

EAT•N

Powerware

Powerware BladeUPS Uninterruptible Power System

Product Focus

12–60 kW

EAT•N | Powerware



BladeUPS

Powerware BladeUPS

High-density computing environments demand more power

Today, the management of a data center or network operations center places you under the intense pressure to reduce costs while dealing with inescapable operational realities:

Expanding power demands. The blade servers that are satisfying business demands can also raise the demands for power consumption in the same footprint. Rack power requirements that were once at 60 watts per U may now have to be delivered at levels up to 600 watts per U with redundant power supplies.

Increasing power costs. Utility rates have a common recurrence. They always go up. IDC research reports that energy costs represent a dominant influence on IT spending (IDC U.S. Market Watch Survey, Q2 2006, September 7, 2006). Most organizations are researching and developing plans for the selection of new data center sites based on the proximity of affordable power facilities. The need for more cost-effective power solutions is confirmed in a recent Gartner research report. Power will be 50% of data center operational costs (Gartner RAS Core Research, August 18, 2006).

Excessive heat. Blade servers generate a lot of heat that translates into high demand for additional energy. A fully loaded rack of blade servers can use close to 30 kW of power. This equals over 100,000 BTU/hr in heat generation that requires cooling—wasted heat that is not utilized in any way. Since cooling adds huge costs to data center operations, IT organizations are forced to increase their power efficiency to counteract the inefficient heat and cooling problems.

If you manage, engineer, or plan the present and future of a data center or network operations center, you are already aware of these critical issues and their impact on operations. Your challenge is to make decisions that provide efficient power protection and distribution for growing loads, while managing the heat. Eaton is ready to help you with these challenges.

Introducing the Powerware BladeUPS uninterruptible power system

Designed specifically for high-density computing environments, the Powerware® BladeUPS® from Eaton® delivers 12 kW of efficient, reliable power in only 6U of standard rack space, including batteries. Expand capacity by combining 12 kW modules in a building block fashion to deliver 60 kW of redundant backup power from a single rack enclosure. This powerful configuration delivers higher power density than competitive, modular solutions, while dissipating only one-third of the heat.

The standard internal batteries provide needed ride-through power until an auxiliary power source takes over or systems are gracefully shut down. Extend runtime up to 34 minutes at full load (or 76 minutes at half load) with Extended Battery Modules (EBMs).

Power protection for:

Blade servers

Small, medium, and large data centers

Network closets

PBX and VoIP equipment

Networking applications: IPTV, security

Storage devices: RAID, SAN

Database clusters



Powerware BladeUPS - 12 kW

Features

- Protects mission-critical applications with innovative backup power technology designed specifically for high-density computing environments
- Supports the constant moves, adds, and changes (MAC) of today's dynamic data centers with a modular, scalable, and flexible backup power architecture
- Conserves valuable rack space with 12 kW of power in only 6U of rack height, including batteries
- Accommodates growth by enabling building-block upgrades from 12 kW to 60 kW in a single rack enclosure
- Reduces energy costs and cooling needs through best-in-class efficiency performance
- Delivers highest levels of reliability at the rack with patented Powerware Hot Sync® paralleling technology and intelligent bypass design, field proven in thousands of large data centers globally
- Simplifies installation and service with true plug-and-power connections and hot-swappable batteries and electronics modules
- Increases battery life through ABM® technology, resulting in more uptime and fewer battery replacements



Powerware BladeUPS in a rack
(60 kW, N+1 Redundant)

Reduce energy costs with high-efficiency

As utility rates continue to climb, you need the highest efficiency delivered in the industry. Eaton, knowing this was critically important, confirmed the need through extensive customer research. The concern for energy efficiency tops the list.

The Powerware BladeUPS delivers an outstanding, industry-leading 97 percent efficiency in normal operation. Even at <50% load, where efficiency is typically much lower, this UPS performs more efficiently than competitors' modular products at full load.

