Customer: **Itility**

MANCHESTER DATA CENTRE MAKES THE MOVE TO MULTI POWER

The modular Multi Power's combination of reliability, scalability, and efficiency in a compact footprint make it the ideal choice to replace end of life UPS at a Manchester-based colocation, cloud, and hosting data centre.

Located just a couple of miles from Manchester city centre, Itility is a privately-owned, high-performance data centre and hosting specialist, providing colocation and disaster recovery solutions.

Its purpose built, multi-million pound 8,900 square foot site incorporates the latest in temperature and climate control, connectivity, power, fire suppression and high tech 24/7 security protection.

Through this state-of-the-art data centre, Itility supplies dedicated and shared hosting, application hosting, Cloud, IP Transit, and disaster recovery solutions to the small to medium-sized businesses that power the UK economy.

It gives clients reassurance that if the mains power ever should fail, their critical applications won't.

HARDWARE REFRESH REQUIRED

As a business offering secure space for customers where infrastructure won't ever go down, having a reliable and fully working UPS, battery, and generator set-up in place is crucial.

The original UPS system was installed in 2011, comprising three 400 kVA Riello UPS Master Plus units configured as 800 kVA with N+1 redundancy to support a load of approximately 700 kVA.

By 2021, one of the UPS reached the end of service life, so the system was reconfigured into a pair of 400 kVA units.

With a second unit approaching the end of its service life, it became essential for Itility to consider some major equipment upgrades.

EXPLORING THE OPTIONS

Authorised Riello UPS reseller and service partner **Specialist Power Systems** was tasked with specifying the most cost-effective and efficient replacement.

Since the initial install in 2011, the existing UPS had become oversized and inefficient, and needed replacing.

Specialist Power Systems carried out an in-depth site survey and extensive dialogue with Itility to establish their key considerations.

Rather than simply replacing the units with similar, but more energy efficient models, Specialist Power Systems proposed a modular design which not only required a lower initial capital investment, but also gave the customer full flexibility to expand the system in the future.

With Itility being an 'always on' facility operating around the clock, 365 days a year, a quick turnaround was essential. Another key priority was to make sure the IT infrastructure of all customers remained working.

And with the building operating on one working UPS and with no redundancy available, it was important to provide a quote, organise teams and turn the project around in a few days, with a small window of just a few hours to install the new unit.

MAKING THE MOVE TO MULTI POWER

With lower running costs a key factor for the client, it was agreed the award-winning Multi Power UPS from Riello UPS was the perfect solution as it guaranteed scalable, secure, and high-quality power available 24/7/365.

Multi Power combines unmatched power density with high efficiency across all load levels in a compact footprint.

It offers easy 'pay as you grow' scalability to increase power, redundancy, or battery autonomy by simply adding additional power modules, battery units, or cabinets.

While all power modules and battery units are hot-swappable and accessible from the front of the UPS, ensuring downtime-free maintenance.

A RACE AGAINST TIME

To minimise downtime on installation day, the new unit and rack were delivered onsite and positioned in the comms room the day before.

Then on the morning of the install, the old 400 kVA units were isolated, uninstalled, decommissioned, and removed from site by Specialist Power Systems' certified safe disposal team.

An external bypass switch enabled the old units to be isolated, whilst still maintaining the customer load the entire time off the mains supply. Because of this, speed was crucial to have backup on the new units as quickly as possible.

Once moved into position, engineers had to extend the AC cabling as the connectors were higher up on the new modular design.

To save further costs, the team were able to reconfigure two strings of the existing Yuasa batteries to work with the new design.

Once install was complete, the units were commissioned, and the power was running back through the UPS by 3:30 pm that afternoon with no disruption to any Itility customers.

The complete removal, installation, and commissioning took less than one day.

SUCCESSFUL OUTCOME

Its compact, modular design ensures the Multi Power has a significantly smaller footprint than the original installation, saving the customer valuable floor space.

While the principle of modularity enables the new system to grow alongside Itility's business needs, minimising the risk of wasteful oversizing whilst optimising both the initial investment and total cost of ownership moving forwards.

Compared to the old units, which operated at 85% efficiency, the new Multi Power installation is capable of up to 96.5% efficiency.

Due to the scalable design of the new modular solution, the client load level sits higher in the efficiency window and as a result will deliver energy savings of around £12,000 a year.

Adam Baverstock, Sales Director of Specialist Power Systems and the project lead, commented: "By installing a newer, greener modular alternative we delivered a scalable and flexible design where our customer can simply add more power modules when the business requires more.

"Giving them a pay-as-you grow solution meant less capital investment from the start, lower cost of ownership, a more efficient UPS and significant energy savings."