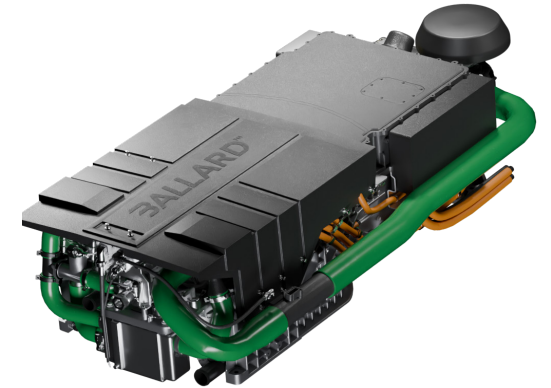
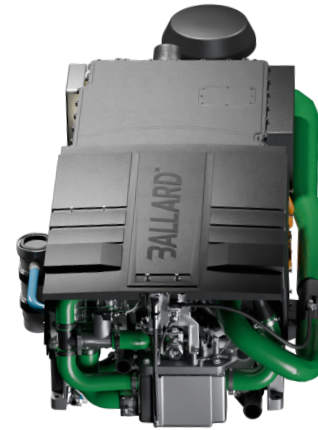
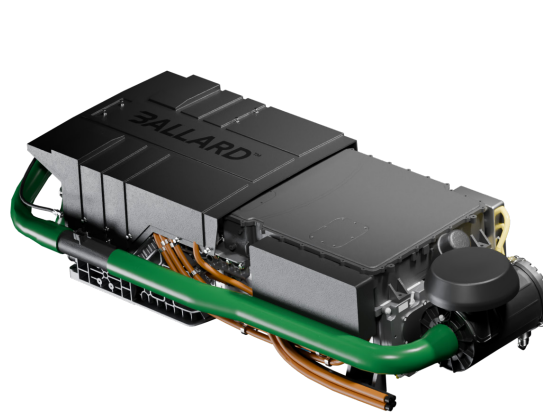




Fuel Cell Power for Transit Applications

The FCmove®-SC represents the next evolution in Ballard's trusted FCmove® platform—our 9th generation fuel cell engine engineered specifically for the demands of modern transit buses. Designed with integration in mind, the FCmove®-SC combines a compact, lightweight form with exceptional power and efficiency. It features a fully integrated DC/DC power converter, complete balance-of-plant (BOP), and essential filtration systems—all in one streamlined unit. Backed by decades of real-world experience, unmatched reliability, and Ballard's commitment to quality, the FCmove®-SC delivers a smarter, simpler path to zero-emission transit.



Features

Low Total Cost of Ownership

High efficiency engine enabling long driving range, reductions in integration complexity, and reductions in service maintenance times.

Integration Flexibility

Routable filtration systems, simplified fluid and low voltage connections in easily accessible location, optimized packaging for easier access to BOP parts.

Proven Reliability & Durability

Demonstrated exceptional fuel cell stack lifetime, with >25,000 hours of operation and 98% in service module power availability.

High Performance Stack

FCgen®-LCS stack is a high power density, high performance stack designed to meet stringent automotive standards.

Freeze-Start Capability

Rapid freeze start from -30°C eliminates vehicle plug in or vehicle assisted start procedures.

Compact Design

Integrated with a DC/DC converter and BOP components, this module easily connects to the architecture of the integrator.

Humidification

Integrated maintenance free system that provides maximum system performance and durability through a wide range of environmental conditions.

High Temperature and Altitude Operation

Operation up to 88°C system outlet temperature and up to 500m with no power derate at beginning of life and end of life.

Climate Protection

Designed to IP6K9K to protect key module components in extreme climates.

High Pressure System

Offers better performance, fuel efficiency and durability by preventing degradation.

Remote Diagnostics

Monitors performance data remotely to anticipate preventative maintenance.

Safety Features

Fuel shut off, fuel pressure relief, touchsafe high voltage rated connectors, optional high voltage interlock configuration, hydrogen leak and intrinsically safe stack enclosure that provides additional layer of safety.

Product Specifications¹

Performance with integrated DC/DC convertor

Peak power capability	75 kW
Controlled system power	65 kW
Operating system voltage	520 – 750 V
Idle power	6.5kW

Physical

Dimensions ² (L x W x H) mm	1447 x 600 x 414
Weight	231 kg
Environmental protection	IP6K9K
Environmental operating temperature	–40°C – +80°C
Minimum start-up temperature	–30°C
Short-term storage temp	–40°C – +80°C

Reactants and Coolant

Fuel type	Gaseous hydrogen
Composition	H2 quality as per SAE J2719_201511, ISO 14687:2019 grade D
Fuel supply pressure	6 – 10 barg, 8 barg nominal
Peak fuel efficiency	57%
Oxidant	Air
Coolant	Ethylene glycol concentrate 50% by volume, balance DI water
Maximum radiator coolant outlet temperature	75°C

Safety Compliance

Certifications ³	UN ECE Reg 10, Reg 100, Reg 134, EU REACH, ISO23273:2013, ISO6469–2:2018, SAE J2578:2014, ISO/IATF16949:2016, SAE J1939:2013, ISO 6469–4:2015
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Monitoring

Control interface	CANbus
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Emissions

Exhaust	Zero-emissions (no PM, NOx, SOx, CO or CO ₂)
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¹Specifications based on product currently in development. Final product may differ.

²Excluding air filter and DI filter.

³SAE J1939:2013, ISO 6469–4:2015 (Applicable sections).

