

PEM - Electrolysers

PROTON EXCHANGE MEMBRANE

Gas Production

Max. output pressure

Hydrogen

30 barg

Oxygen

9 barg

Purity without additional purification

>99.9 %

>99.8 %

Hydrogen Drying System

Industrial drying system with automatic regeneration.

The hydrogen purity according to ISO 14687-2 for the use in fuel cell vehicles is met.

Max. hydrogen purity

99.999 %

Feeding Water (Tap Water)

Water quality acc.

98/83/EG | Pressure

2 to 6 bar

PH

4 to 10

| Temperature

+5 to +35 °C

Water treatment

Integrated Reverse Osmosis System (ROS) + electro de-ionisation system

Power Input

Voltage

From 400 V AC to high voltage

Alternatively a transformer can be included

Frequency

50 Hz, 60 Hz

Safety Norms and Regulations

Compliance

Machine directive 2006/42/CE

Pressurised equipment directive 2014/68/UE

Low voltage directive 2014/35/UE

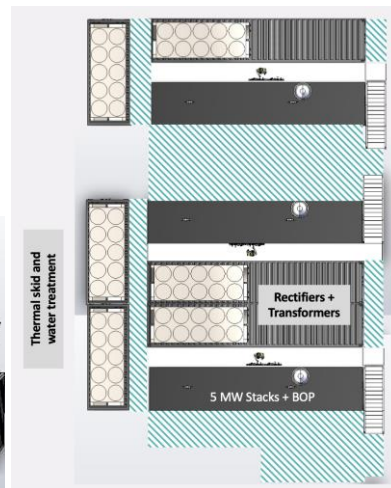
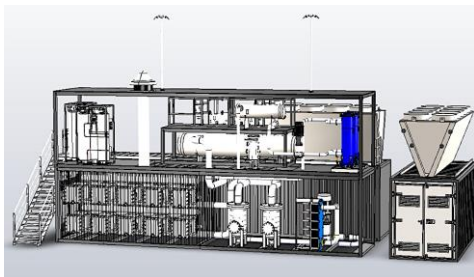
Electromagnetic compatibility directive 2014/30/UE

ATEX directive 2014/34/UE

CE Mark



Our solutions



Specification	Semi-containerized Open Power System		Modular Open Power System
	E 500	E 1000	n x E 1000
Hydrogen Production			
H ₂ flow rate [Nm ³ /h]	500	1 000	< 4 000
Oxygen Production			
O ₂ flow rate [Nm ³ /h]	250	500	< 2 000
Operating range			
Hydrogen production [%]	5-100	5-100	5-100
Feeding Water			
Consumption [l/h]	<1 000	<2 000	<8 000
Installed Power			
Electrolysis [kW]	2 500	5 000	< 20 000
Power [kVA]	3 200	6 500	< 25 000
Specific Energy			
Stack consumption [kWh/Nm ³ H ₂]	4.4	4.4	4.4
System consumption [kWh/Nm ³ H ₂]	4.9	4.85	4.85
Footprint			
Dimensions	<30m ² /MWel	<30m ² /MWel	<30m ² /MWel

More than 30 electrolyzers delivered across Europe, Asia and US with project specific solutions

adaptation to other water quality on demand



waste heat recovery system

oxygen collection