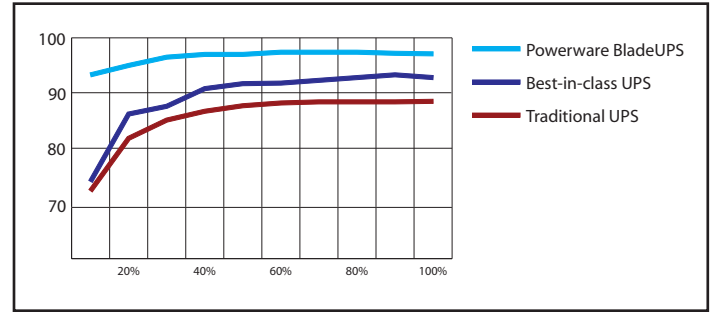
Even small increases in efficiency can quickly translate into thousands of dollars. The example compares annual and five-year energy costs for the Powerware BladeUPS and a competitor's solution. It's easy to see that the Powerware BladeUPS pays for itself through energy and cooling savings alone.

In addition to dramatic cost savings, high system efficiency extends battery runtimes and produces cooler operating conditions within the UPS, extending the life of components and increasing overall reliability and performance.

Example

| | Powerware BladeUPS | Traditional UPS |
|--|--|-----------------|
| UPS Efficiency Rating | >97% | 91.5% |
| Rack Power Consumption | 60 kW | 60 kW |
| Cost per Kilowatt Hour | \$0.10 | \$0.10 |
| Cost to Operate per Hour | \$6.18 | \$6.56 |
| Monthly Power Savings | \$273 Saved Each Month with Powerware BladeUPS | |
| Heat Dissipation (BTUs per hour) | 6,300 | 19,000 |
| *Monthly Cooling Savings | \$246 Saved Each Month with Powerware BladeUPS | |
| Annual Savings with Powerware BladeUPS | \$6,238 Saved Each Year | |
| Five-Year Savings with Powerware BladeUPS | \$31,190 Saved In Five Years | |

* Cooling savings based on industry calculation of cooling costs per kW of power costs.



Even at very small loads, where you would expect efficiency to be lower, the Powerware BladeUPS is still more efficient than other UPS products at full load.

Reduce cooling costs with lower heat dissipation

The high-efficiency Powerware BladeUPS reduces the power requirements for the data center. In the example shown, the Powerware BladeUPS reduces energy costs by an average of \$273 per month. In addition, the high efficiency of a Powerware BladeUPS reduces overall air conditioning needs by more than one third; multiply that with a reduction in cooling costs by one-third and utility bills are further decreased by an additional \$246 per month. The savings compound with the data center size and the number of UPS products. The low heat dissipation means this UPS can be located close to equipment racks without a concern for creating hot spots in the data center.



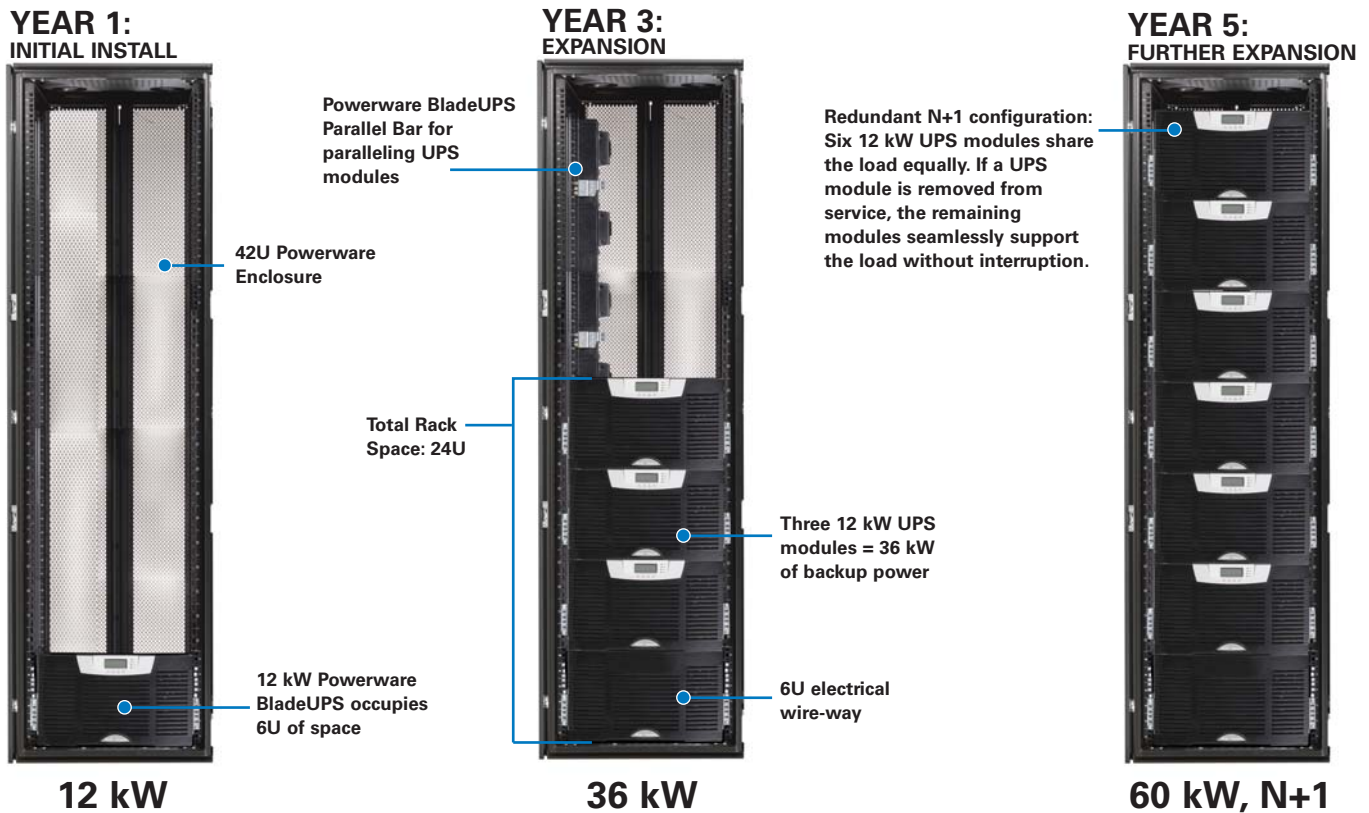
The Powerware BladeUPS remains cool even in a data center full of servers.

