal protection for networks, Web servers, telecommunications applications and other critical electronic equipment

Powerware 9125 700–6000 VA

- True online, double-conversion design for maximum reliability
- 2-in-1 form factor provides flexibility for use in rack (2U and 5U) or tower environments
- Optimizes battery life and recharge time with exclusive ABM technology
- Optional EBMs prolong runtimes
- Individual load segment control maximizes runtime
- Ideal protection for servers, communications equipment and other mission-critical applications

Powerware 9140 7.5–10 kVA

- Online, double-conversion design for maximum reliability
- Occupies only 6U of rack space, including internal batteries
- Optimizes battery life and recharge time with exclusive ABM technology
- Extends battery runtime for up to 45 minutes (at full load) with up to four 3U EBMs
- Lightweight, user-replaceable, hot-swappable
- Electronics and battery modules for easy installation and service
- Choice of single- or three-phase input, (480/230V) with single phase output (hardwired models only)
- USB port with HID standard, optional X-Slot ® communication card
- Powerware LanSafe® software for remote monitoring, management and shutdown can be run through USB or additional X-slot card
- Ideal protection for mission-critical, high-density rack environments
- Galvanic isolation separates input from output, filtering line noise and surges

Powerware 9155 8–15 kVA

- Optimizes battery life and recharge time with exclusive ABM technology
- Reduces total harmonic distortion (THD) to less than five percent
- Supports Powerware Hot Sync® paralleling of multiple modules for redundancy or extra capacity
- Provides more real wattage in less space with a 0.9 power factor protecting more equipment and leaving more room for expansion