

SENTRYUM PROVES PERFECT PRESCRIPTION FOR CHILDREN'S HOSPITAL



Our third generation of transformerless UPS is the ideal choice for protecting lifesaving equipment at a specialised NHS Children's Hospital in South Yorkshire.

The hospital's existing power protection solution, consisting of two 10 kVA UPS, was approaching its end of service life and on longer capable of providing the critical backup support required in a sensitive medical setting.

A replacement was necessary, one capable of meeting the strict requirements of the Health Technical Memoranda (HTM) 06-01 for electrical services supply and distribution.

Healthcare facilities must be able to provide a safe, robust electrical system that is capable of protecting end-users and more specifically, patients from electrical failures. As the system required was to be used to protect patients undergoing complex treatments and surgeries, it was essential a comprehensive and reliable solution was found.

The replacement UPS needed to be capable of maintaining a continuous supply of power to support two operating theatres and an IPS system in the event of mains and secondary power failures.

PROJECT PARTNERS

Sheffield-based power protection specialists **Secure Power Ltd** won the contract to supply the replacement UPS system.

Founded in May 2010, the family-run business is one of the UK's leading UPS and generator suppliers and maintenance providers.

It specialises in the installation, commissioning, and maintenance of emergency backup power equipment to help our customers take a proactive approach to power management.

Secure Power has been a Riello UPS authorised reseller and service partner for several years, with the two companies working on various projects.

These include Rotherham Metropolitan Borough Council, Hunslet Moor Primary School in Leeds, and the Barnsley Schools Trust, which involved replacing legacy UPSs with 60 5 kVA Sentinel Dual (SDU) units.

SENTRYUM SOLUTION

Having sourced a competitive and 'fit for purpose' replacement UPS, Secure Power was awarded the contract for the works and quickly began the process of decommissioning and removing the old units.

Once this was complete, the installation and commissioning of the new replacement system could begin. Secure Power identified the Sentryum range as the optimum solution.

As Riello UPS's third generation of transformerless online UPS, Sentryum delivers outstanding performance and high efficiency of up to 96.6% in a compact footprint.

It is designed to handle capacitive loads such as blade servers without any reduction in active power.

The series also comes with a choice of three frames (Compact, Active, and Xtend) to optimise floor space and maximise battery runtime.

SUCCESSFUL INSTALLATION

For the hospital upgrade, a pair of 10 kVA single-phase input and output Sentryums with two strings of internal batteries were selected.

Designed to an N configuration, the UPS maximises availability, efficiency, and performance in critical applications, reaching approximately 27 minutes of battery runtime at a 10 kW load.

To avoid any unnecessary downtime and mitigate all potential risks to patient safety, all works were conducted out of hours.

Thanks to the expertise of its in-house engineering team, Secure Power completed the entire decommissioning, removal, installation, and commissioning process on time and to budget, allowing a seamless transition between the two sets of UPS.

Gary Candow, Engineering Supervisor for Sheffield Children's NHS Foundation Trust, commented: "Secure Power has delivered above and beyond all expectation on every aspect of this job. Their engineering team conducted themselves professionally and have done an excellent job on the theatre six and seven UPS replacements."

