



Colocation provider standardizes with Eaton for full solution suite

Location:
Southeast U.S.

Segment:
Colocation

Problem:
The organization was looking to standardize on a highly reliable UPS solution that could be easily deployed across all of its data center locations, today and into the future.

Solution:
Power Xpert 9395P High Performance UPS, 93PM UPS, Power Distribution Units (PDUs), rack PDUs, RS Enclosure, Power Xpert Gateway X-Slot UPS Card, preventive maintenances

Results:
Eaton not only delivered a UPS offering unparalleled reliability, footprint and efficiency, but was also able to supply the colocation provider with complementary data center solutions including racks and PDUs.

"Power Xpert 9395P High Performance UPS is the box of choice for our data center platform ... It was a combination of the technology, the service, the pricing, the footprint. We really get the whole package with Eaton."

Mark Masi, operations leader

Background

DC BLOX is a multi-tenant data center provider with four sites strategically located to meet the needs of underserved markets in the southeast. The Tier 3 facilities—in Chattanooga, Tenn., Huntsville, Ala., Atlanta, Ga., and the company's most recent addition in Birmingham, Ala.—offer colocation, cloud storage, and network and connectivity solutions to support clients' infrastructure requirements while also reducing the need for capital.

Challenge

As a colocation provider pledging 100 percent uptime to its customers, DC BLOX cannot afford to settle for a mediocre power protection solution. "We would never even consider a manufacturer unless they had a time-tested, stellar reputation and had demonstrated proven reliability," emphasizes Mark Masi, the company's operations leader.

Yet ensuring that level of unparalleled availability is no easy task in the southeast, where power quality is frequently tested by harsh weather conditions such as tornadoes and severe thunderstorms. "We are in quite a storm zone here," Masi confirms.

In 2017, within its premier data center in Chattanooga, DC BLOX installed an Eaton® 93PM uninterruptible power system (UPS), which fit well within the space restrictions of the retrofitted site. The following year, while designing its Huntsville data center from the ground up, the organization wanted to standardize on a power protection solution that could be deployed in the new site, as well as across all future facilities. Carefully assessing multiple UPS providers, DC BLOX sought a solution capable of delivering supreme reliability, modularity, efficiency, a small footprint and exceptional service.

"The company had started with Eaton in Chattanooga and we were happy with that UPS," Masi acknowledges. "But when making such a large technology decision, we needed to weigh all of the factors."



Powering Business Worldwide

Solution

After thoroughly evaluating the UPS vendors, DC BLOX chose Eaton, a decision Masi says was based on multiple aspects. "It was a combination of the technology, the service, the pricing, the footprint," he explains. "We really get the whole package with Eaton."

While the 93PM had proven to be a great unit for its Chattanooga facility, the firm selected a different model to represent its UPS prototype: the Power Xpert 9395P High Performance UPS. Opting to deploy the UPS in pairs of 500 kw units, DC BLOX was especially impressed with the model's proven technology and advanced feature set, which result in exceptional performance and low total cost of ownership (TCO). "It is the box of choice for our data center platform," Masi confirms. In tandem with the chosen UPS, DC BLOX also opted to install Eaton three-phase Eaton Power Distribution Units (PDUs).

Contributing to the 9395P's low TCO is the unit's industry-leading efficiency of up to 97 percent in double-conversion mode and up to 99 percent with Energy Saver System (ESS), a mode of operation that allows the UPS to facilitate that unprecedented level of efficiency across the entire operating range, typically down to 20 percent. Operating without ESS, the 9395P is still able to significantly reduce HVAC and operating costs by generating 33 percent less heat, while a three-level converter topology minimizes energy losses and heightens efficiency. This was a critical feature for DC BLOX, since the company strives to achieve a low PUE (power usage effectiveness) rating of 1.4 or lower. "Everything we add has to help drive that number," Masi notes. The organization also values the modularity of the 9395P, which makes it possible to bolster capacity at any time simply by adding power modules. "We are able to respond to data center growth demands very quickly," Masi says, noting that the company is planning to add additional modules to migrate from a 2N to an N+1 architecture.

