

CASE STUDY

MONORAIL, KUALA LUMPUR: ROBUST FIBRE OPTIC SOLUTION FOR MONORAIL

The operator relies on a future-proof solution from Datwyler when upgrading the fibre optic network.

The Kuala Lumpur (KL) monorail, which came into operation in 2003, is a two-track elevated railway linking the main station of the Malaysian metropolis with Titiwangsa terminus and interchange station. Along its 8.6 kilometre length it serves eleven stops in the city. Among others it runs through the central business and nightlife district in Kuala Lumpur, the so-called “Golden Triangle”. At peak times the KL monorail moves up to 60,000 passengers a day. It belongs to the stateowned enterprise Prasarana Malaysia Bhd and is operated by RapidRail, its affiliate.

In the past rail operations were repeatedly disrupted because the automatic signalling systems kept malfunctioning. It transpired that the faults were due to the aging of the fibre optic cables. In addition, the hardware used for the fibre optic network only supported data transmission of 600 megabits per second – so was in urgent need of upgrading.

Basis for uninterrupted data traffic

RapidRail recognised the pressing need for action and decided on a STM-64 system, which enables transfer rates of up to 10 gigabits per second.

Cyberlan Integral Sdn Bhd was awarded the contract for installing the new fibre optic network. Cyberlan is an experienced ICT service provider – and a certified Datwyler Solution Partner. The two companies have already worked together for decades, because Datwyler has been able to support the ICT service provider with reliable



high performance IT infrastructure solutions and services for all its projects.

Old fibre optic network was entirely replaced

In October 2021, when only a few passengers were using the monorail due to the Corona pandemic, Datwyler supplied Cyberlan with a total of 42 kilometres of 12-fibre single-mode FO Outdoor cable plus the connection technology and accessories for the individual construction phases of the KL monorail. This meant that the old fibre optic network was entirely replaced by a Datwyler fibre optic solution. As per requirements, use was made of robust, easy-to-assemble cables with a steel shaft sleeve which can withstand the outdoor environment.

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