

A CASE STUDY FROM KOHLER UNINTERRUPTIBLE POWER

Blue Chip Upgrades its Head-Office Power Protection with the Latest in High-Efficiency Standalone UPS

When Blue Chip decided to upgrade the power protection at its head office, it turned to Kohler Uninterruptible Power for an energy efficient solution that met all the requirements and provided peace of mind for the company and its customers.

Understanding the Challenge

With over thirty years' experience in the industry, Blue Chip provides the IT infrastructure that supports many of the UK's largest brands. Specialising in mission critical systems through its Tier IV data centre, the Bedford-based expert offers the e-commerce backbone for a large number of high street retailers, and manages 10% of the UK's banking traffic, keeping business running all over the world.

In addition to its IT-managed services and backup and recovery operations, Blue Chip is also one of the UK's longest established providers of IBM system maintenance, counting eight of the top ten global IT companies as clients. Blue Chip's head office functions as the first point of contact for customers to report an issue, making the availability of its call dispatch team business critical. Equally, the building also houses the company's ERP system, supporting the extensive stock holding Blue Chip manages as part of its maintenance contracts.

Supporting these essential applications was a number of existing UPS, which had been in place for almost ten years. Whilst still fully operational, and with adequate levels of redundancy, the age of the system and its energy efficiency credentials led Eamonn Sheridan, Blue Chip's data centre and facilities manager, to instigate a review, the purpose of



which was to understand how a new UPS solution could meet the current and future demand whilst increasing energy efficiency.

"Maintaining continuous power at our head office is as important as it is at our data centres. From here we run our call dispatch desks, all the systems to support our engineers in the field, access to our stock management platform and the general business functions – all of which are required 24/7. Following a reduction in the size of the critical load, we saw an opportunity to replace the old UPS's – which were nearing the end of life – with a new, highly-efficient system. Being a sustainable partner is a key pillar of our business, so it's vital we assess opportunities to reduce our footprint wherever they arise," commented Eamonn Sheridan.

After conducting his own research into a number of potential providers, Sheridan met with the Kohler Uninterruptible Power (KUP) team at the Data Centre World event in March 2019. Following the event, KUP was invited to quote for a new UPS to support the 60kVA load and provide five minutes of backup power – more than enough capacity to manage the transition from mains power to the on-site generators that operate in an N+N configuration.

"Following receipt of several responses to our RFP, we decided that KUP was the right choice for us. Its quote stood out as the most competitive, and I had been impressed by the conversations I'd had with members of the team, the

organisation's reputation in the marketplace, its commitment to advanced technology, and the credentials of its individual products," Eamonn Sheridan continued.

The right choice

After supporting Blue Chip in developing the system's final specification, and with a comprehensive understanding of the requirements and objectives, KUP recommended the Kohler PowerWAVE 6000 UPS as its preferred product, which – along with the relevant battery banks and switch gear – would provide a complete end-to-end solution and fully meet the brief, as KUP's UK hardware sales manager, Andrew Marais, explains:

"The PowerWAVE 6000 UPS was the clear choice for this project. The three-phase UPS delivers the best combination of availability, energy efficiency, overall power performance, and boasts the lowest total cost of ownership in its class. It offers both intelligent energy management and maximum power protection, whilst using less energy, to provide Blue Chip with notable cost savings and a reduced impact on the environment."

The transformerless PowerWAVE 6000 UPS offers up to 96% energy efficiency and is capable of supporting loads from 60 kVA to 500 kVA within a single frame, for a power density of up to 363 kW/m². Ten units can also be connected in parallel to provide a maximum 5 MVA protection in a single system. Additionally, the UPS offers a near unity input power factor – reducing the size of the input cable and fuses, and thereby saving on materials and costs. Equally, low input current Total Harmonic Distortion (THDi) virtually eliminates

harmonic pollution on the mains supply, saving unnecessary oversizing of gensets, cabling and circuit breakers.

The winning solution

Having reviewed the credentials for the PowerWAVE 6000 and how they met the organisation's requirements, Sheridan agreed that it was the right solution for Blue Chip:

"It was clear that KUP had spent the time required to understand our immediate and long-term objectives and identified a solution that met our current and future needs. The PowerWAVE 6000 ticks all the right boxes and offers a decent saving in energy consumption compared to the old UPS's. Additionally, KUP's reputation for supporting its customers with excellent ongoing service means we are confident that we have chosen the right partner."

"Overall, the PowerWAVE 6000's efficiency meets our expectations, and its small physical footprint and high-power density are appealing qualities. It is an advanced product and the combination of the features it offers, although not individually unique, collectively provide the best solution for our specific needs."

Installation and ongoing support

Following the acceptance of the technical specification, installation was set for July and KUP began the process of commissioning the system:

"We pride ourselves on providing a fully-managed, end-to-end solution, removing as many of the pain points for the customer as possible. Our engineers are permanently employed members of the KUP family, so they benefit from comprehensive factory training, which we believe is vital to ensure that our UPS systems are properly installed and commissioned for a long and trouble-free working life," said Marais.

Working in partnership with the Blue Chip team, KUP's field-service engineers commissioned the entire system without issue. Not long after installation, the UPS was called into action when there was a

complete loss of mains power due to a lightning strike, as Sheridan concludes:

"From the initial conversation, throughout the specification process, and through to commissioning, KUP has been excellent. Whenever we met with its engineers, they instilled confidence with their knowledge and the support they provided. During the install, the old UPS was kept online for as long as possible, reducing the time on bypass to less than an hour and everything went very smoothly. Thankfully, when the new KUP UPS was called upon, it performed exactly as expected and everything worked seamlessly. I would have no hesitation in recommending KUP and its products and I am sure we will be speaking to them again in the future."