Meet current and changing requirements with modular architecture

The building block of the Powerware BladeUPS system is a 6U rackmount module that provides 12 kW of backup power protection. The system expands easily to provide maximum results. As your data center grows, the system's modularity plays a key role in optimizing your capital planning and deployment. Using the patented and field-proven Powerware Hot Sync paralleling technology, up to six Powerware BladeUPS modules can be paralleled for extra capacity or redundancy, providing 60 kW of redundant backup power protection in one 19 inch rack.

Patented load-sharing control intelligently distributes the workload among modules without requiring direct synchronization links among them. Any module can provide backup support for any other, with no interruption or downtime. For instance, in a redundant system you could perform full maintenance on any module without any interruption of conditioned power to the protected IT equipment.

The Powerware BladeUPS is the most scalable backup power protection solution of its kind, scaling easily from 12 kW to 60 kW, N+1 redundant, in a standard 19" rack enclosure.



The Powerware BladeUPS is designed to be extraordinarily flexible—configured as a single module or multi-module system (up to six modules) in a standard 19 inch rack enclosure. The modular design enables you to deploy just the right amount of backup protection at the right price for your current needs and expand later whenever needed.

Easy setup with simple parallel configuration changes

The Powerware BladeUPS is easy to install, configure, and deploy—and easy to expand later, without help from Eaton. To link multiple Powerware BladeUPS modules into a parallel configuration, all you need is a Powerware BladeUPS Parallel Bar—a simple kit installed in the bottom of the rack and on the back rail. IT personnel can then simply plug additional modules into the parallel bus bar. The system is intelligent, so it automatically detects paralleled modules and fully configures itself for parallel operations.



Adding modules is a simple plug-and-power procedure for IT personnel with safety-approved connectors.

Administrators can monitor and manage the Powerware BladeUPS using the unit's LCD panel or remote monitoring software. The UPS provides data for the entire multi-module system, as well as the individual module. In addition, a module working in a parallel configuration can be separated at any time and re-deployed as a stand-alone module to meet a data center's changing requirements.



Powerware BladeUPS Parallel Bar

The Powerware BladeUPS Parallel Bar easily connects up to six modules in parallel.

The brightly backlit 2.6" LCD shows parameters of the system or a module.



