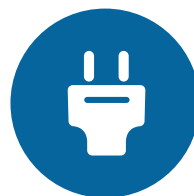


lighTram® 19 TOSA



tpg, Geneva

a smart bus system



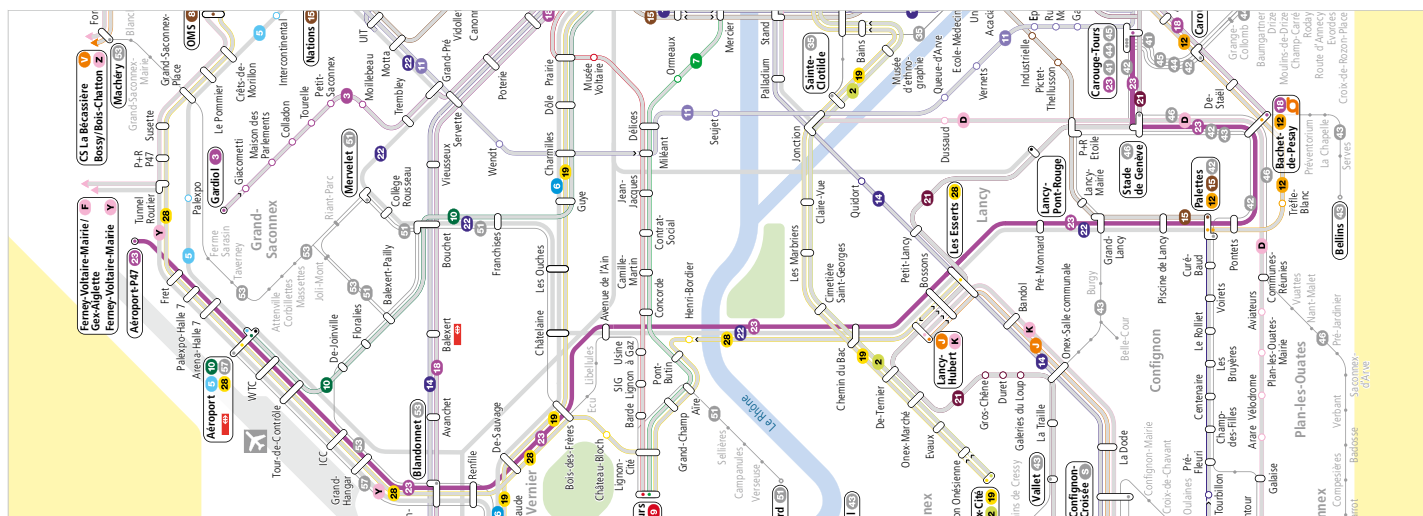
MOTION & EMOTION

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lighTram® 19 TOSA

The line 23 from Geneva airport is electrified with the lighTram® 19 TOSA and operated CO₂ neutral. The batteries on the roof are charged on average at every fourth stop, while the passengers get on and off. This charging process takes only about 20 seconds, drawing the energy from local hydroelectric power.

A project of:	Transports publics genevois
Line:	23
Length of line:	Outward: 11.8 Km Return: 12.7 Km
Vehicles:	12 lighTram® 19 TOSA
Total capacity:	133 + 1
Bus body:	Aluminum system CO-BOLT®
Steering:	Electrohydraulic
Traction:	Electrical on axles 2+3 Permanent magnet motors, liquid-cooled
Heating / Cooling	100% electrical: fully automatic heating and air conditioning
Length, Width, Height:	approx. 18,7 m, 2,55 m, 3,5 m
Driver's area:	Compatible with VDV
Maximum speed:	80 km/h
Plug charge:	DFS, 400 V AC, 50 kVA
Pantograf charge:	Conductive energy transmission type TOSA on 15 stations along the line. Flash Charging: 400 V AC, 600 kVA Fast Charging (Terminus): 400 V AC, 436 kVA



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