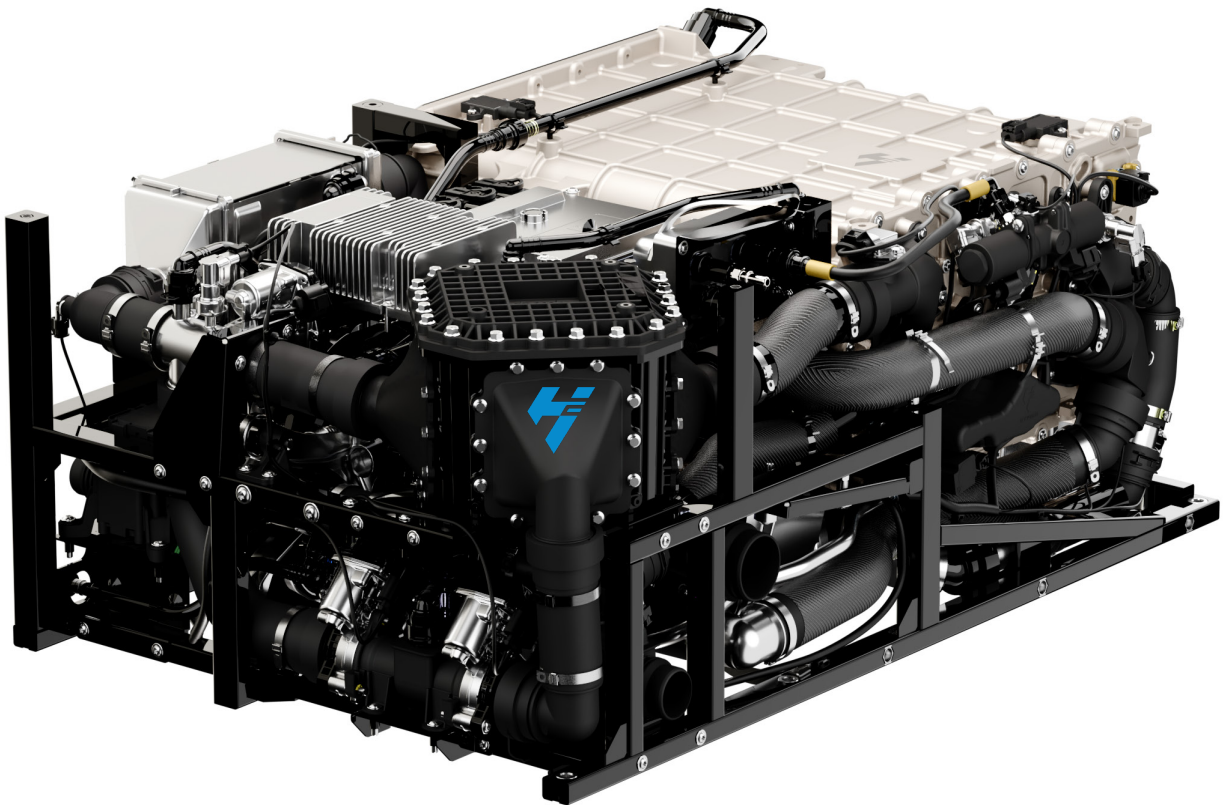


StackPack™ 75

HYDROGEN FUEL CELL SYSTEM

City & Intercity Buses Applications



BUILDING
A POSITIVE
FUTURE

Symbio, partner of your hydrogen-electric transition

Our customer-centric approach

The transition to decarbonized transportation is a major challenge for operators—whether urban, interurban, or long-distance, public or private. Our hydrogen fuel cells offer the best of both worlds' solution, combining the competitiveness and performance of thermal engines with the benefits of electric power: zero CO₂ and particle emissions. We partner with OEMs, integrators, and fleet managers to support every stage of their hydrogen mobility transition project and deployment:

- Needs assessment
- Integration
- Commissioning & training
- Aftersales & maintenance



StackPack™ 75, plug-and-play system, end-to-end support

Our hydrogen-electric fuel cell solution for your buses

Symbio's StackPack™ 75 is a compact, versatile, and deployable at scale hydrogen fuel cell system. Purpose-built for bus and coach applications, it delivers maximum efficiency and dependable performance.



SEAMLESS
INTEGRATION

- **Compactness:** 268L in volume and 40 cm high to fit in the engine bay or on the vehicle roof.
- **Ease of cooling:** operates at up to 85°C, minimizing the size and complexity of your cooling system.
- **Versatility:** possibility to combine multiple systems into one streamlined solution.
- **Cost-effectiveness:** plug-and-play system to simplify integration and reduce overall expenses.



COST-EFFICIENT
FLEET OPERATIONS


- **Low hydrogen consumption:** engineered for optimal efficiency to significantly reduce H₂ usage.
- **Maximized passenger capacity:** compact and lightweight design to preserve space and payload.
- **Minimal maintenance costs:** built for durability and minimal routine servicing.




BEST-IN-CLASS
SERVICES

- **Technical support:** a dedicated team to assist with system commissioning directly at your facility.
- **Aftersales:** data logging, rapid-response flying doctors, and readily available spare parts to maximize vehicle uptime.
- **Training:** access to 80 specialized modules via our Symbio Hydrogen Academy training platform to enhance adoption by end users.

