

PRESSURIZED ALKALINE ELECTROLYZERS

Sunfire-HyLink Alkaline

Sunfire's pressurized alkaline electrolyzers are installed in industrial projects across Europe. Our products meet the highest quality standards and safety requirements.



Modular system for accelerated implementation of up to multiple 100 MW capacity



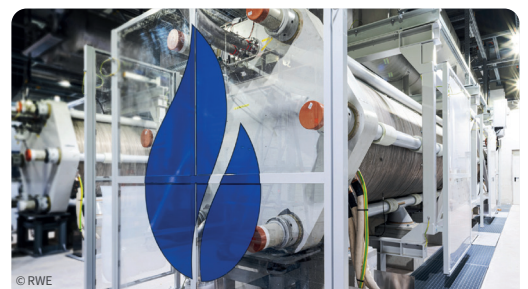
30 bar(g) pressurized alkaline electrolyzers for highly cost-effective hydrogen production with low OPEX and no compressor costs



Most reliable electrolyzer technology with 30+ years system design life



Data-driven monitoring for highly efficient system operation and lean maintenance

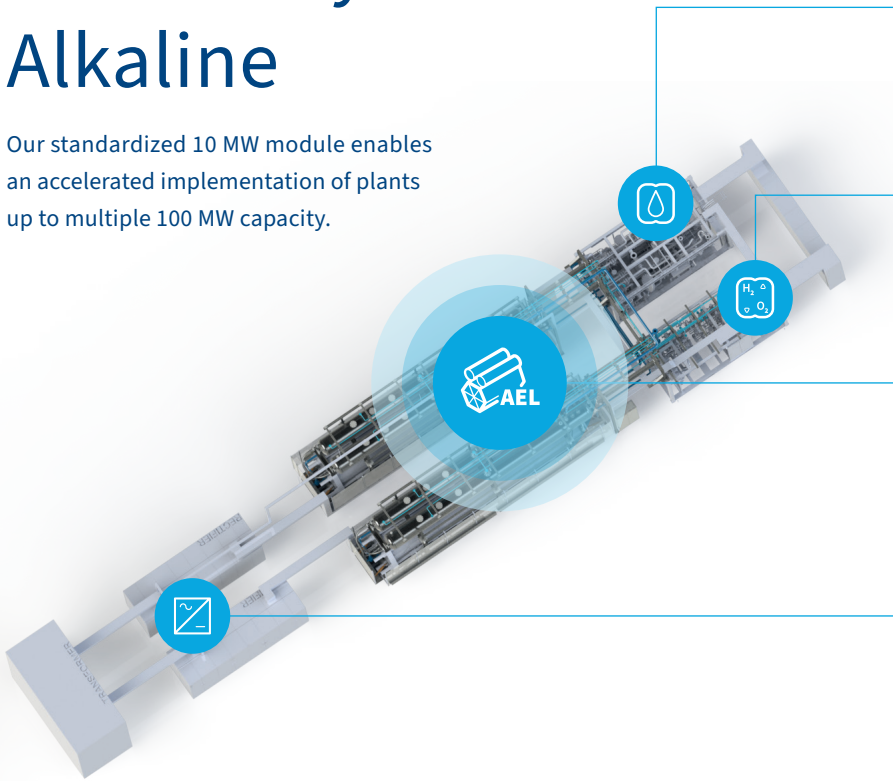


For large-scale industrial applications, such as:

- Green refining
- Green ammonia
- Green steel
- Green methanol
- Synthetic fuels

Sunfire-HyLink Alkaline

Our standardized 10 MW module enables an accelerated implementation of plants up to multiple 100 MW capacity.



Module Liquid Skid

- Temperature management
- Electrolyte circulation

Module Gas Skid

- Gas cooling
- Gas quality analysis

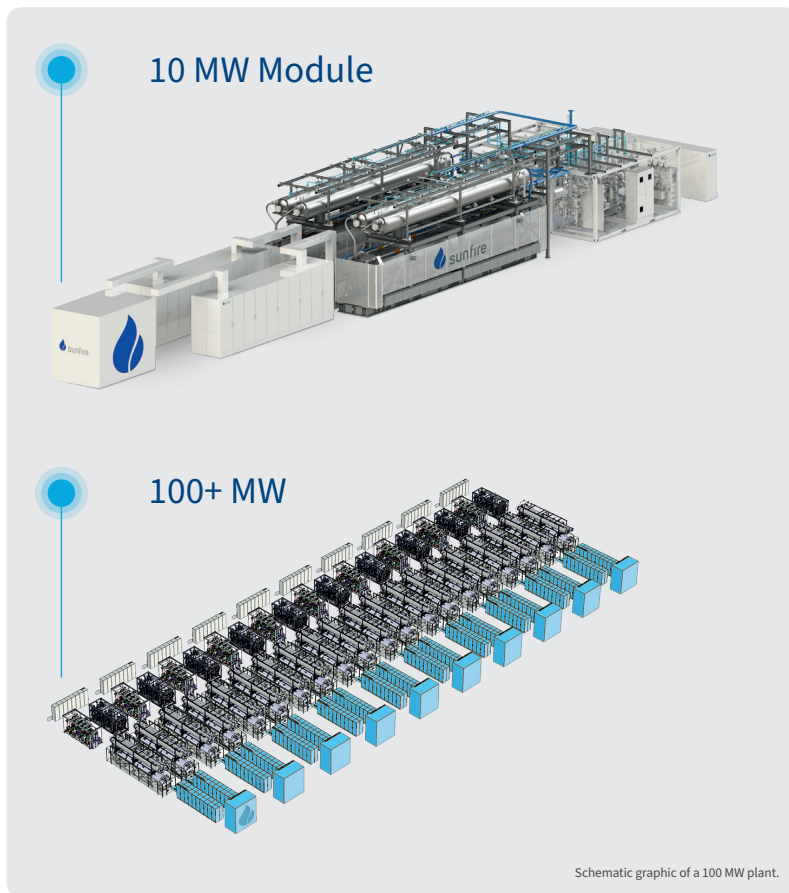
Core Electrolysis Unit

- Industry leading electrolysis efficiency
- Pre-assembled stack on steel frame
- State-of-the-art cell monitoring

Power Supply Unit

- High-efficient AC-DC conversion
- Grid conformity

TECHNICAL SPECIFICATIONS



10 MW Module

100+ MW

Schematic graphic of a 100 MW plant.

30 bar(g)

Delivery pressure

99.99%

Hydrogen purity after gas cleaning

Hydrogen Production

Net production rate 200 kg/h · 2,240 Nm³/h

Dynamic production capacity 50 – 100 %

Hydrogen purity ¹⁾ 99.85 % before gas cleaning

Oxygen 1,600 kg/h · 1,120 Nm³/h

Electrical Efficiency

DC-Power 10.1 MW

Energy consumption stack level (DC) 4.14 – 4.51 kWh/Nm³

Feedstock

Electrolyte 26 % KOH aqueous solution

Demi water consumption 1.85 m³/h

Hardware

Stack lifetime 10 years mechanical lifetime

Full footprint ²⁾ 47 m²/MW

Indoor footprint ²⁾ 30 m²/MW

All specifications refer to our product: Sunfire-HyLink Alkaline GEN2, graphics and illustrations may vary, some components and specifications in this illustration are tailored to customer and project requirements. Information in this version (05 2024) is valid until the next version. 1) Depending on load point, up to 99.998% after gas cleaning – 99.8% before cleaning. 2) Average space requirement for a 10 MW module comprising stacks, balance of stack, module control cabinet and power supply unit.