

**BOSCH**

Hybrion

PEM Electrolysis Stacks
by Bosch

PEM electrolysis for hydrogen production

Hydrogen produced via the proton exchange membrane electrolysis (PEMEL or PEM) method is one of the key elements of a CO₂ reduced economy.

It is generated in electrolysis systems powered by electricity ideally from renewable sources, such as solar or wind energy, with water as the raw material. The reaction products of this electrochemical process are hydrogen and oxygen.

Our contribution – Hybrion PEM Electrolysis Stacks

With the Hybrion Stack, we deliver the heart of your hydrogen production. Our many years of experience in industrialization and automation are incorporated into the production of the stacks, of course, with the excellent Bosch quality you expect.

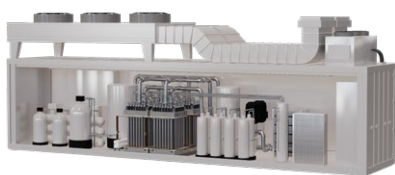
Our goal is to provide you with a scalable solution for global hydrogen generation. With our advanced electrolysis technology and accompanying services, we pave the way for a future-proof energy system that reduces CO₂ emissions – thus protecting the world for both present and future generations.

The Hybrion Stack produces 22.9 kg of hydrogen per hour at an output pressure of max. 34 bar. This is equivalent to a rated power of up to 1.25 megawatts.

A wide range of application areas

Using our core competence of scaling and industrialization, we make hydrogen production solutions available from decentralized systems for covering the energy requirements of the user's own production facilities or for hydrogen filling stations up to large-scale industrial solutions.

Local, decentralized hydrogen production



In scalable, decentralized plants with capacities of up to 5 MW per container, our Hybrion Stack is ideal for integrating

into applications that are positioned in the exact location where the hydrogen is used.

Electrolysis on a large industrial scale

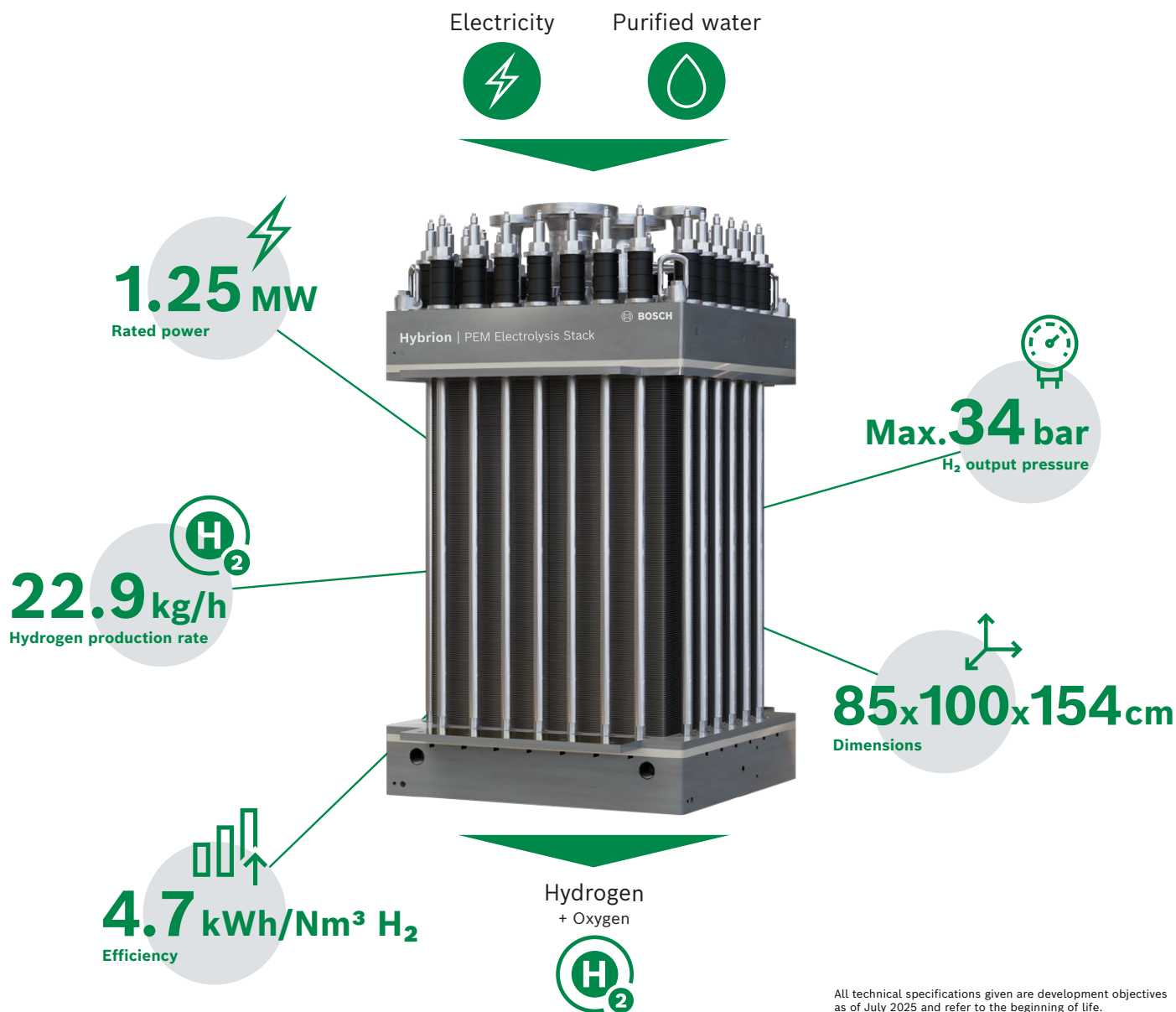


Embedded in large plants of industries such as the

steel, chemical or fertilizer sectors, our Hybrion Stack is used in centralized, highvolume production of hydrogen with a capacity of several hundred megawatts.

WELCOME TO THE NEW H₂

Hybrion PEM Electrolysis Stacks by Bosch



All technical specifications given are development objectives as of July 2025 and refer to the beginning of life.

Welcome to the new H₂ – shape the hydrogen era together with us!

Robert Bosch GmbH
Postfach 30 02 20 | 70442 Stuttgart | Germany
www.bosch-electrolysis.com



Funded by
the European Union



BOSCH
Invented for life

The commissioning of Bosch Hybrion PEM Electrolysis Stacks for customers starts in 2025. All technical specifications given are development objectives and refer to the beginning of life.