

EATON

Powerware

Powerware® 9395 Uninterruptible Power System (UPS)

Product Focus
225 - 550 kVA

Powerware® 9395-825 - Available Fall 2008
Uninterruptible Power System (UPS)
225 to 825 KVA



Benefits

The Powerware 9395 UPS is designed to meet the current and future power protection requirements of data centers, manufacturing operations, medical facilities and other large-system applications.

Best total reliability

- Delivers the highest reliability and availability for large, mission-critical systems by integrating the capabilities of a redundant multi-module UPS (including the System Bypass Module) into a single, pre-wired unit

Unmatched power performance and efficiency

- Provides unmatched power performance for efficiency, input current harmonic distortion (THD), and power factor

Scalable, redundant architecture meets current and future load requirements

- Grows with changing power requirements using scalable architecture that allows you to add another 275 kVA module on-site later for capacity or redundancy

Integrates into total PowerChain Management solution from Eaton

- Integrates seamlessly with Power Xpert® Architecture to enable you to monitor and manage the UPS as well as the entire power system, including all upstream and downstream switchgear

Incorporating over 40 years of technology leadership in the design of mission-critical power systems, the Powerware 9395 is an innovative, state-of-the-art UPS designed to provide reliable power to your most critical loads. With its capability to be configured as a redundant system, the Powerware 9395 is ideal for applications such as large data centers, medical facilities, or any load that must operate 24x7x365 without interruption.

Taking large system mission-critical reliability to the next step

The Powerware 9395 combines the reliability and redundancy of a multi-module UPS into an integrated, pre-wired solution. The Powerware 9395 features N+1 redundancy, which allows one 275 kVA module to automatically carry the load in the event the other module is out of service. Up to three 275 kVA modules can be used in an integrated solution to match the capacity, reliability and redundancy needs of your application.

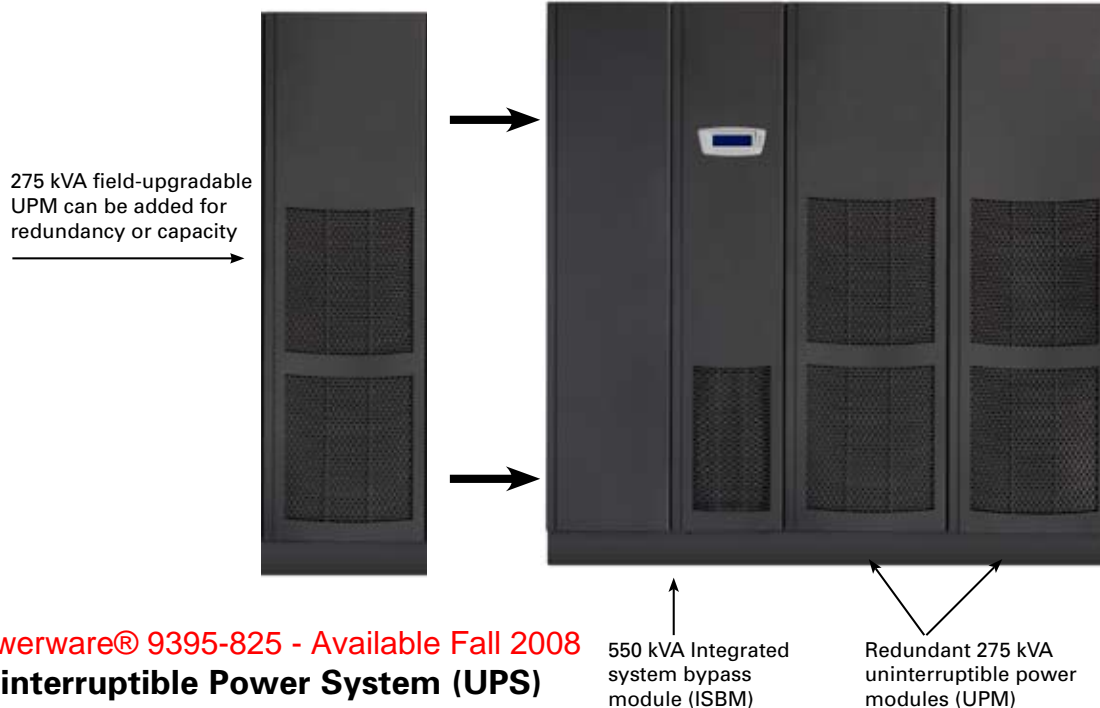
Advanced design delivers unequaled power performance

