ABB puts the charge into world’s first autonomous electric passenger bus

The world’s first electric, fully-autonomous 40-seater bus has been unveiled at Nanyang Technological University (NTU) in Singapore where two of ABB’s Heavy Vehicle Chargers (HVC) have been delivered to make this vision a reality.

The system will charge two all-electric 12-meter Volvo 7900 Electric buses

ABB’s HVC 300P fast charging system delivers 300 kW DC power and is based on OppCharge, an open interface for DC electric bus charging, which is now being used in Singapore and across Asia Pacific.

300 kW DC power

3-6 minutes

Using a pantograph mounted on the infrastructure for end-point charging, set up at a bus stop or depot, it allows buses to be charged in three to six minutes at the end of the line, without impacting the normal operation of the route.

The project is part of a collaboration between NTU, the Land Transport Authority (LTA) and Volvo Buses to develop autonomous bus trials.

ABB is a key industry partner of the project, helping Singapore to make another major step towards sustainable mobility.

One of the autonomous electric buses will be used at the Centre of Excellence for Testing and Research of Autonomous Vehicles (CETRAN), Singapore’s advanced new test facility at the NTU campus.

The second bus will be used for tests in a bus depot in partnership with SMRT, the public transport provider in Singapore.