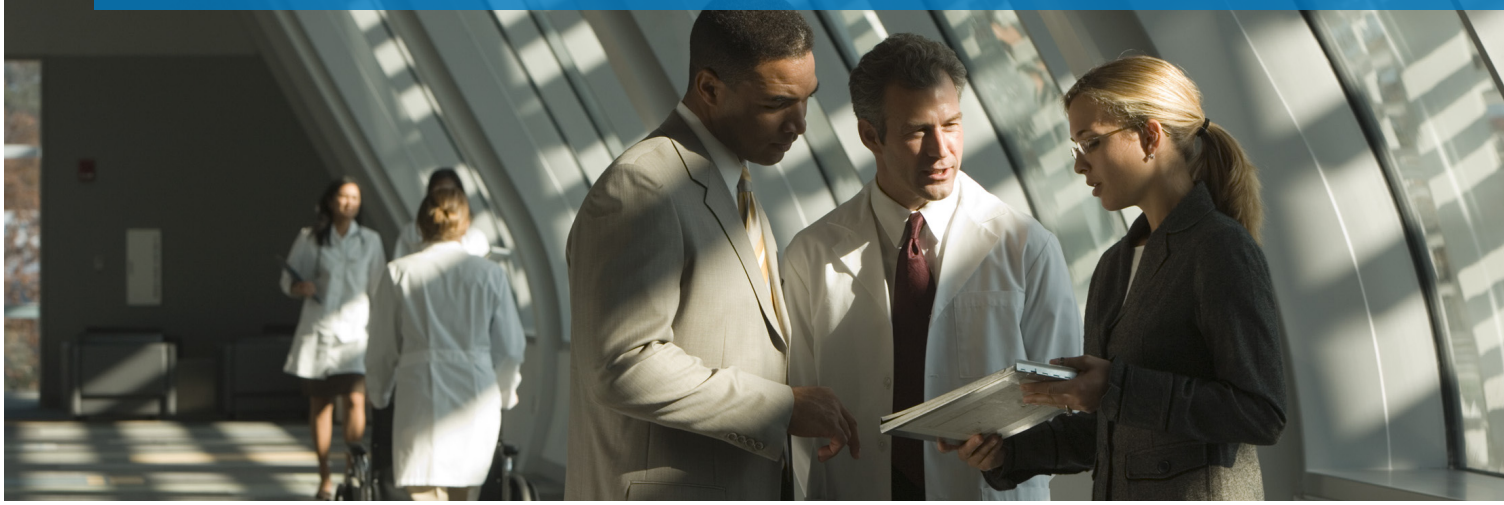
Success Story: Appalachian Regional Healthcare



Eaton 9390 UPS Proves Just What the Doctor Ordered

Product:
Eaton® 9390 UPS

Location:
Lexington, Ky.

Market Served:
Healthcare

"This UPS pretty much allows me to guarantee 99.9 percent uptime."

- Rhonda Tharpe, manager of user support and operations

Background

Appalachian Regional Healthcare (ARH) is a not-for-profit health system serving 350,000 residents across eastern Kentucky and southern West Virginia. Operating nine hospitals, clinics, home health agencies, HomeCare Stores and retail pharmacies, ARH is the largest provider of care and the single largest employer in southeastern Kentucky, as well as the third largest private employer in southern West Virginia.

The ARH system consists of more than 4,000 employees and relies on a network of more than 400 active and courtesy medical staff members representing various specialties.

Challenge

In order to promote the well-being of residents within its service territory, ARH must first ensure the ongoing health of its own critical equipment and applications.

"We're in a healthcare environment, so any downtime is totally unacceptable for us," explains Rhonda Tharpe, manager of user support and operations for ARH.

Last year, when its aging and overloaded uninterruptible power system (UPS) failed, the medical organization needed to come up with a new treatment plan. Without a properly installed solution, ARH faced a variety of painful consequences in the event of a power outage. Charts – which are maintained online – would be unavailable. Any admissions process would require a manual paper trail. Databases and applications would be at risk for corruption, and hard drives could be permanently lost.

To immunize itself against these potentially devastating threats, and ensure that patient care is never compromised, ARH sought a premium UPS capable of safeguarding the 50-plus mission-critical servers within its data center. The organization also wanted a solution it could grow into, as well as one that would facilitate easy maintenance.

Solution

ARH gained a best-in-class, three-phase power protection solution with its selection of the Eaton 9390 UPS. 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.

Although ARH purchased an 80 kVA unit, the organization has the ability to expand it to 120 kVA at any time. Thanks to the 9390's internal upgrade capability, the unit achieves additional power protection capabilities with a simple call to an Eaton customer service engineer (CSE). The upgrade is completed on-site without costly additional cabinetry or connections.

Currently operating the 9390 at less than 50 percent, Tharpe says she values the flexibility to grow into the system. "I would strongly encourage people to do this," she advises. "We ran our previous UPS at full load for so long that it eventually just ran out. It crashed and burned."

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The double-conversion design of the 9390 offers the highest level of protection available, safeguarding ARH's equipment against all of the most common power problems.

In addition, with a high efficiency rating of 94 percent and output power factor of .90, the UPS lowers total cost of ownership by reducing the cost of power to support protected loads. Even when operating at less than 50% load, the 9390 provides an efficiency level that is higher than most traditional UPS systems at 100% load. Due to its high efficiency rating, the 9390 also produces less heat, which in turn lowers facility cooling costs.

"There's less heat, less noise, easier operation, and better bells and whistles," Tharpe confirms.

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.

ARH keeps a pulse on its UPS at all times with Powerware eNotify Remote Monitoring, which offers 7x24, real-time enterprise monitoring. The service includes response to more than 35 UPS system and battery alarms, as well as immediate notification of significant power quality events via phone, email or pager. Also included is remote troubleshooting and resolution of power problems, monthly status reports, and if necessary, dispatching of Eaton UPS service technicians.

Implementation

As a pre-wired, integrated module, the 9390 saves on time, installation costs, and cabling expenses. Its standard top- or bottom-entry design provides easier and more flexible installation, while front panel access for all operation increases serviceability, while reducing repair time.

"We wanted the capability to bypass the UPS when changing the battery, and this model allows us to do that," adds Tharpe. "With our old UPS, we had to power the whole thing down."

Furthermore, with the smallest footprint of any UPS in its class – 35 to 50 percent smaller than competitive units – the 9390 occupies less valuable space within ARH's server room.

Another selling point for ARH was the unit's standard service protection package, which includes start-up service, a UPS performance check, one year of battery replacement labor coverage, and one year of Web remote monitoring of both the UPS and batteries.

"The Eaton technician was on site for the installation, the power up, and to set up the parameters. He also completed several types of testing," notes Tharpe. "That was a load off of our minds to not have to go through all of that ourselves by reading a manual."

Result

Since ARH installed the 9390 UPS, the solution has been tested several times by power glitches. "It's been excellent," reports Tharpe. "It's done exactly what it is supposed to."

With the 9390, ARH has achieved a solid power protection treatment plan, with the ability to:

- Provide 7x24 uninterrupted clean power to its mission-critical servers
- Upgrade its UPS capacity to accommodate future growth
- Reduce energy and cooling costs through the 9390's best-in-class efficiency performance
- Easily complete maintenance or change batteries without powering down the connected load

Eaton Corporation
Electrical Group
8609 Six Forks Road
Raleigh, NC 27614
Toll free: 1.800.356.5794
or 919.872.3020
www.eaton.com/powerquality

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