

Stadler to showcase powered electric multiple unit train

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Stadler will showcase its first independently powered electric multiple unit (IPEMU) train built for the UK at Rail Live.

The train has been purchased by the Liverpool City Region Combined Authority for the Merseyrail network, following the contract signing for 52 EMUs in 2017, which will entirely replace the legacy fleet.

It will be the first time that Stadler exhibits one of its products at this leading annual event. For the first time in its history, Stadler will have a presence at the annual rail trade show, displaying its first IPEMU built for the UK market.

This prototype train has recently been ordered by the Liverpool City Region Combined Authority to undertake trials on the Merseyrail network along with the 52 EMUs, commissioned in 2017.

Relying on less carbon than standard vehicles and enabling the operator to run on an extended network, it boasts enviable green credentials and provides clients with greater flexibility than a standard train.



The IPEMU has all the features of the EMU, including the third rail collecting shoes, but can be used in both power modes, if necessary. It is equipped with an energy storage system, enabling it to run without an external power supply, and has the same amount of seating, and high levels of passenger comfort as the EMU.

This prototype train is designed to go up to 120 km/h when collecting current and 80km/h in the independently-powered sections, illustrating Stadler's design technology.

It will be able to travel for 25km before batteries have to be charged, which can be done quickly through the third rail at 750 V DC. All of the equipment is mounted in the underframe and roof, so the EMU fleet can easily be converted into IPEMUs, if required.

Stadler is committed to developing innovative, sustainable and durable high-quality products and systems and to promoting decarbonisation. In 2019, Stadler signed its first ever contract to supply a hydrogen-powered train to San Bernardino County Transportation Authority in the US.

Ralf Warwel, UK and Ireland sales director, commented: "We are very pleased to be displaying this prestigious train at this prestigious event. It brings together the very best of Stadler –green technology, design innovation and a keen emphasis on our client's specific requirements."

David Powell, Programme Director for the Liverpool City Region Combined Authority, commented: "The Class 777s EMUs are set to become the Merseyrail fleet for decades to come. The ability to deploy these as IPEMUs gives us a very powerful tool to widen our network and to further improve our green credentials."

Photo credit: Stadler