



The vehicle is a bi-directional, six axle, single articulated, high floor vehicle, suitable for high platform operation. The carshell is constructed of low alloy high tensile (LAHT) steel. The vehicle sections consist of two body sections and an articulated section.

The design of the vehicle is modern, attractive, and aesthetically pleasing that complements the appearance of the existing Edmonton vehicles. The roof shrouding is an integrated design that enhances the overall appearance of the vehicle.

Passenger seating arranged in predominately transverse orientation. Longitudinal flip-up seats are provided in the articulation area to provide accommodations for wheel chairs.

Each LRV is equipped with eight (8) sliding plug style passenger doors, with four (4) doors on each side of the vehicle, located directly across from each other. The vehicle is fully ADA compliant, and ramps are mounted at two of the middle doors in the A Car for entry of disabled riders.

The SD160 vehicle is powered from an overhead catenary and is capable of speeds up to 50 mph (80 km/h). This vehicle is capable of multiple unit operation in consists of up to five cars.

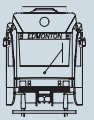
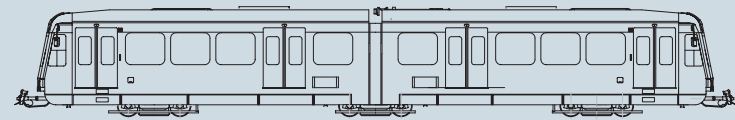
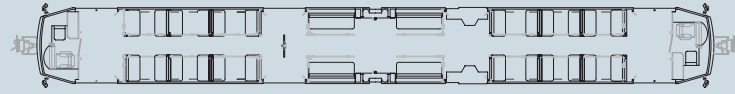
The nominal low voltage power supply voltage is 24 VDC. The operation range of the low voltage power supply loads is 18 VDC to 30 VDC. The nominal AC output voltage is 120/208 VAC, three phase, 4 wire, 60 Hz.

Each vehicle is carried by two power trucks, one at each end, with a non-powered truck under the articulation section.

Performance and Capacity		
Maximum operational speed:	50 mph	80 km/h
Maximum allowable speed:	50 mph	80 km/h
Service acceleration:	2.37 mphps	1.07 m/s <sup>2</sup>
Service deceleration:	2.95 mphps	1.31 m/s <sup>2</sup>
Emergency braking rate:	5.9 mphps	2.63 m/s <sup>2</sup>
Passenger capacity:	60 seats	
	Approx. 190 total passengers	
Maximum operational gradient:	7%	
Motor power rating:	194 hp x 4	145 kW x 4
Catenary supply voltage:	600 Vdc	

# SD160 Light Rail Vehicle

Edmonton, Canada



Vehicle Dimensions and Weight		
Length over coupler:	81.4 ft	24820 mm
Width:	8.7 ft	2654 mm
Height with pantograph (locked down):	12.6 ft	3840 mm
Maximum pantograph height:	up to 23 ft	7010 mm
Vehicle empty weight:	91492 lbs (AWO)	41500 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