POWER & LIFETIME

	Max. power ¹	75 kW
	Idle power ¹	9 kW
	Durability ²	20 000 hours


ELECTRICAL OUTPUT

	Peak efficiency	54 %
	Voltage, output range	520 - 850V
	Current, max. output	150 A
	Control interface	CAN / CAN FD

OPERATING TEMPERATURE

	Coolant, max. outlet temp.	85 °C
	Operating ambient air temp. ³	-20°C to 50°C

COMPACTNESS

	Stack power density	4.9 kW/liter
	Volume & mass	268 L & 184 kg

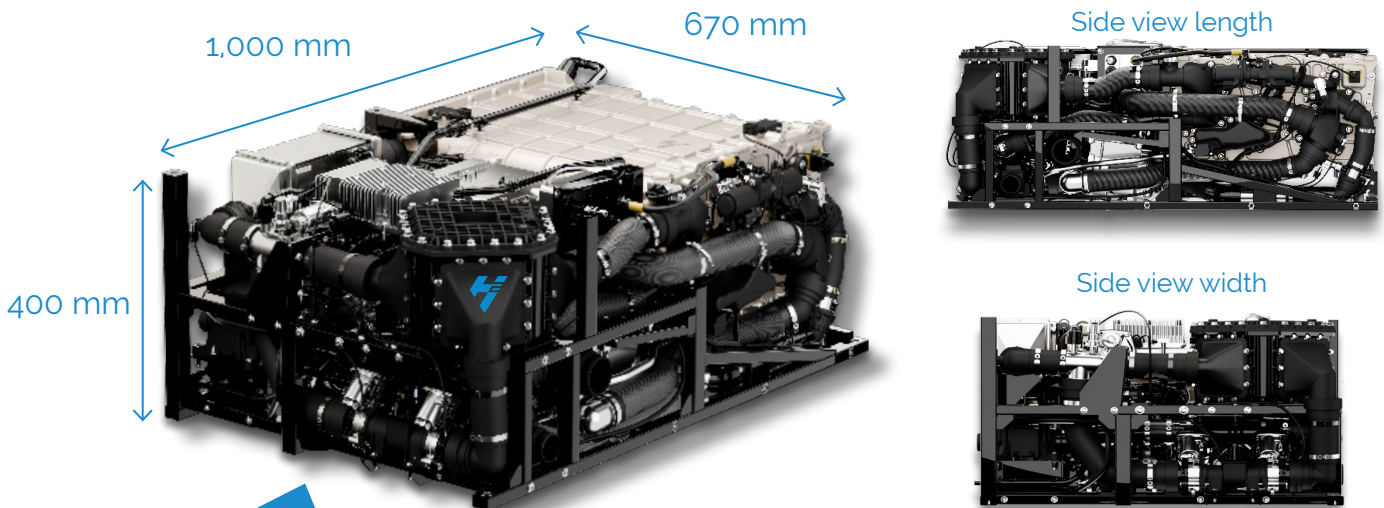
NORMS & REGULATIONS

	Environmental protection	IP69K
	Regulations	UN ECE R10, UN ECE R100, UN ECE R134, UN GTR13
	Safety standard	ISO 26262

¹ Net power delivered by the complete fuel cell solution to the DC bus at BOL.

² Durability defined by end-of-life efficiency and use case.

³ at Compressor inlet.



ELECTRIC CONVERSION BOX (ECB)

The Symbio ECB combines the HVSU (High Voltage Supply Unit) and DC-DC (Direct Current Converter) that were previously distinct components, into a single one. Electrical functions such as electric power conversion, electrical safety, and auxiliary power distribution are integrated as an all-in-one smaller-size efficient system. From an industrial perspective, this components rationalization improves manufacturing lead times. On the product side, it enables a breakthrough volume reduction of our fuel cell system.

Symbio, an industrial leader

Symbio combines industrial leadership, breakthrough innovation, entrepreneurial agility and a customer-centric approach to create tailor-made solutions and support its clients in the deployment of their clean mobility roadmaps.

Symbio designs and manufactures a wide range of **StackPack™** fuel cell systems that meet all power, durability, and autonomy needs of mobility and stationary applications. At our **4.0 Gigafactory**, the biggest integrated fuel cell production site in Europe, IATF 16949 certified, we manage the complete system assembly process. Our unique expertise in key components, combined with full control and in-house manufacturing of the **MEA and BPP**, enables us to supply efficient and competitive solutions tailored to each application and vehicle architecture.

Our robust industrial footprint ensures rapid project scalability and high-volume production, allowing us to meet customer and market expectations effectively.



IATF 16989
certified for **automotive**
standards

> 7,000 Sqm
of unparalleled world-class
innovation center certified ISO 8



Scan me!

Driving hydrogen excellence through the first 100% dedicated digital training platform

Symbio has established the **Symbio Hydrogen Academy** to develop the skills that are necessary to the global promotion and adoption of hydrogen solutions. The Symbio Hydrogen Academy consolidates and emulates the expertise across the Symbio Group to share cutting-edge knowledge externally and **accelerate the development of the hydrogen industry globally**. With its first **digital training platform** that is entirely dedicated to the hydrogen ecosystem, the Symbio Hydrogen Academy offers comprehensive **training modules covering the entire hydrogen value chain** to all professionals and students involved in the hydrogen industry.



EUROPE - FRANCE
10 rue Specia, 69190 Saint-Fons
sales.europe@symbio.one

NORTH AMERICA - USA
42613 Avenida Alvarado, Termeclula CA 95590
sales.na@symbio.one

SYMBIO HYDROGEN ACADEMY
www.symbiohydrogenacademy.com
symbiohydrogenacademy@symbio.one