Application stories

JNUP UNDERGROUND PROJECT

The London Underground manages approximately 1 billion passenger journeys per year, demanding an absolutely effective and tightly managed transport system.

The continued increase in the number of passengers and growing need for the effective control and management of trains has led the Underground to develop a plan for the enhancement of two primary lines, Jubilee and Northern, otherwise referred to as the JNUP Project.

The JNUP Project consists of a massive improvement program committing more than 8 billion (USD) by 2011. One of the primary objectives is to modernize the rail system by the implementation of new signal systems and control centres to enable enhanced efficiency and increased performance. These efforts will allow for automated (or “driverless”) train control that will result in a reduced waiting time between trains and increased revenue production.

SYSTEMS REQUIREMENTS AND SOLUTION

Amplicon were approached by a leading contractor for the London Underground JNUP project to supply industrial computers capable of meeting the stringent approvals required by London Underground.

As an experienced supplier for similar applications, Amplicon was able to specify two systems that it was confident would meet all the required approvals without any major redesign costs. Another major consideration was the life cycle of the systems, they had to be available for a minimum of 5 years from the approval date. As Amplicon operate a transparent roadmap policy for its industrial computers it was able to offer advise at design stage to meet this criteria. In addition to meeting the EMC requirements the systems had to perform outside of normal industrial operating temperatures.

SYSTEMS REQUIREMENTS AND SOLUTION

Amplicon offered the standard Ventrix 4000 and Ventrix 500, these had been used previously in underground and rail applications throughout Europe. The systems had already been approved in the most demanding rail applications and this combined with the long life cycle made these the ideal choice for the project.

Amplicon tested the systems at it's EMC pre-compliance facility to ensure they would meet BS EN 50121-4 series + M1027 approvals. They were also subject to it's environmental testing chamber to check they would meet the extended temperature ranges. The requirement was for systems that would run at a minimum of 50°C.

Once the systems had been successfully pre-compliance tested and the final specification signed off by the customer it was fully tested at an independent EMC testing facility.

THE RESULTS

By selecting a system that was already proven in Rail applications, the customer was quickly able to make a decision on hardware. The time consuming process of fully testing several solutions from different suppliers was avoided as the Ventrix systems had already passed the stringent approvals laid down by London underground in previous projects.

WHY AMPLICON

With over 30 years experience in supplying high end solutions and many similar projects already completed Amplicon were first choice to supply hardware for this high profile project.

If you would like more information please contact our industrial computing sales engineers on 01273 570 220 or email **sales@amplicon.co.uk**.