

# Eaton 9390 UPS Helps Colo Solutions Ensure High Availability

## **Product:**

Eaton® 9390 UPS

#### Location:

Falls Church, Va.

## **Markets Served:**

Managed Services and Colocation

"The UPSs are absolutely vital to our operations."

- Ed Nuckols, network engineer, Colo Solutions

# **Background**

Downtime simply isn't an option for Colo Solutions, a leading provider of managed services, hosting and colocation for organizations across the United States. Anything less than 7x24 availability impacts not just the critical equipment and operations of Colo Solutions, but that of its customers, as well.

Based in Orlando, Fla., Colo Solutions is responding to the demands created by today's trend toward convergence, which has prompted many enterprises to seek state-of-the-art, carrier-neutral colocation facilities to house their computer and telecommunications equipment.

Colo Solutions also assists customers who need to operate complex applications and configurations with insufficient internal resources by providing space, connectivity, monitoring, management, security, scalability and technical expertise.

Maintaining robust, high-speed, redundant networks throughout its many data centers, Colo Solutions insures industry-leading network performance, reliable data delivery and guaranteed response times.

## Challenge

With clients that range from Web hosting companies and Internet providers to on-call physician phone services and payroll firms, Colo Solutions' ability to deliver the results it promises is tied to stringent Service Level Agreements (SLAs) with its customers.

As such, only the highest level of power protection available will suffice within the company's Orlando head-quarters, where hurricanes, lightning and other weather-related issues can occur.

Beyond its reliability requirements, the company sought a UPS that would be robust enough to safeguard the significant amount of critical equipment within its 5,000-square-feet, including hundreds of servers, phone switches and other networking equipment.

"All of our UPSs protect not only our equipment, but also our customers' equipment," points out Ed Nuckols, network engineer for Colo Solutions. "The UPSs are absolutely vital to our operations."

Furthermore, the company required a solution that would provide sufficient time for its generator to get up and running during an extended outage. Finally, as is the case for most companies when it comes to allocating their IT budgets, cost was a factor in the selection of a new system.

## **Solution**

When it came to finding a UPS capable of delivering all of the specifications outlined by Colo Solutions, the company didn't have to look far. With two Eaton 9315 UPSs already installed in its data center, Colo Solutions once again turned to the name it knew it could trust.

"We have been very happy with our 9315 units," Nuckols reports. "Going with Powerware solutions again gave us continuity and reliability throughout our data center."



Indeed, Colo Solutions gained a best-in-class, three-phase power protection solution with its purchase of a 120 kVA Eaton 9390 UPS last year. Combining technical innovation with a rich feature set, the UPS delivers an impressive combination of power performance, battery management, scalable architecture, flexibility, power density, and warranty and service. Most importantly, its double-conversion design offers the highest level of protection available, safeguarding Colo Solutions' equipment against the most common power problems, including outages, sags, surges, spikes, brownouts, line noise, frequency variations, switching transients and harmonic distortion.

In addition, with an unparalleled efficiency rating of 99 percent with Energy Saver Mode and output power factor of .90, the UPS lowers total cost of ownership by reducing the cost of power to support protected loads. Due to its high efficiency rating, the 9390 also produces less heat, which in turn lowers facility cooling costs.

"We really look at our efficiency and power use," Nuckols notes. In fact, using monitoring software from Eaton®, Colo Solutions is able to closely track its power usage and forecast its necessary future supply for the local utility company. "This way we don't get blindsided, and we know the capacity will be there when we need it," Nuckols explains.

Further enhancing the reliability of the 9390 is the unit's exceptional battery management system, which uses advanced technology to extend battery life and optimize recharge time. In addition, an integrated battery management system tests and monitors battery health. It also relays this information monthly to a central monitoring station for trending and action if needed.

Even more, the 9390 affords Colo Solutions the ability to parallel for redundancy using Powerware Hot Sync® technology. This capability allows up to six UPS modules to operate in parallel without the need for inter-module connectivity, maximizing availability and eliminating the system-level, single point of failure inherent in traditional parallel configurations. Each UPS module is configured with its own backup battery system, as opposed to standard systems that generally incorporate a common battery system.

The 9390 also reduces installation time and costs with its small footprint and the flexible installation options, including against walls, using top- or bottom-entry cabling.

"The small footprint was attractive to us and one of the selling points," Nuckols says of the unit. Furthermore, convenient front-panel access for all services and operation increases serviceability for the 9390, while reducing repair time.

#### **Results**

Since installing the 9390 UPS within its data center, the solution has been tested several times by power outages and storms. On every occasion, the UPS has weathered the storm without incident. "We are getting two to three years of uptime out of our equipment," adds Nuckols.

With the 9390 UPS, Colo Solutions is able to:

- · Meet its SLAs by ensuring high availability for its customers at all times
- Provide 7x24 uninterrupted clean power for hundreds of critical servers and networking equipment
- Deliver sufficient ride-through during an extended power failure until the company's generator can get up and runnina
- Reduce energy and cooling costs through the 9390's bestin-class efficiency performance



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