



Bi-directional, six-axle, high-floor single articulated light rail vehicle constructed of low alloy high tensile (LAHT) steel, with step-wells suitable for street-level boarding.

Modern interior with large windows. Air conditioning and enhanced sidewall heating to accommodate local climatic conditions. Seating is primarily knee-to-knee.

Eight low-level sliding plug doors with interior steps. Four doors are equipped with manually-operated bridge-plates allowing for easy entry from wayside ramps meeting the ADA requirements. Modern passenger information system consisting of automated visual and audio announcements, public address, passenger-operator intercom and electronic destination signs. Passenger safety is enhanced by an on-board video surveillance system.

Vehicle equipped with a diagnostics health monitor that delivers local fault specific information to the operator for major systems.

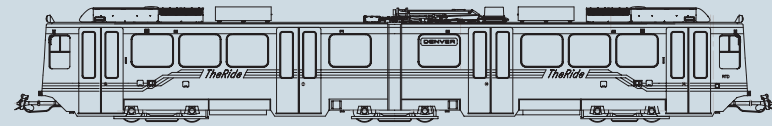
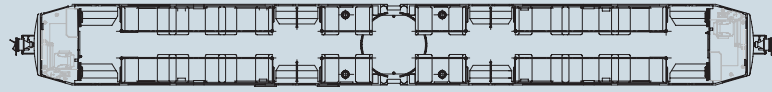
Each vehicle is equipped with customer-supplied automatic train protection equipment (ATP).

Propulsion is provided by a modern, state-of-the-art AC-IGBT system, with four motors per car, pulse controlled inverters and microprocessor vehicle control logic. Dynamic and hydraulic friction brakes are provided, as well as track brakes.

Performance and Capacity		
Maximum operational speed:	55 mph	88.5 km/h
Maximum allowable speed:	65 mph	105 km/h
Service acceleration and deceleration:	3.0 mphps / 3.0 mphps	1.34 m/s <sup>2</sup> / 1.34 m/s <sup>2</sup>
Emergency braking rate:	6.15 mphps	2.75 m/s <sup>2</sup>
Passenger capacity:	64 seats	
	Approx. 185 total passengers	
	4 wheelchair spaces	
Maximum operational gradient:	6%	
Motor power rating:	194 hp x 4	145 kW x 4
Catenary supply voltage:	750 Vdc	

# SD160 Light Rail Vehicle

Denver, Colorado



Vehicle Dimensions and Weight		
Length over coupler:	81.4 ft	24820 mm
Width:	8.7 ft	2654 mm
Height with pantograph (locked down):	12.4 ft	3786 mm
Maximum pantograph height:	up to 23 ft	7010 mm
Vehicle empty weight:	89560 lbs (AW0)	40624 kg
Floor height above TOR:	3.2 ft	985 mm
Low floor section above TOR:	n/a	n/a
Minimum turning radius:	82 ft	25 m
Vertical curve, crest:	1150 ft	350 m
Vertical curve, sag:	820 ft	250 m
Track gauge:	4.7 ft	1435 mm
Wheel base:	5.9 ft	1800 mm