The innovative design of the Powerware 9395 delivers the industry's best performance combination of efficiency, input current distortion and power factor. The Powerware 9395 operates at an industry-leading 95 percent efficiency, reducing utility costs and extending battery runtimes. Higher system efficiency produces cooler operating conditions, which reduces facility air conditioning cost, extends the life of UPS components, and increases overall reliability, availability,

and performance. A new input circuit design keeps input current THD low and input power factor near unity without compromising overall efficiency. As a result, the Powerware 9395 allows maximum transfer of power between power source and protected load and is exceptionally compatible with multiple power sources, especially auxiliary generators. On the output side, the ultra high speed switching Pulse Width Modulation (PWM) inverter enables the Powerware 9395 to provide its full rated power capability to the load whether the load power factor is 0.9 lagging, unity, or 0.9 leading.

For additional information, please call 1-800-392-3299 or email info@naat.com www.naat.com

Powerware 9395 UPS with redundant, field-installed module



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Double-conversion design offers the highest protection possible

Unlike some other commercially available UPS technologies, the double-conversion design completely isolates output power from all input power anomalies and delivers 100-percent conditioned, perfect sine-wave output—regulating both voltage and frequency. Even when presented with the most severe power problems, power output remains stable. Output voltage THD is held within two percent of nominal specification for linear loads, within five percent for non-linear loads—making the Powerware 9395 ideal for supporting equipment that is sensitive to a distorted voltage input as a result of harmonic loads. In the event of a utility power failure, there is no delay transferring to backup power.

Scalable, upgradeable architecture meets your current and future load requirements

The Powerware 9395 is designed to be field-upgradeable for capacity or redundancy. For example, a 275 kVA system can be upgraded on-site to 550 kVA or to an N+1 275 kVA redundant system. In an age where data center loads change quickly, this flexible design allows you to buy what you need now and upgrade or reconfigure later.

Flexible, pre-wired installation options expedite deployment and save valuable space

The Powerware 9395 UPS offers the smallest footprint and lowest weight of any UPS in its class—50 to 60 percent less than competitive units. Cabling can enter the UPS from either the top or bottom of the cabinet to provide easier and flexible installation. Multi-module systems arrive pre-wired in an integrated system so there's no need to perform

all of the inter-unit cabling for power and communications between modules and the system bypass unit. As a result, you save time and money.

Service design maximizes uptime

Our new concurrent service feature allows the Powerware 9395 to be serviced while one of the redundant modules carries the load. Because the redundant module provides uninterrupted and protected power to your load during service, there is no need to put your critical load on utility bypass while a power module is being serviced. The Powerware 9395 maximizes the availability of your electrical power.

The Powerware 9395 provides front panel access for all services and operation, increasing serviceability and reducing Mean Time to Repair (MTTR). And since the compact Powerware 9395 cabinet can

be installed against back and side walls, you have more location options, installation is fast and easy, deployment cost is lower, and you save valuable data center space for future expansion.

UPS control innovations optimize battery performance and service life

Eaton's ABM® (Advanced Battery Management) technology uses a unique three-stage charging technique that significantly extends battery service life and optimizes recharge time, compared to traditional trickle charging. An integrated battery management system tests and monitors battery health and remaining lifetime, and provides advance notification to guide preventive maintenance. Optional temperature-compensated charging monitors temperature changes and adjusts the charge rate accordingly to properly charge the battery and greatly extend battery life. With our

eNotify remote monitoring of the UPS and battery system, Eaton is there with you—able to respond to alarms and real-time battery data to avert potential battery problems.

