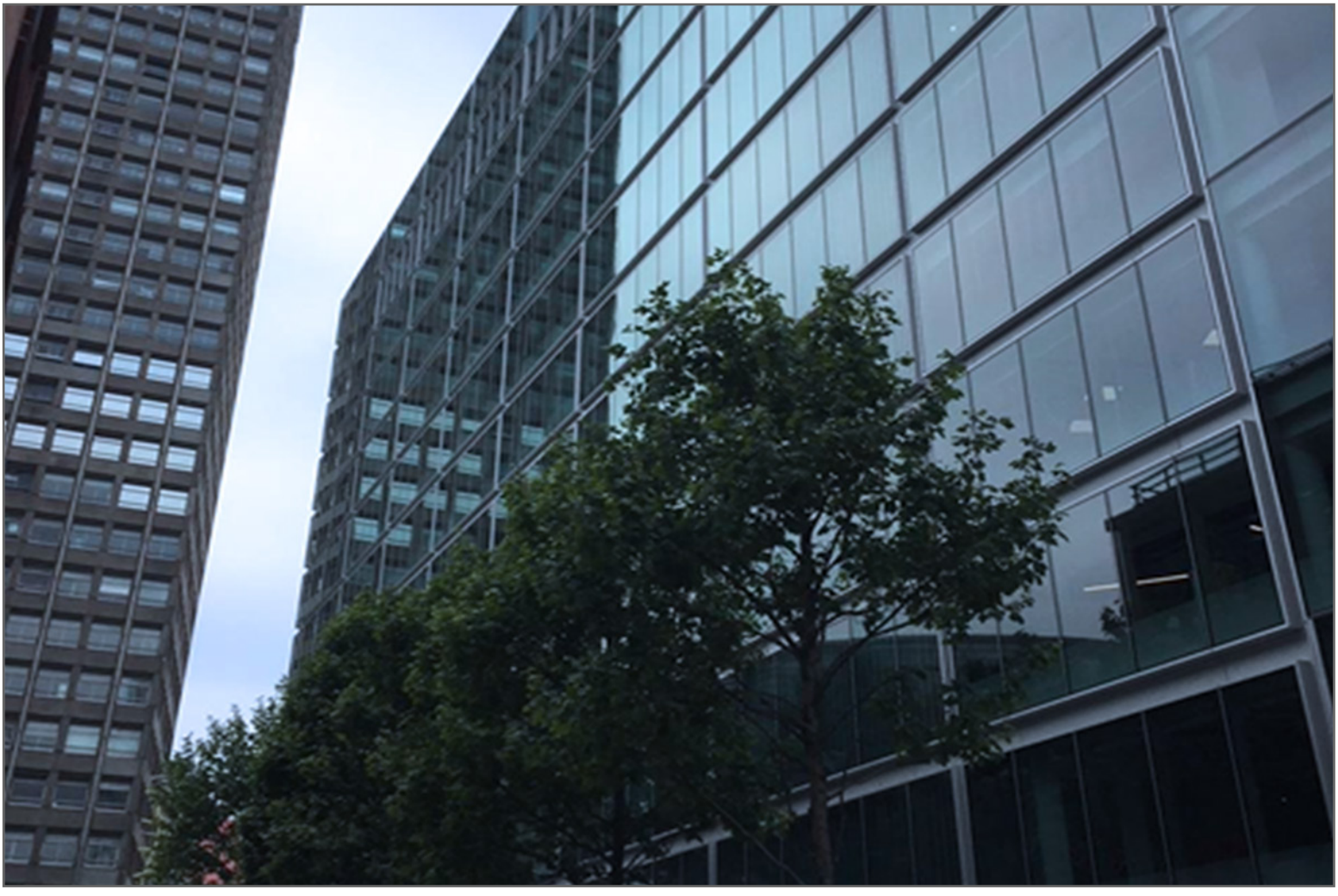
centiel

continuous power availability

CENTIEL is a Swiss-based technology company designing, manufacturing, and delivering industry-leading power protection solutions for critical power facilities. Our team of innovators are responsible for the industry's first transformerless design, and High Availability true modular, UPS systems.

The Modular range includes the class-leading, 4th generation, CumulusPower, an innovative fault-tolerant true modular UPS solution that achieves availability levels of 99.9999999%, and 97.1% efficiency significantly lowers operating costs. Capital expenditure is also reduced by only installing the required number of UPS modules to closely match your critical load size, with future proofing assured by the simple insertion of additional modules up to 3.6MW.

The traditional monolithic range is the PremiumTower. With on-line operating efficiencies of 96.6% and small footprint, this is the perfect standalone solution to protect your critical load. Paralleling units adds redundancy and scalability to the system.



Centiel Protects Power for Central London Installation Case Study

CENTIEL UK were recently appointed by Parkeray to supply and install a complete a UPS system for the new operational facility of a global firm of professional intermediaries based in the Verdi Building adjacent to Victoria Station, London. Parkeray is one of the commercial fit-out industry's leading companies with over 21 years' experience in fit out and refurbishment projects.

Michael Brooks, operations director, CENTIEL UK Ltd explains: "The specification called for a UPS system to provide two hours' back up in the event of a power failure. The 30,000 square foot, modern office block required a low noise solution which was as small and lightweight as possible. Major considerations were redundancy, high efficiency, with special attention to weight distribution due to some structural limitations in the area of the proposed installation. Redundancy was ensured with two CumulusPower™ Modular UPS units of 80kVA each, plus four strings of 50 batteries for one UPS and 4 strings of 46 batteries for the second UPS.

