VENTURE TRAINSETS

VIA Rail

VIA Rail's current Corridor fleet will be replaced by Siemens Venture trainsets and will operate in the Quebec City - Windsor corridor, VIA Rail's busiest route, which represents 96% of its ridership in 2019.

Performance
The Venture trainsets are powered by the Siemens Charger locomotives and are equipped with a proven propulsion system powered by a fuel-efficient Cummins QSK95, 16-cylinder diesel engine providing 4,200 hp. The Cummins engine feeds an alternator, and the IGBT traction converters provide single axle control for operation of up to 201 kph/125 mph* while meeting the latest EPA (Environmental Protection Agency) Tier 4 emission standards.

Accessibility
Each trainset has three cars with onboard wheel-chair lifts available in economy and business class, as well as five mobility aid spaces per trainset that provide ample space for wheelchair users. Large and fully accessible washrooms allow for easy wheelchair maneuverability, clearer floor area, more hand grabs, a wider door opening and a power-operated door.

Braille signage is provided on important features such as seat numbers, call-for-aid buttons and at-seat attendant call buttons at Mobility Aid Spaces. Onboard announcements are also available in both audio and visual formats.

Safety
Sliding-plug side doors with trap doors and retractable low-level entry steps offer improved ease of entry and exit for high- and low-level platform access.

Performance and Capacity

Maximum operational speed	201 km/h / 125 mph*
Rated power maximum	4,200 hp @ 1,800 rpm
Head end power	600 kW
Tractive effort (max.)	290 kN / 65,000 lbs.
Fuel tank volume	2,200 gallons
Passenger capacity	Economy: 194 seats Business: 87 seats Wheelchair lifts: 6 Mobility aid spaces: 5

*Current maximum speed allowed for passenger trains in Canada, which is determined by the Class of Track on which these trains operate, is 160 km/h (100 mph).

SIEMENS

Modern sealed gangways (passage between cars) are wider and have a smooth floor surface allowing for an easy transition from one car to another isolated from weather.

Passenger areas are equipped with CCTV that can be accessed by the Operations Control Center.

Intelligent Train
The fully integrated IT system provides the backbone for innovative applications such as vehicle diagnostics, Maintenance, Passenger information system, CCTV, and internet on board

Passenger Comfort:

- Modern suspension design, featuring air spring technology delivers the highest level of comfort.
- Wider aisles, automatic touchless interior doors, large and adjustable tray tables, comfortable and ergonomic seats with integrated power outlets, USB charging and overhead reading lights.
- A self-contained roof-mounted HVAC system with thermal and acoustic insulation maintains a pleasant environment.
- Enhanced Wi-Fi improves connectivity and supports high-speed reliable data connection.
- In-seat recline allows seat adjustment without encroaching into the space behind.
- Latest state-of-the-art galleys optimize passenger service abilities.

Environmental Considerations:

- These bi-directional trainsets operate more efficiently, reducing emissions and operating costs.
- The engines will meet EPA (Environmental Protection Agency) – Tier 4 emission standards which will allow for an 85%-95% reduction in particulate matter (PM) and Nitrogen Oxide (NOx) emissions and significantly contribute to improving air quality.
- The trains feature energy-saving LED lighting and dual pane windows.
- The locomotives use a microprocessor-controlled electrodynamic braking system which allows the braking energy of the traction motors to feed into the train's onboard electrical system, reducing overall fuel consumption.
- Water dispensers provide passengers with access to fresh water using their own water bottles.

Optimized Maintenance:

- Continuous trainset data monitoring and data analytics ensures early detection of faults, preventative maintenance and reduced downtime. Vehicle Equipment Monitoring System (VEMS) data related to the wheels (wear, condition, and profile of the wheels) and the braking system.
- Predictive and condition-based maintenance paired with a newly introduced computerized maintenance management information system (CMMIS) extends the useful life of components and optimizes the maintenance schedule, ultimately increasing the fleet reliability and availability.

Passenger Car Dimensions

Length	25908 mm	85 ft
Width	3201 mm	10 ft 6 in
Height	4268 mm	14 ft
Floor height above top of rail	1296 mm	51 in
Side door width	864 mm	34 in
Aisle width	696 mm	27.4 in
Distance between truck centers	18136 mm	59 ft 6 in
Trainset Weight*	414,812 kg	914,504 lbs (414.8 T)

*For a standard trainset configuration, which consists of four coaches, one cab car and one locomotive. The configuration is flexible and can be decreased and increased as needed.

Siemens Mobility, Inc.
One Penn Plaza
11th Floor, Suite 1100, New York, NY 10119, USA

Contact for information:
Rolling Stock Rail Plant, Sacramento, CA 95828
(916) 681-3000, siemensmobility.us@siemens.com