Service and support enhance performance

Eaton recognizes that superior power reliability requires flawless execution from its services team. Every Powerware 9395 includes an on-site startup from a factory-trained field technician to insure proper installation, operation, and customer training. In addition, we include a full year of on-site 24x7 parts and labor warranty and service protection plan coverage at no extra charge. Finally, our experts will remotely diagnose, trend, and proactively spot problems and expedite field technicians with appropriate parts when required during the first year with our advanced eNotify remote monitoring and diagnostic service.

Included at no extra charge with every Powerware 9395:

- 24x7x365 startup service and customer training
- One-year limited factory warranty¹
- Service protection plan 24x7 coverage, 8-hour response (upgrade to 4- or 2-hour where available), parts and labor, unlimited on-site emergency response support
- eNotify Remote Monitoring and Diagnostics service: 24x7 critical alarm notification and monthly reports on UPS and battery health
- 24x7 technical support access

In addition to the warranty and first year of on-site coverage, Eaton offers a wide variety of support agreements for continued preventive and emergency response maintenance. Eaton PowerTrust™ Service Plans include:

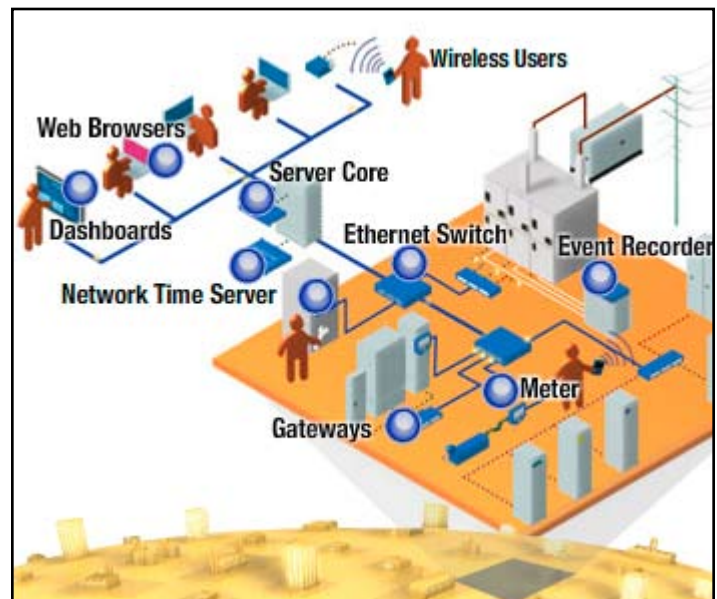
- UPS and battery scheduled preventive maintenance
- Parts and labor coverage for electronics and/or batteries
- Factory-trained technicians with genuine Powerware parts and diagnostic tools
- eNotify Remote Monitoring
- Available coverage: 24x7, 8/4/2-hour response, or 8x5 next business day response
- 24x7 technical support access

Advanced software allows you to see the entire picture

Eaton's Power Xpert Architecture enables you to monitor much more than your Powerware 9395 UPS; it transforms your power system into an integrated, agile system that delivers real competitive advantage. With the software and hardware components of Power Xpert Architecture, you can monitor, control, and manage your complete power system effectively and efficiently via a simple, Web-based interface. All of the varied elements of your power system such as PDUs, batteries, and other critical equipment are integrated into a single, easily managed whole to monitor the availability and reliability of your electrical power, lower energy costs, extend equipment life, and more. And Power Xpert Architecture's open standards and scalable approach make it easy for your power system to grow and adapt to a rapidly changing environment.

Eaton delivers a new level of confidence

The culmination of 40 years of R&D excellence, the new Powerware 9395 UPS means confidence—confidence that your organization's critical systems are protected by the most reliable, efficient, and full-featured protection available. Eaton will be there with you for the long term with premium warranty coverage and expert technical support. To find out more about the new Powerware 9395 UPS, visit our website at www.powerware.com/9395, or contact us at 1.800.356.5794.