Access parallel system information



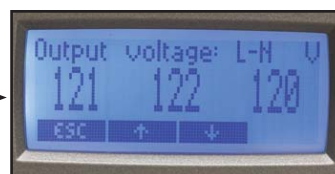
Display output from multiple modules on one screen



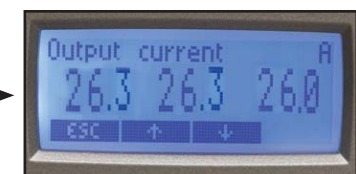
Display full system output from any UPS



Review any UPS from any display



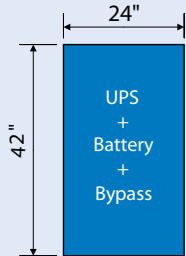
Display individual module output voltage



Display individual module output current

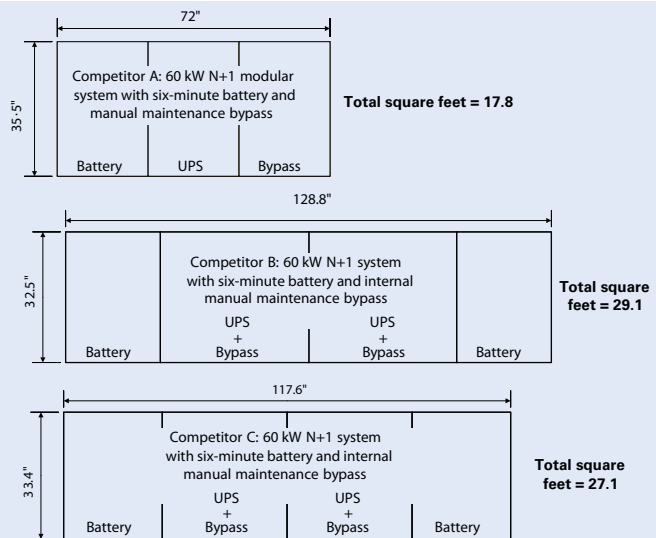
Save space with high power density UPS

The Powerware BladeUPS offers the smallest footprint of any UPS in its class—double the power density of any other UPS on the market. This compact design leaves more space for IT equipment in the rack and data center.



Powerware BladeUPS
60 kW N+1 modular
system with six-minute
battery and automatic
maintenance bypass

Total square feet = 7.0



Powerware BladeUPS system footprint compared to competitors' footprints for 60 kW N+1 redundant application

Expedite deployment with flexible installation options

The Powerware BladeUPS can be deployed in a variety of system architectures to support the specific requirements of your computer room or data center, and to support the desired level of redundancy (Tier I through Tier IV, as defined by the Uptime Institute).

Centralized power protection for small computer rooms. Start with one 12 kW module and expand to 60 kW with N+1 redundancy in single 19" rack enclosure.

Zone power protection for mid-sized computer rooms. Deploy 60 kW (N+1) in a 19" rack to protect a row of IT equipment racks.

Distributed power protection. Distribute 12 kW modules to protect one to three racks—thereby achieving zero footprint power protection.

Hybrid power protection. Stronger redundancy of power protection for equipment racks containing critical IT equipment.

- For dual-corded loads with one source on a central UPS and the other on utility power, you can back up selected loads with a local Powerware BladeUPS, deployed in a distributed or zone fashion.
- For dual- or single-corded loads on a central UPS, you can back up selected loads with a local Powerware BladeUPS (distributed or zone) in series with the central UPS. This configuration provides maximum reliability close to critical loads, with minimal heat dissipation and maximum efficiency.

With the flexibility to deploy and re-deploy a Powerware BladeUPS either in single or parallel systems—data center managers can tailor power protection to adapt to changing needs, often without the need for an electrician or service technician.

Eaton also offers an assortment of plug-and-play power distribution accessories with various input and output connections to distribute power from the Powerware BladeUPS to rack power strips or directly to high-power servers. You can choose from distribution designs with or without monitoring capability, for redundant or non-redundant applications spanning from zero U to full rack height.

System Architecture with the Powerware BladeUPS

Centralized Power Protection



Centralized Power Protection—Dual Power Feeds



Zone Power Protection



Distributed Power Protection



Hybrid Power Protection



Central Large UPS



Count on reliable system performance and uptime

Recognizing the mission-critical nature of data center operations, the Powerware BladeUPS has been designed for premium reliability and continuous operation. The rackmount Powerware BladeUPS incorporates leading technologies that Eaton developed for its largest UPSs, such as:

Robust paralleling. With Eaton's patented Powerware Hot Sync technology, UPS modules work in peer-to-peer fashion when configured in a parallel system. Most other paralleling systems on the market use a single central main controller with a backup controller. If the main controller fails, the system must recognize this and transfer control to the backup control, or the entire system fails. With Eaton's patented approach, each UPS module operates independently, yet is completely synchronized with the others. There is no change in control, therefore no single point of failure.

