



## ***RABe 520 low-floor articulated EMUs for Swiss Federal Railways (SBB)***

Swiss Federal Railways purchased GTW 2/8 articulated electric multiple units for use on the Lucerne–Lenzburg line and other routes in the canton of Aargau. Higher capacity, a narrower car body structure to increase the distance between train and road traffic, and twice the number of doors are the most obvious differences to the standard version. This is the first GTW to feature Stadler's innovative air-suspended bogies.

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## Technical features

- Air-conditioned passenger and driver compartments
- Closed toilet system
- Central power unit features 770-mm-wide passenger aisle
- Air-suspended power and trailer bogies
- Six doors on each side for rapid passenger access
- Ergonomically designed driver's cab
- Glass fibre reinforced front section with automatic coupling
- Extruded aluminium superstructure
- Bombardier electrical system: water-cooled IGBT power converters, MITRAC vehicle control system with train bus and diagnostic computer
- Multiple-unit control for up to three vehicles

## Vehicle data

Customer	Swiss Federal Railways (SBB)
Lines operated	Lucerne - Lenzburg, other routes in the Aargau region
Gauge	1'435 mm
Catenary supply voltage	15 kV, 16.7 Hz
Designation	RABe 520 000+016
Axle arrangement	2'Bo 2'2'
Number of vehicles	17
Service startup	2002
Seating capacity (1 <sup>st</sup> class/2 <sup>nd</sup> class)	12/127
Standing capacity (6 pers./sq.m)	269
Floor height	
Low floor	400 mm
High floor	1'000 mm
Door width	1'350 mm
Longitudinal strength	1'200 kN
Overall length	53'434 mm
Vehicle width	2'650 mm
Vehicle height	4'300 mm
Tare weight	74.5 t
Bogie wheelbase	2'100 mm
Powered wheel diameter (new)	860 mm
Trailer wheel diameter (new)	750 mm
Continuous output at wheel	520 kW
Maximum output at wheel	760 kW
Starting tractive power	77 kN
Max. acceleration at gross weight	0.7 m/s <sup>2</sup>
Maximum speed	115 kph

