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Combino Potsdam Extension, Germany

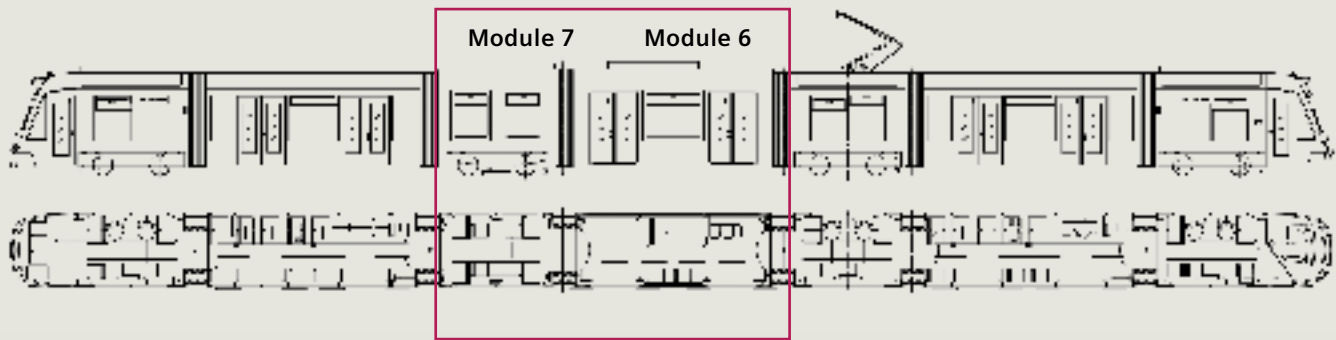
Increase in capacity and refurbishment
of eight Combino vehicles

Siemens is one of the leading suppliers of integrated mobility solutions for urban areas and of vehicles for local, regional, and main-line transportation.

Potsdam's transportation company (Verkehrsbetrieb Potsdam, ViP) was the first operator to order 16 five-car Combino vehicles in 1996. These trains have been in passenger service in the ViP transportation network since October 1998.

In November 2015, ViP commissioned Siemens to extend eight vehicles in the existing fleet by adding two additional modules (one bogie module and one intermediate module).



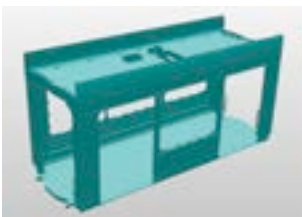


Key data for the extension of 5-car to 7-car trainsets

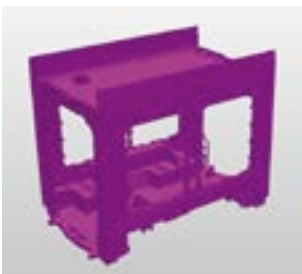
	5-car vehicle	7-car vehicle
Vehicle type	100% low-floor tram vehicle Combino	
Extension modules		Derived from Avenio M platform
Axle arrangement	Bo' 2' Bo'	Bo' 2' 2' Bo'
Car body material		Aluminium welded
Vehicle length	30,520 mm	41,630 mm
Vehicle width	2,300 mm	2,300 mm
Entrance height / floor height	300 mm / 330 mm above bogie	300 mm / 375 mm above new bogie
Traction power rating	4 x 120 kW	4 x 120 kW
Capacity (4 pers./m ²)	176 incl. 68 seats	246 incl. 77 seats
Tare weight	approx. 35 t	approx. 45 t

Technical properties / special features

- The extension modules are based on the latest Siemens' 100% low-floor vehicle family – the Avenio M. The trains will be manufactured in the Siemens Mobility factory in Vienna.
- Open and bright passenger interior including air-conditioning system; multi-function area for strollers and bicycles that ensures optimal passenger comfort
- Extension of the vehicle length from 30.5 m to 41.6 m
- Increase in passenger capacity from 176 to 246 passengers
- Passenger compartments refurbished in the original five-module vehicles, including new flooring
- A new vehicle unit was formed by combining the proven Siemens low-floor tram family Combino with the latest generation Avenio M; special challenges included connecting the old and new articulations in the underframe and roof areas and integrating a hydraulic roll-coupling system to optimize the ride characteristics of the new seven-module vehicle.



Module 6



Module 7

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