Intelligent maintenance bypass switch. The internal switch inside the UPS chassis automatically activates bypass mode whenever a power module is removed. This feature ensures that power to protected loads is not accidentally interrupted by human error. (If the UPS is in a parallel environment with N+1 redundancy, removing an electronics module only causes that particular UPS module to go offline while the protected equipment is supported by other modules in the configuration.)

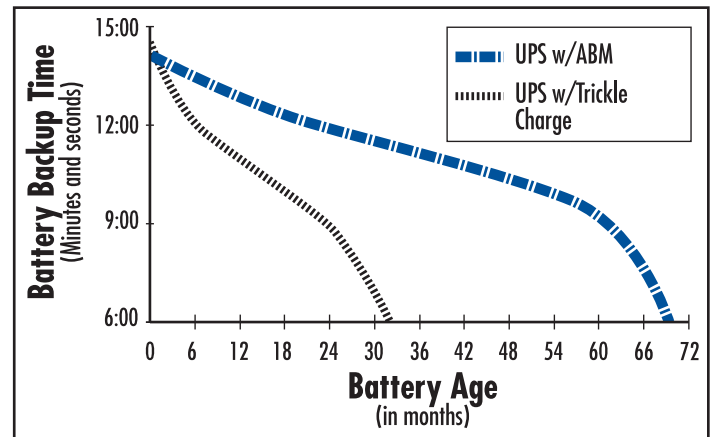
Static bypass switch. All Powerware BladeUPS modules have their own static switch for normal operations and for internal bypass in case of a high overload condition, output load fault or internal failure.

Hot-swappable electronics and battery modules. Replacing batteries or electronics modules can be done in minutes without interrupting power to IT equipment. This hot-swap capability helps reduce mean time to repair (MTTR) and dramatically improves the availability of the protected IT equipment.



IT staff can easily replace battery modules.

Eaton's advanced battery management technique. ABM technology significantly extends battery service life with a unique three-stage charging technique. The UPS automatically tests battery health and provides advance notification when preventive maintenance is needed, allowing ample time to hot-swap batteries without ever having to shut down connected equipment.



Eaton's ABM technology significantly increases battery service life.

Flexibly distribute power to racks

With the Powerware Rack Power Module (RPM)

Partner the Powerware BladeUPS with a Powerware Rack Power Module (RPM) to create a highly flexible, adaptable power delivery architecture at the rack level. The RPM delivers up to 36 kW of power in an organized manner to loads of various voltages, power cords and layouts.

The 3U RPM can be deployed in the same rack with the UPS and IT equipment; there's no need for a dedicated infrastructure rack. The resulting architecture has fewer cables to manage, fewer distribution points to monitor, and greater flexibility for IT personnel make changes without an electrician.

Consider a Tier II data center with 42 racks at 5 kW per rack: the Powerware BladeUPS with RPM can meet power requirements with half the number of racks, 60 percent less rack space, 45 percent less cabling and 41 percent less square footage than other vendors' power distribution products that require dedicated racks. These advantages make the Powerware BladeUPS with RPM ideal for distributed protection in small to mid-sized data centers, or to add zone protection in large data centers that have centralized UPSs.



Powerware Rack Power Module (RPM)

Simplify UPS installation and maintenance

The Powerware BladeUPS is easy to install, configure, and deploy. All Powerware BladeUPS modules (UPS and battery) come with rackmount kits for easy installation in standard equipment racks. In-house IT staff can install and service this UPS themselves. Adding parallel units for future expansion is a simple, plug-and-play procedure.

The Powerware BladeUPS battery trays are user-replaceable so that one person, working alone, can replace the battery without disrupting data center operations or power to protected equipment.

Most IT teams are confident managing the Powerware BladeUPS without outside help because of its simplicity. However, Eaton is ready to provide support with its world-class service organization of 300 customer service technicians in North America and 1200 internationally. These factory-certified and trained service technicians deliver 7x24 support including on-site corrective and preventive maintenance, battery solutions, service training, integration services and spare parts.

