

AND THE LIGHT GOES ON

Singapore, the green high-tech city in the middle of the tropics, is a city of extremes.

Skyscrapers beside Chinese temples, amphibious vehicles beside bum boats, fast food outlets beside spas – the business metropolis offers its guests many contrasts. Life pulsates here: 4.2 million inhabitants live in the city with the most important container harbor in the world – a melting pot of cultures in the south of Malaysia.

Preventive maintenance of the infrastructure

Singapore has an exemplary and cost-effective light rail system, which requires continuous and regular maintenance and systematic development. The maintenance work includes regular inspection of the rails. Safety-relevant faults must be detected and rectified immediately. Visual inspection systems can automatically detect the relevant faults – with the advantage that transport services are not disrupted by the maintenance work. These are the solutions that Singapore is currently implementing.

Backup power supply

RailCheck is a visual inspection system produced by the bvSys company (www.bvsys.de) that can be used for rail inspection. At speeds of up to 200 km/h, the condition of the track is monitored, evaluated and recorded by cameras on the train. The quality of the data depends, however, on sufficient and constant illumination: halogen headlights light up the inspection area and guarantee optimal contrast imaging in dry and wet weather conditions.

The power required for the inspection system is supplied by auxiliary converters from SMA. They provide the required backup power supply, so that trains like the C651, which are equipped with the RailCheck, can carry on the inspection of Singapore's railway network.

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Technical Data

Onboard converter

Input voltage	750 V DC
AC output	3 x 400 V AC, 50 Hz, 30 kVA
Dimensions	1,100 x 450 x 350 (mm)
Weight	115 kg



Top and bottom right:
Impressions of Singapore

Bottom left:
Metro train, type C751