

February 2015

# Metropolitan Transit System SAN DIEGO TROLLEY LIGHT RAIL VEHICLES

MODEL (series)	SD100 (2000)	S70 (3000) / S70US (4000)
Manufacturer	Siemens Sacramento, CA	Siemens Sacramento, CA
Туре	Double-ended articulated car, six axle, multiple-unit operation.	
Fleet Size	52	11 / 65
Height (top of car to rail)	12.4 feet	12.4 feet
Center Aisle Floor Height	39 inches	15 inches
Width (exterior)	8.7 feet	8.7 feet
Length (end-to-end)	76.71 feet	88.5 feet / 79.2 feet
Length (over coupler faces)	81.36 feet	90.7 feet / 81.4 feet
Weight (empty)	89,000 pounds	97,900 pounds / 96,000 pounds
Car Body	Lightweight welded steel.	Low-alloy, high-tensile steel and composite materials.
Interior	Upholstered neoprene foam seats (fire-resistant), rubber flooring, simulated wood paneling.	Cloth-covered foam seats (fire-resistant), rubber flooring, color coordinated paneling.
Wheels	Steel-tired with acoustic dampening.	
Dynamic Braking	Primary method of stopping car. Active down to ½ mph to 3 mph.  Full dynamic braking from 55 to 3 mph (SD100), 55 to ½ mph (S70 / S70US). Friction braking system is applied to complete the stop from 3 mph to no motion (SD100), ½ mph to no motion (S70 / S70US).	
Ventilation (cooling and heating unit on entire fleet)	Dynamic air pressure allowing an exchange rate of not less than 20 times per hour.	Interior air conditioning and heating to accommodate local climate.
Speed	55 mph maximum	55 mph maximum
Overhead Traction Power	600-V DC	600-V DC
Operating Power Requirements	550 KW to accelerate from a stationary position. 165 KW needed to maintain speed.	130 KW to maintain speed.
Passenger Capacity	Seated: 64 Commute: 96 Special Events: 150	Seated: 64/ 60 Commute: 120 / 120 Special Events: 163 / 163
Doors - eight per car	Opened by operator and/or individually activated by passenger pushing button after locks released by operator. One for wheelchair lift; low-level stair boarding through double-folding doors.	Opened by operator and/or individually activated by passenger pushing button after locks released by operator. All center sliding doors comply with ADA; low-floor boarding through sliding doors.
Door Safety System I	Photo-electric cells and sensitive door leaf edges.	
Wheelchair Lifts	Located at one dedicated door at one end of each vehicle.	Bridge plate/ramps on two designated doors per car side.

Vehicle Orders Cars 1000 - 1071 (U2, Retired January 2015)

Cars 2001 - 2052 (SD100) Cars 3001 - 3011 (S70) Cars 4001 - 4065 (S70US)







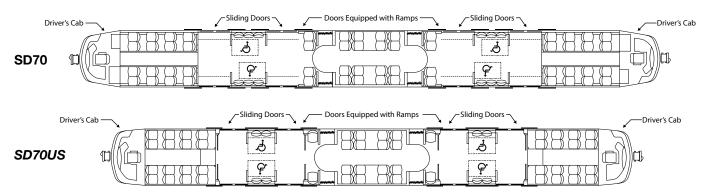


## **Metropolitan Transit System**

## **LIGHT RAIL VEHICLE SCHEMATICS**

#### SD70 / SD70US Model





### SD100 Model