The Powerware BladeUPS is also compatible with Eaton's eNotify Remote Monitoring system which features 7x24 real-time monitoring of 100+ UPS and battery alarms, with Eaton's staff of technical experts able to respond immediately and resolve many issues remotely. eNotify delivers monthly email reports that detail UPS performance and alarm history. To test drive eNotify free for 90 days without a service plan, please visit www.powerware.com/eNotify.



IT staff can easily install electronics modules.



Powerware BladeUPS Extended Battery Module

Flexible runtime options

Each Powerware BladeUPS can be configured with its own external battery backup. The Powerware BladeUPS design eliminates this single point of failure. Competitive, modular systems use a centralized battery bank with a shared connection point that presents a potential single point of failure.

POWERWARE BLADEUPS TYPICAL BATTERY RUNTIME CHART (IN MINUTES)

| Single Module | | Internal Battery | + 1 EBM | + 2 EBMs | + 3 EBMs | + 4 EBMs |
|---------------|--------|------------------|---------|----------|----------|----------|
| Load kW | Load % | | | | | |
| 1.6 | 13% | 55 | 118 | 183 | 253 | 329 |
| 2.4 | 20% | 37 | 78.3 | 119 | 163 | 211 |
| 4 | 33% | 23 | 46 | 69 | 94 | 120 |
| 6 | 50% | 13 | 30 | 44 | 59 | 76 |
| 8 | 67% | 9 | 21 | 32 | 43 | 54 |
| 9.6 | 80% | 6.9 | 17 | 26 | 34 | 44 |
| 12 | 100% | 4.8 | 12 | 20 | 27 | 34 |

POWERWARE BLADEUPS TYPICAL BATTERY RUNTIME CHART (PARALLEL UPS, IN MINUTES)

| Number of UPS Modules | Total Load kW | Configuration | Internal Battery | + 1 EBM | + 2 EBMs | + 3 EBMs | + 4 EBMs |
|-----------------------|---------------|---------------|------------------|---------|----------|----------|----------|
| 6 | 60 | N+1 | 6 | 15 | 22 | 29 | 37 |
| 5 | 48 | N+1 | 6.9 | 17 | 26 | 34 | 44 |
| 4 | 36 | N+1 | 18 | 28 | 37 | 47 | 47 |
| 3 | 24 | N+1 | 9 | 21 | 32 | 43 | 54 |
| 2 | 12 | N+1 | 13 | 30 | 44 | 59 | 76 |

Monitor the power infrastructure from anywhere

You can monitor the Powerware BladeUPS over your LAN or the Internet to stay informed of conditions in the power protection infrastructure.

With Powerware LanSafe® software that comes with the UPS, administrators can monitor UPS status and gracefully shut down or restart the systems connected to that UPS.

Using PowerVision® software, you can also monitor the status of multiple UPSs and ancillary devices to accurately diagnose past events and predict future conditions.

FORESEER® software analyzes thousands of data points to proactively manage key equipment throughout an enterprise-wide infrastructure. This system interfaces with an extensive collection of devices from most major manufacturers of power and environmental equipment, as well as subsystems for fire detection and suppression, security, fuel handling, and building controls.

Software and connectivity options provide a unified window into the state of IT and facilities systems. With this level of visibility, you can transform the power system into a powerful strategic asset.

Gain a new level of confidence

The innovative Powerware BladeUPS delivers reliable, energy-efficient backup power protection for your organization's critical IT systems today, and the flexibility to support your changing needs tomorrow.

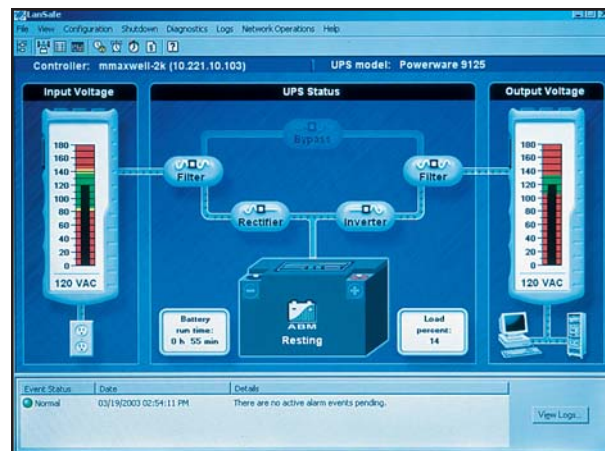
Eaton offers a full line of technology solutions designed to address the power crunch in IT infrastructures. In fact, Eaton offers solutions for the entire power system, from the point where utility power enters your facility all the way to the individual server. Eaton's solutions for the computer room include:

