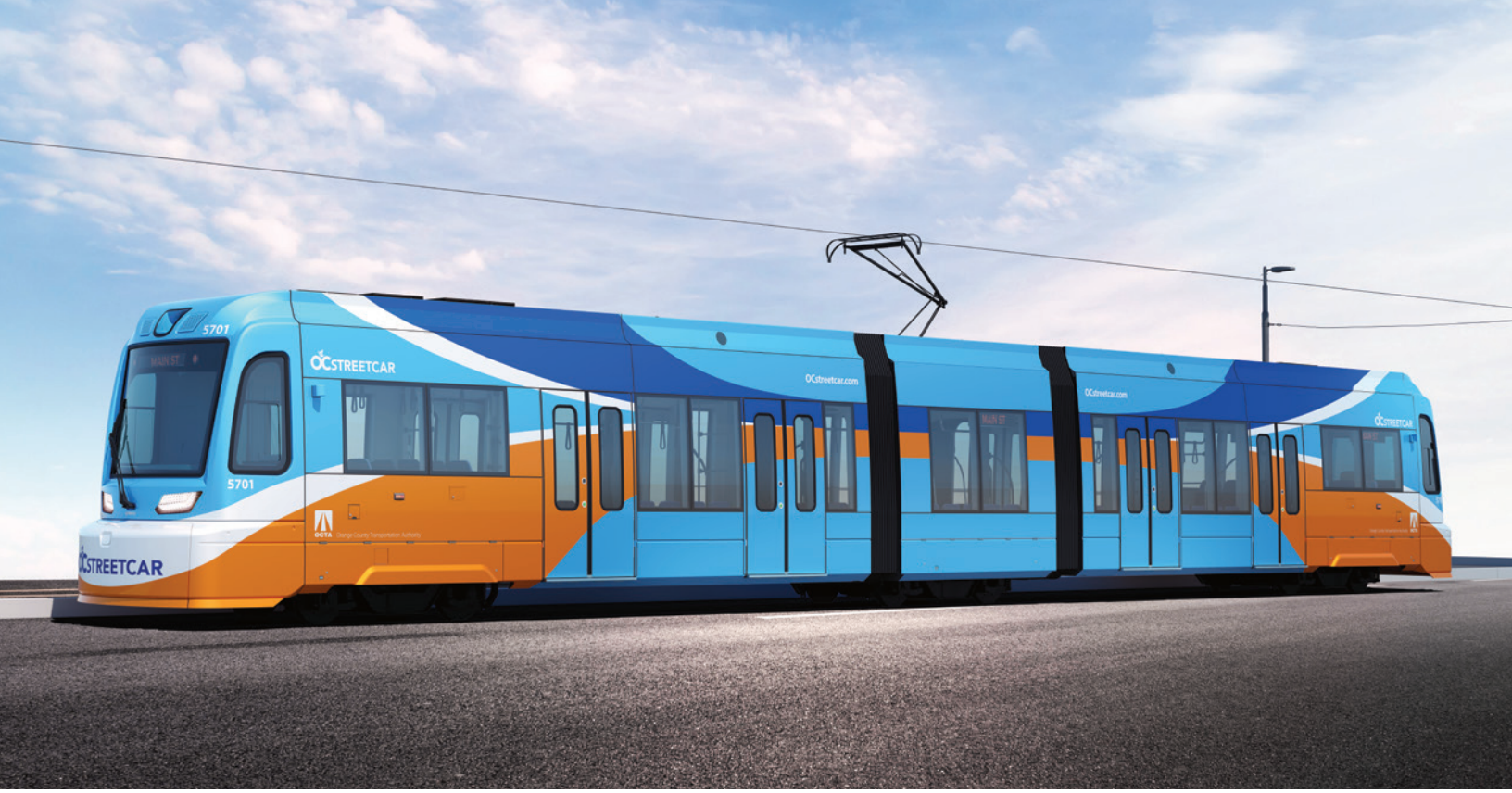


ORANGE COUNTY, CALIFORNIA

S700 Streetcar

In 2018 Siemens Mobility introduced the latest innovation in low-floor light rail technology – the S700. Updating the 15-year-old S70 platform, the new and improved modern design of Siemens Mobility's low-floor light rail vehicle (LRV) has a new name and a new passenger experience.

