

Touchdown! Miami Dolphins Score Big with Eaton 9390 UPSs

Product:

Eaton® 9390 UPS

Location:

Miami, Fla.

Markets Served: Professional Sports

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 Joe Curbelo, director of infrastructure services for both Dolphin Stadium and the Miami Dolphins

Background

Located in Miami Gardens, Fla., Dolphin Stadium is a world-class facility that is home to the NFL's Miami Dolphins, the MLB's Florida Marlins and the University of Miami's Hurricanes football team. In addition to also serving as the host of the annual FedEx Orange Bowl, the venue is preparing to welcome the 2009 Bowl Championship Series game, as well as the 2010 Super Bowl. The stadium also takes center stage as a premier showplace of the Americas for concerts and other international events.

Considering the fact that millions of fans visit Dolphin Stadium each year, it is imperative that NFL and stadium officials have a solid game plan to address high availability and uptime within the two organizations' data centers, which support virtually all behind-the-field operations.

Challenge

With Dolphin Stadium supporting its own data center on site, and the Miami Dolphins managing a separate data center approximately 10 miles away at the NFL team's Davie training facility, both organizations were experiencing limitations from their previous uninterruptible power systems (UPSs).

"Some were outdated and it had become almost impossible to obtain spare parts," explains Joe Curbelo, director of infrastructure services for both Dolphin Stadium and the Miami Dolphins. "Other UPSs were just too small to meet our needs."

Both organizations required a robust and redundant solution capable of providing continuous, clean power to the array of servers, routers, firewalls, switches and telecommunications systems within each data center.

"It's about as critical of an environment as you can get," acknowledges Curbelo. "If we lose those systems, then it would put a large strain on the business. It would be very difficult to perform our normal operations, including selling tickets."

Solution

To prevent its vital equipment from being sacked by potentially devastating power anomalies, the Miami Dolphins and Dolphin Stadium drafted the Eaton® 9390 UPS, which delivers the industry's best combination of power performance, battery management, scalable architecture, flexibility, power density, and warranty and service. Having recently installed two 80 kVA units in each data center, the organizations are relying on the Powerware Hot Sync® wireless paralleling technology to achieve desired redundancy.

Offering the ultimate in reliability, Hot Sync technology 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. Additionally, each UPS module is configured with its own backup battery system, versus standard systems that often incorporate a common battery system. By adding more UPS modules than is needed to support the load, Hot Sync facilitates redundancy.

The Miami Dolphins and Dolphin Stadium were also impressed by the 9390's unmatched power performance. 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. Due to its high efficiency rating, the 9390 also produces less heat, which in turn lowers facility cooling costs.

"We do anticipate a reduction in power and cooling," Curbelo confirms. "That was an attractive benefit."

Furthermore, the 9390's low total input harmonic current distortion (THD) of less than 4.5 percent enhances compatibility with upstream power systems—especially generators—while the unit's input power factor of 0.99 minimizes auxiliary generator sizing requirements. This was another consideration for the Miami Dolphins and Dolphin Stadium, as both data centers are supported by generators.

Another feature of the 9390 that was a good fit with the organizations' game plan is its expansion capability. "The units are currently operating at a low capacity, but down the road, we have plenty of room to grow," Curbelo notes.

For even greater reliability and protection, the organizations are

also taking advantage of eNotify Remote Monitoring, which offers 7x24, real-time enterprise monitoring and response to more than 35 UPS and battery alarms. The service also provides immediate notification of significant power quality events via phone, email or pager; remote troubleshooting and resolution of power problems; monthly status reports; and if necessary, dispatching of Eaton UPS service technicians to resolve problems.

Implementation

When it was time to deploy the four units, the small footprint of the 9390 scored big points with the Miami Dolphins organization, preserving valuable space within the data centers. With the unit's flexible installation options—against walls, using top- or bottom-entry cabling—the installation was performed without a single fumble.

"Eaton's service technician completed the startup of the units and worked very well with our electrical contractor," Curbelo reports.

Result

Since taking the field, the 9390 UPSs have been performing as expected. "Just last week, we lost power for about 20 seconds at the training facility," Curbelo recalls. "If you were standing inside the data center, you'd never have known."

Since deploying the 9390 UPSs, Dolphin Stadium and the Miami Dolphins are enjoying a winning power protection record, with the ability to:

- Provide uninterrupted, clean power to both data center facilities
- Deliver added assurance and protection with a fully redundant solution
- Accommodate future growth with the ability to expand UPS capacity
- Reduce energy and cooling costs through the 9390's bestin-class efficiency performance



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