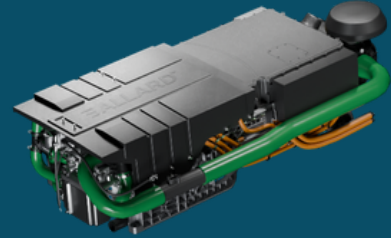


The FCmove®-SC represents the next evolution in Ballard's trusted FCmove® platform - our ninth generation fuel cell engine engineered specifically for the demands of modern transit buses. Designed with integration in mind, the FCmove®-SC combines a compact, lightweight form with exceptional power and efficiency. 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 Balance of Plant 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.

High Pressure System

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

Compact Design

Integrated with a DC/DC converter and Balance of Plant 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 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.

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.

Performance with integrated DC/DC convertor

Rated power	75 kW
Peak efficiency ²	57%
Lifetime ³	>25,000 hours
Operating voltage with DC/DC	520-830 V
Idle power	6.5 kW

Physical

Dimensions with air filter (LxWxH)	1743 x 824 x 416 mm
Dimensions without air filter (LxWxH)	1447 x 600 x 413 mm
Weight ⁴	231 kg

Environmental

Ingress Protection	IP6K9K
Environmental operating temperature	-40°C - +80°C
Minimum ambient start-up temperature	-30°C

Fluids

Fuel type	Gaseous hydrogen
Fuel composition	ISO 14687:2019 Grade D SAE J2719_201511
Fuel supply pressure	6-12 bar
Oxidant type	Air
Coolant type	Ethylene glycol concentrate balanced by DI water
Maximum coolant outlet temperature	88°C

Standards

Codes, standards, directives ⁵	ISO23273:2013, ISO6469-2:2018, ISO6469-3:2018, SAE J2578:2014, UN ECE Reg 10, UN ECE Reg 100, UN ECE Reg 134, EU REACH, SAE J1939:2013
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Communication

Control interface	CANbus
Data interface	Wifi/Cellular

¹ Specifications are subject to change.

² Includes purge losses.

³ Product lifetime is based on operation under standard operating conditions. Operation outside specified limits may reduce product lifetime and performance. Please contact Ballard for an application-specific assessment.

⁴ Dry.

⁵ The Product is designed and manufactured with reference to applicable provisions of the standards listed, to the extent relevant to the Product as a component. As many of these standards apply at the vehicle or system level, the Product in isolation is not intended to demonstrate full compliance with such standards. Certification and compliance of any system incorporating the Product remains the responsibility of the integrator. This information is provided for general guidance and does not constitute certification of compliance with these standards.