

Success Story: GF Health Products



Eaton 9155 proves to be just what the doctor ordered

Product:

Eaton® 9155 UPS

Location:

Hazelwood, Mo.

Market Served:

Medical

"We used to have constant power failures on our equipment ... now, we even had one thunderstorm that caused power in the entire building to fail, but all of our loads remained safe on the UPS."

- Wiley Allen, computer operator

Background

GF Health Products, Inc. is one of the world's leading distributors of medical products, manufacturing more than 4,000 medical, rehabilitation, long-term care and homecare items designed to enhance the quality of life of the people who use them, as well as their caregivers. Headquartered in Atlanta, Ga., the company's offering is comprised of quality brands such as Everest & Jennings wheelchair and seating products; Lumex ambulatory, bath safety, pressure management and specialty seating products; Basic American beds and institutional equipment; John Bunn respiratory equipment; Labtron diagnostic equipment; Grafco exam treatment products, and Lumiscope diagnostics products.

In addition to its headquarters location, the company supports five distribution centers across the United States.

Challenge

Leave it to a vacuum cleaner to wreak havoc with the company's primary distribution center. But that is precisely what occurred at GF Health Products' Hazelwood, Mo., facility earlier this year. When the after-hours cleaning crew plugged in the seemingly innocuous floor-cleaning device, the subsequent power draw took down almost every piece of critical electronic equipment in the computer room, reveals Wiley Allen, GF Health Products' computer operator.

"The primary distribution center for the company was brought to its knees by a vacuum cleaner," he acknowledges.

It was that incident that unveiled a grave diagnosis for the health care firm's existing uninterruptible power system (UPS): it was being significantly overtaxed. Responsible for protecting the company's IBM AS/400, tape backup system, phone system, warehouse amplifiers, and various hubs, routers and communications devices, the UPS no longer had the power needed to accommodate the organization's expanding equipment.

"I could walk into the computer room and simply turn on the AS400 console or my PC and create a power failure," Wiley recalls. "We ultimately discovered that we only had 50 percent of the power that we needed."

So GF Health Products conducted a thorough examination of new UPS solutions. In addition to a robust model capable of supporting growing load requirements, the company sought a unit that would provide exceptional reliability for the broad range of power anomalies that pose a routine threat.

"We were prone to power issues," Wiley confirms. "The power coming in was unreliable."

The company also required a unit with a small enough footprint to fit into the same space as its previous UPS. "It was more about location than space," says Wiley. "I wanted to put the new UPS in the exact same spot."

Another key criterion was the ability to run the company's loads on separate circuits. "Our old UPS had four circuits, and we wanted at least that many in a new solution," Wiley explains.

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Solution

Working with a local reseller who assessed the company's power needs, GF Health Products was given a referral that proved to be the perfect prescription for the company's power protection needs: a 12 kVA Eaton 9155 UPS.

Installed at the distribution center over Memorial Day weekend 2009, the online design of the 9155 completely isolates equipment from utility power. As such, GF Health Products is now protected against a broad range of ailments, including the nine most common power problems: outages, sags, surges, spikes, brownouts, line noise, frequency variation, switching transients and harmonic distortion.

"What used to trip our old unit a lot was wind," Wiley recalls. "I just hated windy days. I saw trees bending in the wind and I knew my beeper was going to drive me nuts. I'd have at least two or three outages during a thunderstorm."

Not so since the installation of the 9155, whose high 0.9 output power factor delivers more power than the vast majority of competitors' models, enabling the unit to power more equipment than other UPSs of equivalent VA rating.

The health care company also values the 9155's customizable output distribution, which provides user-specified power outlets along with terminals for connecting hardwired equipment.

"The unit has six separate breakers so it helped us split our loads in the computer room," Wiley explains. "Now the IBM AS400 is on one, the phone system is on one by itself, the servers and hubs and routers are on one, the amplifiers are on different one. If something were to happen with one, it doesn't trip them all."

Furthermore, the 9155 provides a high efficiency rating of 90 percent across all load ranges, which reduces utility costs and helps the unit run cooler, in turn extending component life. Additionally, the model's low input current distortion of <5% THD allows maximum transfer of power between the power source and protected load.

GF Health Products is also enjoying long battery life for its units, thanks to Eaton's exclusive ABM[®] technology, which significantly increases battery service life compared to conventional trickle-charging. ABM uses an innovative, three-stage charging technique that offers prolonged rest periods between charge phases, as well as temperature-compensated charging to optimize recharge time. Runtime can be easily expanded by adding Extended Battery Modules (EBMs) to the unit.

Available in four models (8, 10, 12 and 15 kVA), the scalable architecture of the 9155 enables customers to choose a configuration that matches their existing capacity requirements and grow from there. Although perfectly comfortable at 12 kVA right now, GF Health Products' installation can expand to 36 kVA if needed. "We can definitely grow into it," Wiley confirms.

Using Eaton's Hot Sync paralleling technology, up to three 9155 modules can be linked for extra capacity or redundancy, with no dependence on communications wiring. This patented load-sharing control distributes the load equally and ensures that equipment remain fully protected even if a paralleled UPS is unavailable.

In an era in which raised-floor real estate is at a premium, the 9155 also boasts a space-saving, compact and attractive design, which offers high power density per square foot. The sleek tower model measures just 12 inches wide and 33 inches deep, requiring only three to six feet of floor space—including the batteries.

Wiley is also able to keep a constant pulse on the status of the UPS using the ConnectUPS WEB/SNMP card, which enables remote monitoring capabilities.

"I really like the fact that it's got a web card and all I have to do is open my browser and look at what's going on," he says. "I can even do it from home via the company's VPN."

Implementation

Because the 9155's small footprint supports more location options, the unit allows for fast and easy installation and lower deployment costs, while preserving more space for future expansion. Prior to installing the 9155 in its computer room, GF Health Products simply ran conduit, then hardwired the UPS into the same spot where its previous solution had resided.

"It was easy," reports Wiley.

Results

These days, neither wind nor rain nor vacuum cleaners can impact the well being of GF Health Products' critical equipment. In fact, Wiley has to manually trip the circuit breaker himself if he wants to test the unit.

"We used to have constant power failures and with the old UPS. I was always worried that I wouldn't be able to get to the facility fast enough to shut down and save our equipment," he says. "Now that the 9155 unit has a much longer runtime, when the power fails, I'm not so worried about it. Since the installation, we even had one thunderstorm that caused power in the entire building to fail, but all of our loads remained safe on the new UPS."

With the 9155 protecting its computer room, GF Health Products is now able to:

- Ensure the continuous uptime and high availability of its critical equipment
- Isolate desired loads with separate circuit breakers on the UPS
- Expand its power protection as needed, with the ability to grow into the 9155
- Easily monitor the status of the unit with the ConnectUPS WEB/SNMP Card



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