



Network Rail

"The optical transceivers must be able to sustain a heavy bandwidth load."

- Roger Gains
Engineer at Network Rail

Case Study

ProLabs Helps Network Rail Stay on Track with Customised, Compatible Products.

Business Challenge

Network Rail maintains and runs Britain's railway network. To ensure safety and reliability, a fleet of 19 vehicles surveys the entire mainline network every two weeks, covering 110,000 miles a year. The New Measurement Train (NMT), one of the most technically advanced trains of its kind in the world, is part of the fleet and plays an essential role in maintaining Network Rail's infrastructure.

Aboard the NMT, there are eight switches serviced by a series of optical transceivers. The switches facilitate the onboard computer and measurement systems, as well as remote access. As the switches neared the end of their useful life, Network Rail faced a problem. Its stock of optical transceivers was not compatible with the new switches required by the NMT. The problem: Most new switches have a preconfigured vendor locking code to force end users to buy transceivers from the original equipment manufacturer (OEM).

Wherever they were sourced, the new optical transceivers had to surmount two challenges—they had to be compatible with the switches and they had to sustain a heavy bandwidth load. All instrumentation onboard the NMT is networked and video and GPS data transmit constantly.

Challenge

Network Rail, which owns and operates Britain's rail infrastructure, maintains a fleet of monitoring vehicles. The switches on the New Measurement Train, one of the fleet's vehicles, were approaching the end of their life. They needed to be replaced but the technical team concluded that its stock of optical transceivers would not be compatible with the new switches.

Solution

Network Rail consulted with ProLabs, its trusted partner since 2006. ProLabs provided replacement optical transceivers that had the necessary compatible hexadecimal coding to work with the new switches.

Customer Advantages

With the new switches in place, the NMT was able to continue monitoring the entire mainline network, ensuring a safe, reliable experience for riders.

ProLabs Solution

Network Rail turned to ProLabs, the leading provider of compatibles for data centres and IT networking. ProLabs' technical experts analysed the situation and provided replacement transceivers that had the necessary compatible hexadecimal coding to work with the new switches. With ProLabs as its partner, Network Rail broke free of OEM dominance and saved money for Britain's taxpayers.



Results and Benefits

Travelling at speeds up to 125 mph, the NMT collects, analyses and transmits critical information. All the components, including switches and transceivers, need to be completely reliable.

Network Rail Engineer Roger Gains praised the ProLabs solution. "With fully compatible products, it could be easy to think you're getting a poorer-quality component but we knew the ProLabs kit was up to the task. We'd been using the original transceivers since 2006 and while we don't expect there to be an issue, we have the added certainty of a lifetime warranty."

Maintaining quality while lowering cost benefits Network Rail's riders and the taxpaying public. Network Rail has been running almost 30 percent more trains each weekday and reduced costs by nearly a third. Most important, Britain's railways remain the safest in Europe.

About Network Rail

The railway is vital to Britain's future economic success. Network Rail manages more engineering projects and employs more specialists than other UK organisations. The work programme for the next five years will have major benefits for the whole country.

Award-winning architectural developments are helping to regenerate towns and businesses, and connecting communities with new train lines. Network Rail is adding to the 15,795 kilometres of rail, 2,515 stations, 32,000 viaducts, bridges and tunnels and 9,000 level crossings.

Since Network Rail took over the network in October 2002, trains run more punctually, safely and frequently than ever before. Costs have been reduced by nearly a third, while running nearly 30% more trains each weekday.

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Availability

With our global presence, regional operations and warehousing, we can offer same or next day delivery on most of our product range.



Interoperability

Our products are designed to bridge multiple platforms, which gives you minimum stock, maximum flexibility and ease-of-use.



Support

You can rely on our industry experts, in region customer service and trusted advisers to give you a swift and personal service.



Quality

Our stringent product testing processes, together with coding verification under operating conditions, gives you compatibility assurance and peace of mind.



Warranty

You can expect quality products and thorough testing, backed by a lifetime warranty on transceivers.



Value

On balance, our range of innovative compatibility solutions enable you to maximise your connectivity with minimal initial investment.