



# QUEST ONE PEM-ELECTROLYZER MODULAR HYDROGEN PLATFORM (MHP)

**Large Scale. Max Output.**

**Quest One High  
Performance Electrolyzers**

Figure is for illustrative purpose only

**QUEST  
ONE**

# PEM electrolyzers for a sustainable energy system – Quest One Modular Hydrogen Platform (MHP)

Modular, skid-mounted, ready-to-install: The Quest One Modular Hydrogen Platform (MHP) is a scalable platform for industrial production of green hydrogen based on PEM technology. 10 MW blocks can be combined to multi-MW systems serving projects with an electrolysis capacity of 10 to more than 100 MW. The system is ready for indoor installation on

preassembled skids. It is equipped with integrated process water treatment and electrical power supply. The Quest One MHP electrolyzer stands out with its unrivalled system efficiency, high availability and a well-thought-out maintenance concept, which results in low hydrogen production costs and stable safe operation.

10 MW BLOCK	
H <sub>2</sub> production nominal	4600 kg/d   2130 Nm <sup>3</sup> /h
Energy consumption <sup>1</sup>	4.6 kWh/Nm <sup>3</sup> H <sub>2</sub>   51 kWh/kg
System efficiency <sup>1</sup>	77 %
Performance class	10 MW
H <sub>2</sub> production modulation range	213 – 2130 Nm <sup>3</sup> /h   10 – 100%
H <sub>2</sub> purity without optional hydrogen purification	Water saturated at 65 °C and 30 bar (g)
H <sub>2</sub> output pressure	30 bar (g)
Load change	30 s (Minimal load to nominal load)
H <sub>2</sub> O required quality, without optional fresh water treatment	DI water (fully desalinated)
DI water consumption nominal	1850 kg/h
Dimensions L x W (indoor)	ca 10 x 24 m
Temperature (indoor)	+5 °C to +45 °C

Technical changes reserved  
<sup>1</sup> Battery limit for the efficiency: stacks and converters; standard conditions: BoL (Begin of Life), 15 °C, 30 bar (g) H<sub>2</sub> transfer pressure, 2000 Nm<sup>3</sup>/h, based on Higher Heating Value (HHV).

## We are the fuel of the global energy transition

As a technological pioneer, we have been playing a decisive role in shaping hydrogen technology for over 25 years. We believe that mobility, production, and consumption are possible without emissions. To achieve this, Quest One

builds on cooperation with visionary customers and partners, and the power of our parent company MAN Energy Solutions. Together, we are making hydrogen production green and the CO<sub>2</sub>-neutral transformation of all sectors a reality.