"We chose to use CumulusPower™ our three-phase, modular UPS system because it offers class-leading "9 nines" system availability and very low total cost of ownership. Unlike traditional multi-module systems, the CumulusPower™ technology combines a unique Intelligent Module Technology (IMT), with a fault-tolerant parallel Distributed Active Redundant Architecture (DARA), to offer industry-leading availability of 99.9999999%. This excellence in system availability is achieved through fully independent and self-isolating intelligent modules - each with individual power units, intelligence (CPU and communication logic), static bypass, control, display, and battery.

"In the unlikely event of a module failure, the module can be quickly and safely swapped without transferring the load to raw mains. Furthermore, the solution has been designed to reduce the total cost of ownership through low losses: the high double conversion efficiency of 97% at the module level means it is currently the best solution available to protect infrastructure as its configuration also reduces downtime risk, avoiding costly errors as well as increasing energy efficiency.

"The project presented my team with several operational challenges which needed to be overcome to complete the project successfully. The new comms room is situated on the third floor of the Verdi building above a large atrium.

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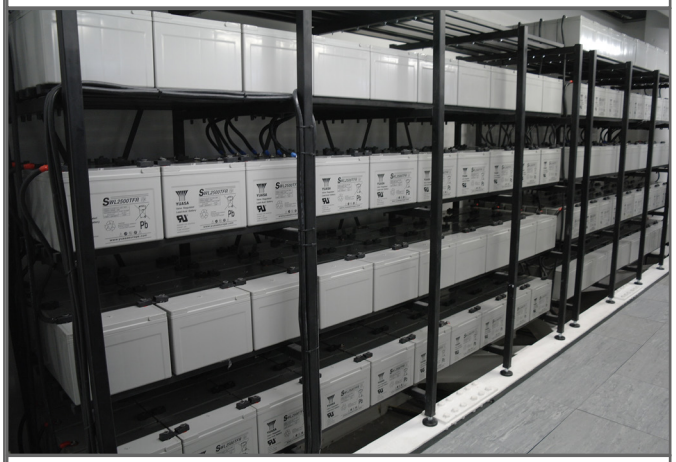

"The CumulusPower™ technology combines a unique Intelligent Module Technology (IMT), with a fault-tolerant parallel Distributed Active Redundant Architecture (DARA), to offer industry leading availability of 99.9999999%"

The CumulusPower™ UPS is small and lightweight and so could be positioned on the normal floor area. However, because of the required two-hour run time, the 13 tonnes of batteries had to be situated right above an unsupported roof space over the building's main reception area.

"A structural engineer designed special steel girders which bolted to the main pillars across the centre of the building, strong enough to support the batteries. This large fabrication of steelwork was joined together with substantial metal plates which meant we had to create bespoke battery racks to be accommodated within the space available while ensuring the weight was distributed properly over the new span of steelwork. We designed the battery stand with open racks for ease of maintenance. There are also spare slots for future flexibility.

"The next challenge was the delivery and positioning of batteries to the third floor. Restrictions on lorries entering central London during working hours prevented deliveries after 6 am. Due to the weight restrictions on the third floor, even following the strengthening, we couldn't stack batteries while we built the racks, the equipment had to be positioned straight onto the steelwork. Therefore, our team worked out of hours accepting one pallet of batteries per day and loading them onto the rack individually. Let's say our engineering team didn't need to visit the gym that week!

"These logistical challenges were combined with some tight timescales. Initially, we had been given one week to complete the install but due to circumstances beyond the client's control leading to some a few delays in the general office fit-out which everyone had to work around, the project took around nine days to complete."

Steve Mott, Parkeray comments: "Parkeray was responsible for the complete office fit-out including comms room, social area, boardroom, and office space. We also managed work to the walls, ceilings, floor as well as lighting and power. "The CENTIEL team worked incredibly hard; shifting 13 tonnes of batteries was certainly a manual, hands-on task! But as expected, the team delivered 100% on their commitments which resulted in the full commissioning of the system".

For further information visit www.centiel.co.uk

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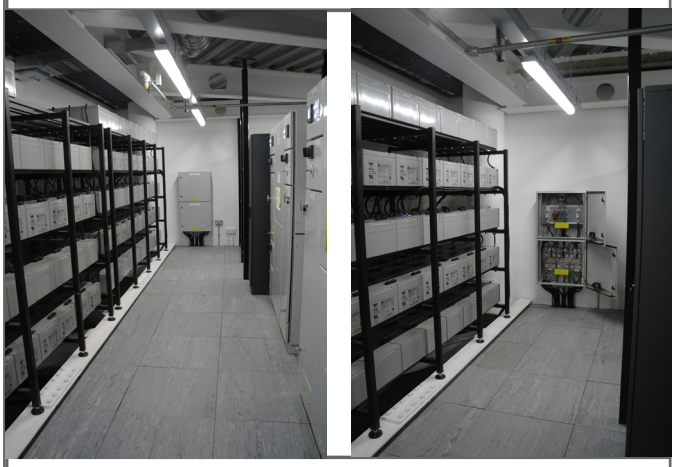

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