The Orange County Transportation Authority has tapped Siemens Mobility to build eight new streetcars. With most of its route following the original path of an abandoned railway, the OC Streetcar is a modern, second generation light rail system running on 4.1 miles of track.

A steel carbody construction, fully bi-directional, double articulated, low-floor vehicle, ideal for street-level operation and built in North America. Each six-axle streetcar is equipped with two power trucks (one under each end) and a non-powered center truck.

The interior of the new S700 will maintain the many proven and reliable aspects of the S70. The technological innovations throughout the new vehicle design and an open low-floor configuration make it one of the most accessible vehicles of its kind in today's market. The end-to-end low-floor access for all passengers including those in the ADA community and better sightlines for security allows for noticeably improved passenger flow and comfort, safety and efficiency.

Performance and Capacity

Maximum operational speed	44 mph	70 km/h
Service acceleration and deceleration	3.0 mphps	1.34 m/s²
Emergency braking rate	5.2 mphps	2.32 m/s²
Passenger capacity	62 seats Approx. 220 total passengers @ 6 p/m² 4 wheelchair spaces or bicycle areas plus 2 dedicated bicycle areas	
Maximum operational gradient	7%	
Motor power rating	174 hp x 4	130 kW x 4
Catenary supply voltage	750 Vdc	

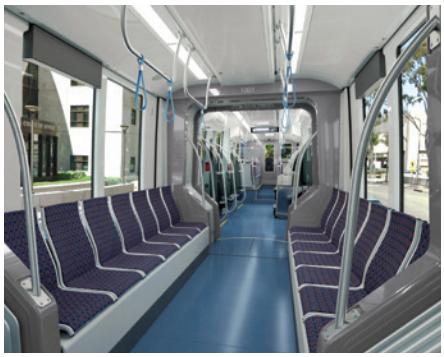
SIEMENS

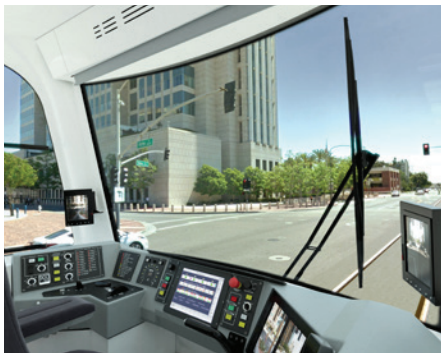
Each S700 streetcar is equipped with eight wide opening sliding plug doors all located in the low-floor area, with four to each side of the vehicle. The vehicle is also equipped with four designated wheelchair spaces allowing for priority seating to disabled passengers.

And to accommodate Orange County's bicycle population, this S700 incorporates two dedicated bicycle areas located adjacent to each forward doorway. The door spacing has been optimized to allow for greater passenger flow entering and exiting the vehicle, which ultimately decreases the station dwell times.

To maximize passenger comfort, each vehicle is equipped with two roof-mounted HVAC units per streetcar.

The S700 utilizes a passenger information system consisting of operator and automated announcements, passenger-operator intercoms and interior and exterior electronic destination signs, as well as interior surveillance system for increased passenger safety.





Each streetcar is electrically powered from an overhead catenary system (OCS) and for Orange County operates at speeds up to 44 mph, carrying close to 220 passengers in each vehicle. These streetcars remove automobiles off the road, in turn helping cities decrease their CO2 emissions.

Vehicle Dimensions and Weight

Length over coupler	90 ft	27451 mm
Width	8.7 ft	2650 mm
Height with pantograph (locked down)	12.8 ft	3860 mm
Maximum pantograph height	21 ft	6400 mm
Vehicle empty weight	102,500 lbs (AW0)	46500 kg
High-floor section above TOR	2.8 ft	855 mm
Low-floor section above TOR	1.2 ft (threshold)	356 mm (threshold)
Minimum turning radius	65.6 ft	20 m
Vertical curve, crest	820 ft	250 m
Vertical curve, sag	1,150 ft	350 m
Track gauge	4.7 ft	1435 mm
Wheel base (power trucks) (center truck)	6.2 ft 5.9 ft	1900 mm 1800 mm

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