

CITADIS Dualis™

Speed and smoothness from the city centre to the suburbs

> The challenge

The urban fabric now extends beyond the confines of the city centre. The CITADIS Dualis has been designed to provide a link between two worlds - the urban and the peri-urban - smoothly and without the need to offload.

> The concept

Based on the CITADIS tramway, the Dualis version reflects a number of its key features: modularity, accessibility – thanks to its integral low floor – and reliability. But Dualis takes things to the next level because it can operate just as happily on a tramway network as on a regional railway network, thanks to power supply voltages that are compatible both with the overhead lines used on regional tracks and those serving urban networks (25kv/750v or 1,500v/750v). It also benefits from KVB signalling that allows for a progression to ERTMS and wheels that are adapted both to tramway lines and regional railway tracks.

Reconfigured to operate on the same lines as regional trains, Dualis boasts some of Alstom Transport's most recent innovations: new bogies equipped with axles that provide improvements in comfort and operation, plus particularly compact and light permanent magnet motors, tested on Speed Record Train.

Dualis also incorporates some of the technological advances developed for the Regio CITADIS tram-train, including fold-out coupling that provides better cushioning from bumps occurring in stations and a reinforced structure to protect against impact that complies with the very latest safety standards.

> Key figures

- **Width:** Between 2.4 and 2.65 m
- **Length:** Between 32 and 52 m
- **Height:** 3370 mm on the rail
- **Capacity:** from 251 to 292 passengers
- **Orders:** 31 trainsets and 169 on option (SNCF, 2007)
- **Top speed:** 100 km/h



The Citadis Dualis sold to SNCF in 2007



Modularity of the interior design