

Benefits

- ▶ **Maximum Availability** – with true double conversion online design, the proven technology that is used for the most mission-critical applications in the world. It's unusual to find line-interactive, pseudo-online or any other kind of UPS, other than double conversion online, supporting 24/365 data centers, facilities, ISPs and major telecommunications installations.
- ▶ **Maximum Reliability** – with Powerware Hot Sync®, the award-winning, patented technology that achieves paralleling for redundancy and capacity (up to four modules) with no system-level single-point-of-failure. The preferred paralleling technology installed around the world with such major customers as E*Trade, Colo.com, and Citibank, Powerware Hot Sync will be available in the 10-40 kVA range with the Powerware 9330*.
- ▶ **Maximum Efficiency** – the Powerware 9330's advanced design features efficiency of up to 93%, the highest for a double conversion online UPS in this kVA range. No need to compromise reliability for efficiency with the Powerware 9330.
- ▶ **Maximum Performance** – the Powerware 9330 delivers the highest performance by using digital signal processing, true pulse-width-modulation and maximum IGBT responsiveness. This provides easy setup, drift-free operation and a pristine output.
- ▶ **Global Services** – Powerware service professionals provide round-the-clock monitoring, remote diagnostics, and on-site maintenance programs. More than just a material warranty, this is the most comprehensive service coverage available in the industry. Powerware Global Services provides you with peace of mind that potential downtime is prevented by proactive service and monitoring.

*Available late-2001

Powerware 9330 Battery Monitoring System

DC Expert Plus™ Built-in Battery Monitoring

Real world business applications require a complete range of battery management and testing features, including battery runtime remaining, lifetime remaining, battery health, and notification. These are critical in making decisions, from scheduling preventive maintenance to load shedding. Advances in firmware, digital technology and battery monitoring techniques enable the Powerware 9330 to offer sophisticated battery management features, previously available only in expensive add-on systems.

By ensuring optimal battery health and availability, DC Expert Plus raises the reliability of the Powerware 9330 far beyond any other UPS in this kVA range.

DC Expert Plus™ advanced features include:

- ▶ **Powerware Battery Lifetime Monitor** uses measures of chronological time, number of battery discharges, battery temperature, and system loading to determine runtime remaining and battery lifetime remaining.
- ▶ **Battery Runtime Remaining Monitor** uses system loading plus internal sensing points for voltage and current data to calculate runtime remaining.
- ▶ **Advanced Battery Management (ABM)** uses patented three-stage charging technique that not only doubles battery service life, but also optimizes recharge time.
- ▶ **Battery Circuit Test (BCT)** performs a periodic pulse test of the battery string to ensure that there are no open circuits that would jeopardize battery performance and system availability.
- ▶ **Temperature Compensated Charging (TCC)** monitors the battery temperature and through sophisticated algorithms adjusts the rate of charge, compensating for the ambient temperature to prolong the life of the battery.

Who Cares?

The decision-makers for the Powerware 9330 (CIO IT director or IT manager) are looking for a UPS system

that will deliver 24/365 system availability. They will be significantly impacted by the merits and benefits of the increased system availability the battery monitoring system affords. Since they are typically the actual user of the UPS system they are the ones that are measured on its availability. The Powerware 9330 is not tied to any specific industry or application, since in this 24/365 world applications run the gamut of verticals and channels.

Why is it important?

The most important thing to our customers is that their UPS system be available to support their critical applications in the event of a utility disturbance. In such an event, the battery must be in optimum health to ensure system availability through:

- ▶ Advanced testing and monitoring of battery health
- ▶ Notification when maintenance is required
- ▶ Sophisticated controls that compensate for environmental conditions when charging the battery
- ▶ Extended battery life by optimal charging methods

What are the major benefits?

By arming our customers with real-time data, they are able to make critical decisions about scheduling maintenance and load shed requirements.

What is the Enterprise Advantage?

The Powerware 9330 has incorporated design features like the Built-in Battery Monitoring System to ensure our customers will have the highest reliability and availability of their critical applications. The Powerware 9330 sets a new standard by which acceptable UPS solutions will be judged.