Furthermore, by delivering up to 20 percent more power in the same footprint as the flagship 9395P UPS, the solution allows DC BLOX to preserve valuable space for revenue-generating activities. "Obviously, we are trying to maintain as much white space inside the data hall as possible," Masi points out, "so the footprint of the units is very beneficial."

For DC BLOX, the ability to standardize on a UPS solution was crucial. "We are a small company that prides itself on being efficient," Masi explains. "We need to be very focused on costs when we are building and operating."

The decision to standardize affords the organization other advantages, as well, such as simplifying management and maintenance requirements. Noting that just a couple of technicians are responsible for overseeing all of the technology among DC BLOX's multiple sites, Masi says, "It's a lot easier when they can walk in and see the same equipment. They don't need to relearn everything."



The Power Xpert 9395P High Performance UPS



Eaton RS Enclosures

The goals behind UPS standardization were quickly realized by DC BLOX; less than a year after installing the initial units in Huntsville, the organization seamlessly rolled out an identical power protection solution within its fourth data center, which debuted in Birmingham in 2019. Prior to opening the doors to the new facility, the organization turned to Eaton for help supplying additional data center products, including more than 100 Eaton RS Enclosures and numerous rackmount PDUs.

Through its flexible design and customizable device mounting options, the RS Enclosure server rack streamlines installation time and reduces costs for DC BLOX. Masi appreciates the ease of installation and efficient use of space within the rack, which is available in network, server and colocation models to meet a variety of application demands. "We love it," he enthuses, adding that Eaton even worked with DC BLOX to customize the enclosures with special locking mechanisms.

Further easing management of the overall solution is the Power Xpert Gateway X-Slot UPS Card, which enables remote monitoring and management of the UPSs through real-time email alarms and data logging. Seamlessly integrating into existing Ethernet infrastructures to minimize installation costs, the card provides a comprehensive system view of DC BLOX's data center. "The commonality of the Power Xpert Gateway Cards made connectivity easy," Masi confirms.



Real-time email alarms and data logging

In addition to the quality and flexibility of the products, the opportunity to engage with Eaton for ongoing service was an important selling point for DC BLOX. "The ability to deal directly with Eaton rather than a third-party service organization has been a high point for us," Masi says. "We really respect and appreciate how Eaton has responded to our preventive maintenance schedule."

The operations leader also extends high praise to the other parties involved in DC BLOX's standardization efforts, from the manufacturers' representative from whom they purchase their equipment to Eaton's internal support personnel. "They really helped us through the design process and made it possible for us to standardize across our data centers," he reveals.

Meanwhile, the 9395P units have repeatedly proven their reliability in the wake of Mother Nature's persistent perils. "Those UPSs get used all too frequently," Masi acknowledges. "But they have responded extremely well, with zero issues to date."

Results

With DC BLOX already making plans to expand both the Huntsville and Birmingham facilities—including adding a third or fourth 9395P unit to each site—the organization can rest easy knowing uptime is assured through its Eaton solution.

“Eaton fit all the criteria we were looking for,” Masi sums up. “We wanted the same look and feel at all of our data centers. And with our charter to add more data halls and more footprint, we are happy to have achieved this standardization with Eaton.”

With the solution in place, DC BLOX is able to:

Ensure the highest level of uptime for its colocation clients, thanks to the 9395P’s unparalleled reliability

- Seamlessly deploy identical equipment across all of its facilities
- Easily expand UPS capacity while gaining inherent redundancy through the unit’s modular design
- Achieve industry-leading efficiency, resulting in energy savings and low TCO
- Optimize power distribution throughout the sites with Eaton PDUs and rack PDUs
- Gain flexibility, ease of installation and reduced costs with the RS Enclosure server rack
- Remotely monitor and manage the solution with the Power Xpert Gateway X-Slot UPS Card
- Ensure ongoing optimal performance of its power protection solution with an Eaton service plan



To learn more, visit [Eaton.com/9395P](https://www.eaton.com/9395P)

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