Power Xpert Architecture Overview

1. Refer to the Eaton Electrical Inc. Limited Factory Warranty for Powerware three-phase UPS products for specifications, limitations, and terms. Service and support specifications may vary by country.

Technical Specifications²

UPS Rating (0.9 power factor)

kVA	225	275	550
kW	202	250	500

General Characteristics

Efficiency	Up to 95%
Parallel Capability	Up to 3 modules, 550 kVA maximum
Audible Noise	< 65dBA @ 1 meter
Altitude (max)	2000m at 40°C (104°F)
N+1 Redundancy Capable	Yes
Field Upgradeable	Yes, 275 kVA increments
System Bypass Module	Included

Input Characteristics

Voltage	480V standard; 208V and 600V with isolation transformer option
Voltage Range	+10% / -15%
Frequency Range	55-65 Hz
Power Factor	0.99 (minimum)
Input Current Distortion	<3% (no input filter required)
Soft Start Capability	Yes
Internal Backfeed Protection	Yes

Output Characteristics

Voltage	480V standard; 208V and 600V with isolation transformer option
Regulation	±1%
Inverter	PWM with IGBT switching
Voltage THD	<2% (100% linear load); <5% (non-linear load)
Load Power Factor Range	Up to a .9 power factor leading without de-rating

Battery

Battery Types	VRLA, AGM, Gel, Wet
Battery Voltage	480V
Temperature Compensation	Optional
Charging Method	Advanced Battery Management technology

Dimensions & Weights

225 kVA, 275 kVA	52.4" w x 34.3" d x 73.7" h	1786 lb.
225 kVA redundant, 275 kVA redundant	73.7" w x 34.3" d x 73.7" h	2875 lb.
550 kVA	73.7" w x 34.3" d x 73.7" h	2977 lb.
550 kVA redundant	95.0" w x 34.3" d x 73.7" h	4153 lb.
Field upgrade module, 225 or 275 kVA	21.3" w x 34.3" d x 73.7" h	1176 lb

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User Benefits

Control Panel (LCD)	8 lines x 40 characters
Battery Startup	Standard
Frequency Conversion	Standard
Remote Display Panel	Optional
Multi-language	Standard
Building Alarm Inputs	6 (galvanic isolated)

Serviceability

Back/Side Against Wall Installation	Standard
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Options

External Maintenance Bypass
Powerware PDU, RPP, and STS
Isolation Transformer
Output Transformer
Maintenance Bypass Module

Certifications

Safety	UL1778, cUL
EMC	FCC Class, A
Surge	ANSI C62, 41 Cat, A&B

eNotify Remote Monitoring

24x7 remote monitoring of 43 UPS and battery alarms, daily heartbeat check and monthly report ConnectUPS Web/SNMP/xHub card

Communications

Software Compatibility - PowerVision®, LanSafe®, FORESEER®, Power Xpert Communication Cards - Standard system includes one ConnectUPS Web/SNMP card with an Environmental Monitoring Probe. Four communication bays standard.

The following connectivity options can be installed at any time:

- ConnectUPS Web/SNMP/xHub
- Modus Card
- Relay Interface Card (Use for AS400s)
- Industrial Relay Card (5A@120V)
- Hot Sync CAN Bridge Card provides CAN communications, isolated RS-485 port
- Environmental Monitoring Probe (EMP)³

Remote Inputs/Outputs - Six building alarms inputs and one summary alarm contact (5A@120V) standard

Remote Panel - Eight backlit status indicator lamps plus an audible horn³

2. Due to continuing improvements, specifications are subject to change without notice.

3. Requires the ConnectUPS Web/SNMP/xHub card.



**PowerChain
Management™
Solutions**

EUROPE/MIDDLE EAST/AFRICA

Denmark: 45.3686.7910
Finland: 358.94.52.661
France: 33.1.6012.7400
Germany: 49.7841.666.0
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

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