

**EMU COG / ADHESION TRAINSET**

TRAX and Little Cottonwood Canyon, Utah

The proposed three-car custom Stadler vehicle will transport passengers through the TRAX network connecting it to the Little Cottonwood Canyon corridor allowing for quick and easy access to the Snowbird and Alta ski resorts and other points within the canyon. The Electric Multiple Unit (EMU), with battery options, will be a mixed operation vehicle allowing for rack-and-pinion (cog) as well as adhesion operation. The vehicle will have a standard gauge and will be equipped with powerful drive equipment, including two motorized trucks with adhesion and rack-and-pinion capabilities per three-car train set. The trains are built for a maximum running speed of 55 mph in the adhesion sections and can also be used for multiple unit train control. Each three car consist is 130.3 ft long and contain 106 seats and a standing capacity of 147, making for a total of 253 passengers per three-car train set. The modern vehicle concept with fully heated and air-conditioned multiple units, passenger information system and low-floor entrance areas is perfectly optimized to meet the needs of passengers. The trainsets will be propelled via 750 VDC overhead catenary as well as possible battery options with a total tractive power of 900 kW in acceleration and -1000 kW in braking.

[**www.stadlerrail.com**](http://www.stadlerrail.com/)



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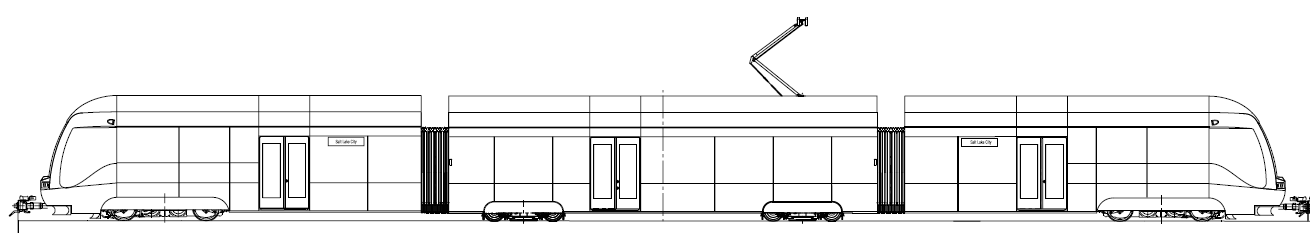
**Stadler US Inc.**

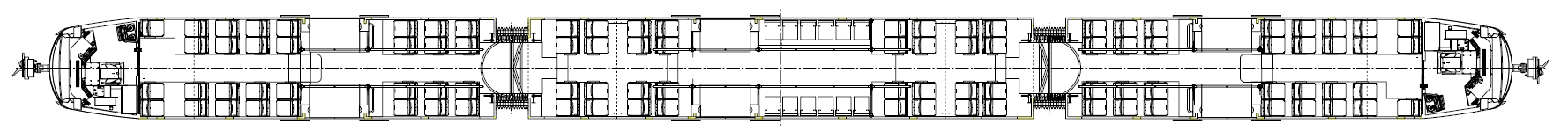
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# Technical features

## Technology

* Car body with steel construction
* 2 two-motor trucks with adhesion and rack-and-pinion capabilities per three-car train set
* Seamless transition from adhesion to rack-and-pinion

## Comfort

* Air-conditioned passenger compartments
* Low-floor entrance areas
* Large, double-glazed windows and spacious compartments guarantee superior brightness
* Wheelchair spaces
* Electrical outlets
* Modern passenger information system
* Accommodates bikes, skis, and snowboards

## Personnel

* Air-conditioned driver cabs

## Options

* Hybrid battery, overhead catenary system

# Vehicle data

**Lines Serviced** Little Cottonwood & TRAX

**Gauge**  1435 mm **Axle Arrangement** Bz’2’2’Bz

### Seating Capacity 106 Standing Capacity 147 (4 persons/m2)

### Floor Height 14 in. (350 mm)

**Entrance Width** 51 in. **(**1.3 m) **Length over Coupling** 130.3 ft **(**39.711 m) **Vehicle Width** 8.69 ft **(**2.65 m) **Vehicle Height** 12.63 ft (3.85 m)

**Minimal Curve Radius** 246 ft (Cog) 80 ft (Adh)

**Max Traction Power at Wheel** 900 kW

### Starting Tractive Effort at Wheel

Adhesion 104 kN



Rack-and-pinion 140 kN



**Maximum Speed, Rack** 23mph **(**37 km/h)



**Design Speed, Adhesion** 55 mph **(**88 km/h) **Maximum Gradient, Rack-and-Pinion** 13 % **Maximum Gradient, Adhesion** 7 %