- Rackmount and freestanding power protection systems deliver computer-grade power with battery backup throughout a data center
- Versatile power distribution products and cable management accessories make it easy to deliver power exactly where needed, even as data centers adapt and evolve
- Attractive and functional enclosures and structured wiring closets turn any location into a virtual, secure data center

Learn more about complete, integrated solutions for protecting and organizing your IT equipment.

1-800-356-5794

www.powerware.com/bladeups



Powerware LanSafe software is included at no charge with the Powerware BladeUPS.



A configurable user interface displays critical data center information with FORESEER software.

Technical Specifications¹

General Characteristics

| | |
|---------------------------------|---|
| Power Rating | 12 kW per UPS Module |
| Efficiency | Up to 97% |
| Heat Dissipation | 371W/1266 BTU/hr at 100% rated load |
| Cooling | Fan cooled, temperature microprocessor monitored; front air entry, rear exhaust |
| Audible Noise, Normal Operation | <60 dBA at 1 meter |
| Altitude Before Derating | 1000 meters (3300 ft ASL) |

Input Characteristics

| | |
|--------------------------|--|
| Input Voltage | 208 Vac and 400 Vac models |
| Voltage Range | 208V model: 180 to 265 Vac 400V model: 311 to 519 Vac |
| Frequency Range | 50 or 60 Hz, ± 5 Hz |
| Input Current Distortion | <5% with IT loads (PFC power supplies) |
| Input Power Factor | >0.99 with IT loads (PFC power supplies) |
| Inrush Current | Load dependent |
| Input Requirements | Three-phase, four-wire + ground |
| Bypass Source | Same as input (single feed) |
| Generator Compatibility | Fast sync slew rate for generator synchronization |

Output Characteristics

| | |
|---------------------------------|--|
| Rated Output Voltage | 208V model: 180 to 225 Vac, Ph to Ph 400V model: 180 to 240 Vac, Ph to N |
| Output Configuration | Three-phase, four-wire + ground |
| Output Frequency (nominal) | 50 or 60 Hz auto-detection on startup |
| Frequency Regulation | 0.1 Hz free running |
| Load Power Factor Range | Lagging: 0.7 Leading: 0.9 |
| Total Output Voltage Distortion | <3% with IT loads (PFC power supplies) <5% non-linear or non-PFC power supplies |

Battery Characteristics

| | |
|-----------------------------|---|
| Battery Type | VRLA - AGM |
| Battery Runtime (Internal) | 13 minutes at 50% load 4.8 minutes at 100% load |
| Battery String Voltage | 240 Vdc |
| Battery Test | Automatic battery test standard (remote scheduling capable) Manual battery test from front display |
| Battery Recharge Profile | ABM three-stage charging technology |
| Battery Cut-off Voltage | Variable from 1.67 VPC at <5 min. runtime to 1.75 VPC at >90 min. runtime |
| Battery Low Condition | Announced with alarm |
| Extended Battery Capability | Yes, add up to four additional 3U battery enclosures (-34 min at 100% load, >1 hour at 50% load) |

Physical Characteristics

| | |
|---|--|
| Dimensions (HxWxD) | |
| UPS | 10.3 (6U) x 17.4 x 26.0 inches 267 x 442 x 660 mm |
| EBM | 5.2 (3U) x 17.2 x 26 inches 132 x 437 x 660 mm |
| Note: | |
| Total Chassis Weight without Batteries or Electronics | 100 lb. (46 kg) |
| Total Chassis Weight with Batteries or Electronics | 307 lb. (140 kg) |
| Total UPS Weight without Batteries | 135 lb (61 kg) |
| Total UPS Weight with Batteries | 307 lb (140 kg) |
| EBM Weight | 170 lb (77 kg) |

