

Protecting Britain's busiest railway station



Clapham Junction is Britain's busiest railway station with more than two thousand five hundred trains, an average of one every twenty seconds, passing through each day. Over two thousand passengers ride through the station every minute during the morning and evening peak periods. As part of a national development project, it was identified as being a key site where upgrading the level of power protection would reduce the incidence of signalling faults and the resulting delays.

This project aims to improve the quality of the power supply and eliminate the supply blips caused when switching between the railway derived supply network and the regional electricity supplier. This was to be achieved using commercially available UPS technology instead of the bespoke systems traditionally used across the railway network.

Working in partnership with Railtrack, On Group has developed an innovative solution including an APC DP series, which has already proved suitably robust for rail applications. Also included is all the other necessary equipment needed to ensure the integrity and reliability of signalling supply points such as an REB (relocatable equipment building), battery, switchgear, transformers, air conditioning and remote monitoring. This provides a low risk, fully functional Plug & Play solution.

According to Project Manager, Keith Watson of Railtrack: The implementation process went smoothly and the new UPS switched on without any hitches showing the value of the pre-testing and planning carried out in advance. The ease with which it can be implemented into the rail infrastructure is testament to the depth of experience that On Group has of both the UPS market and the needs of the rail network. This has enabled the development of a highly engineered solution using standard, proven technologies that are best of breed in their class.

Before the system was handed over to the main subcontractor, On Group trained local signalling technicians in the operation of the system. This included the daily checks, switching to maintenance bypass and ensuring that signallers understood the warning alarms on the remote panel located at the Clapham Area Signalling Centre.

In the first month after implementation, four main interruptions, which would previously have affected the network, were registered.

Each of these events would have required engineers to reset the signalling system and caused serious delays to passengers. As a direct result of this successful installation, Railtrack Southern is already looking at further sites within the inner London area for the adoption of this protected power solution.

Founded in 1984, originally as Universal Power Systems Ltd, on365 is an independent company specialising in the implementation and operation of the complete physical infrastructure of business IT and communication systems. This covers everything from power to cooling and can ultimately be a total datacentre build.

Providing total packaged solutions from concept to after-sales service, on365 has steadily grown to the position of market leader in this field, with an established reputation for innovative power protection design, supply and application. Expansion has been achieved through a commitment to providing customers with the highest level and quality of service.

on365 has the people and the tools to understand both the technical and practical issues involved for your business, its people and its IT infrastructure requirements. This understanding extends beyond taking care of design, safety, principles of operation, future growth and after-sales services. More importantly, it looks at value and basic business principles such as 'return on investment' to ensure that the customer is furnished with a complete solution for their current business needs. Wasting expenditure worrying about the tomorrow's possible growth is practically eliminated by designing on-line expansion facilities, without the need for system downtime.