Communications and User Interface

| | |
|---|--|
| Software Compatibility | UPS ships with Software Suite CD containing LanSafe power management software and a trial version of PowerVision |
| X-Slot [®] Bays | Two available for the cards listed below |
| Optional X-Slot Communication Cards | |
| Application | Powerware Card |
| Web – TCP/IP | ConnectUPS-X Web/SNMP Card |
| Modbus [®] RTU | Modbus Card |
| IBM eServer [™] (i5 [™] , iSeries [™] , or AS/400 [®]) | Relay Interface Card |
| N/O, N/C (dry contacts) | Industrial Relay Card |
| Parallel Remote Monitoring | Powerware Hot Sync CAN Bridge Card Modem Card |
| Control Panel LCD | Two lines by 20 characters Four menu-driven interface buttons Four status at a glance LEDs |
| Multi-language | English standard; 20 languages available |
| Configuration Changes | User capable, firmware auto configures |
| Dry Contact Inputs | Two, user-configurable |
| Dry Contact Outputs | One, user-configurable |

Service

| | |
|-------------------------|---|
| Installation | User capable, located in the IT racks |
| Preventive Maintenance | User capable, optional factory service available |
| Corrective Maintenance | User capable, optional factory service available |
| Serviceability Features | Hot-swappable batteries Hot-swappable electronics module Automated internal maintenance bypass Auto-configure firmware Flash firmware upgradeable |

Certifications

| | |
|----------------------------|---|
| Safety | 208V model: UL1778, cUL 400V model: CE |
| EMI | 208V model: FCC Part 15 Class A 400V model: EN 62040-2 Class A |
| Surge Protection | ANSI C62.41, Cat B-3 |
| Hazardous Materials (RoHS) | EU Directive 2002/95/EC Category 3 (4 of 5) |

Warranty

| | |
|-----------------|---------------------------------|
| Standard | 12 months |
| Warranty Repair | Factory depot repair or replace |

Service Support Agreements²

| | |
|--------------|--|
| Depot | PowerTrust [™] Express |
| On-site 5x8 | PowerTrust Value |
| On-site 7x24 | PowerTrust eight-, six- or two-hour response |

Options and Accessories

| |
|--|
| Detachable input cord |
| Detachable input/output cord assembly |
| Detachable paralleling cord assembly |
| Extended Battery Modules (EBMs) |
| 3U output sub-distribution module |
| 0U to 3U rack power strips |
| 60 kW Powerware BladeUPS Parallel Bar |
| Four-post rail kit |
| Environmental Monitoring Probe (EMP) for temperature and humidity monitoring |
| X-Slot Communication Cards (see Communications and User Interface section) |

1. Due to continuing product improvement programs, specifications are subject to change without notice.
2. eNotify Remote Monitoring and 7x24 technical support included.

UNITED STATES
8609 Six Forks Road
Raleigh, NC 27615 U.S.A.
Toll Free: 1.800.356.5794
or 919.872.3020

www.powerware.com/BladeUPS

CANADA
Ontario: 416.798.0112
Toll Free: 1.800.461.9166

LATIN AMERICA
Argentina: 54.11.4343.6323
Brazil: 55.11.3616.8500
México: 52.55.9000.5252

EUROPE/MIDDLE EAST/AFRICA
Denmark: 45.3686.7910
Finland: 358.94.52.661
France: 33.1.6012.7400
Germany: 49.0.7841.604.0
Italy: 39.02.66.04.05.40
Norway: 47.23.03.65.50
Sweden: 46.8.598.940.00
United Kingdom: 44.1753.608.700



PowerChain
Management®

ASIA PACIFIC
Australia: 61.2.9693.9366
New Zealand: 64.0.3.343.3314
China: 86.21.6361.5599
HK/Korea/Taiwan: 852.2745.6682
India: 91.11.2649.9414 to 18
Singapore/SEA: 65.6825.1668

Eaton, Powerware, BladeUPS, ABM, LanSafe, PowerChain Management, PowerVision, FORSEER, PowerTrust, Powerware Hot Sync and X-Slot are trade names, trademarks, and/or service marks of Eaton Corporation or its subsidiaries and affiliates. All other trademarks are property of their respective owners.

© 2008 Eaton Corporation
All Rights Reserved
Printed in USA
BLADEUPS02FXA
February 2008

EAT•N

Powerware