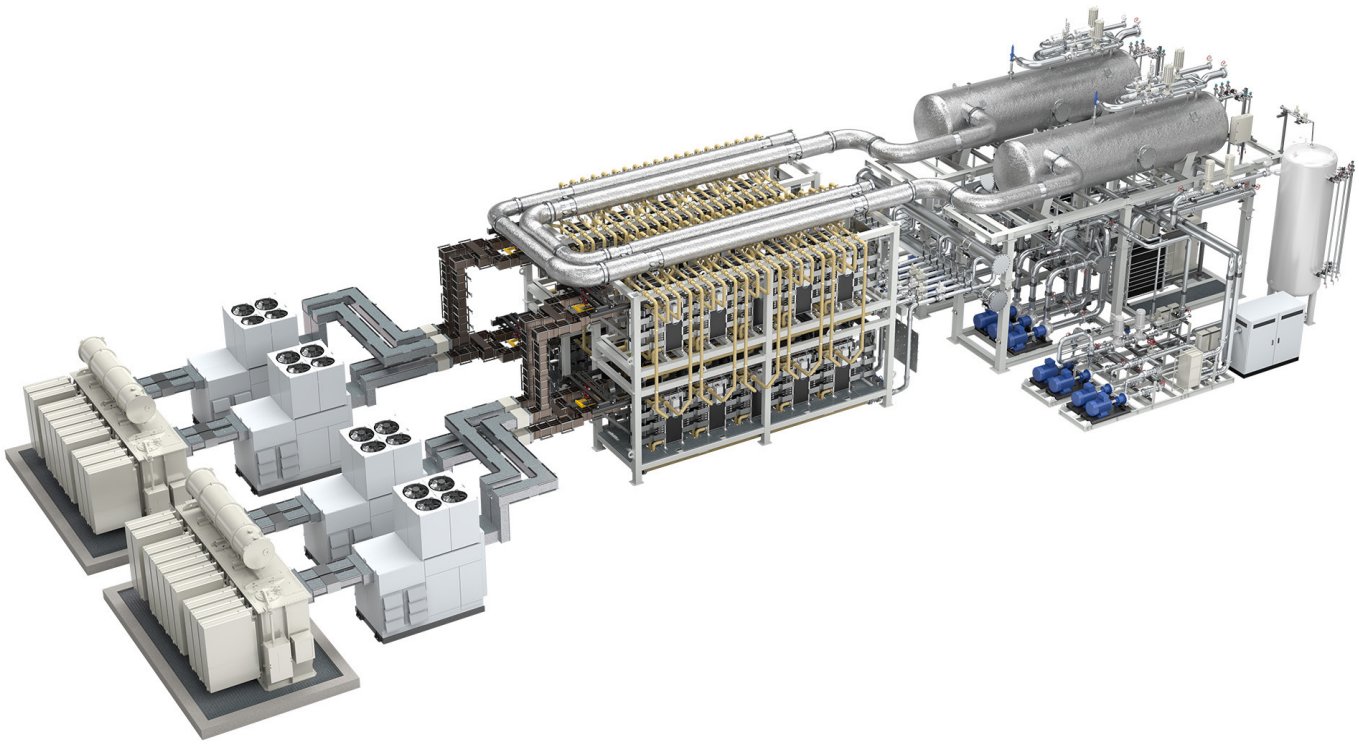
Elyzer P-360

The new pressurized PEM electrolyzer system

Factsheet



omterra

We set the standard with the Elyzer P-300. With the Elyzer P-360, we've raised the bar.

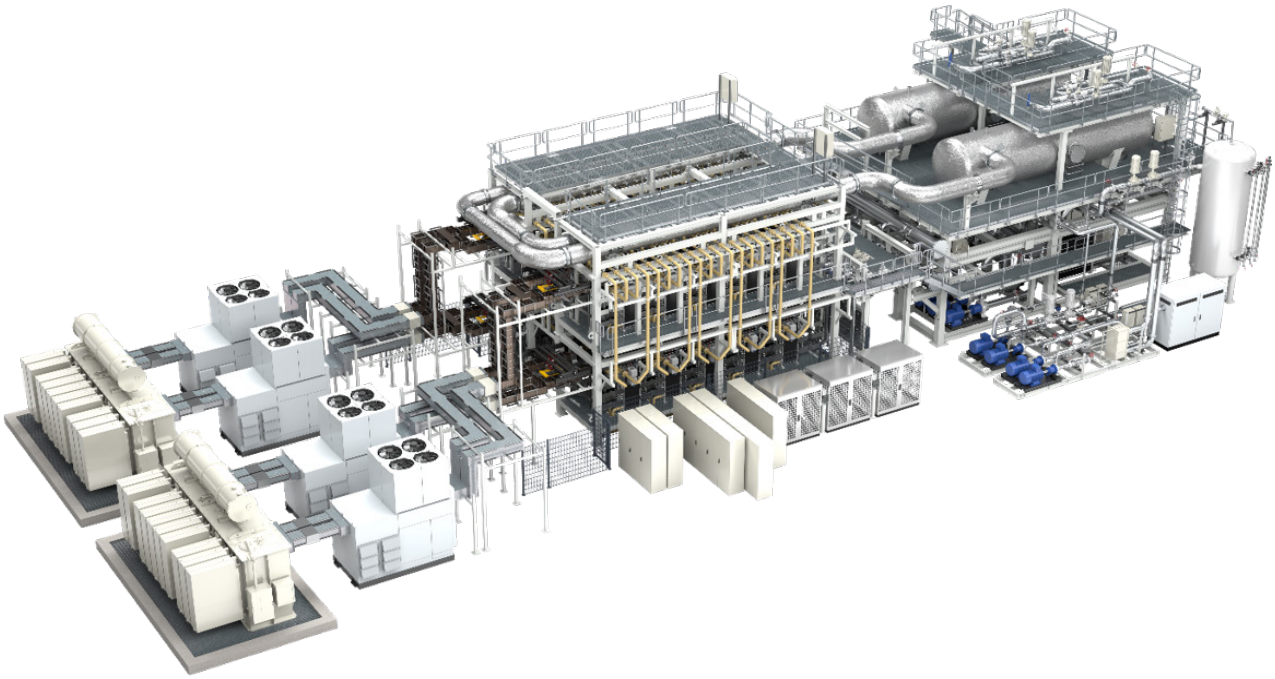
As an evolution of the Elyzer P-300, the new 50MW Elyzer P-360 expands Siemens Energy's PEM electrolyzer portfolio with a system built on proven experience:

- 330 MW of electrolyzers in operation,
- 1 GW in execution,
- ~ 400,000 operating hours in the field,
- ~ 10 million kg of hydrogen produced.

Manufactured at our gigawatt-scale electrolyzer factory in Berlin, the Elyzer P-360

- combines a modularized, moderate pressure 10-bar design with high power density,
- reduces footprint, site work and 20% of total installed cost (TIC), while enabling efficient plant scale-up.

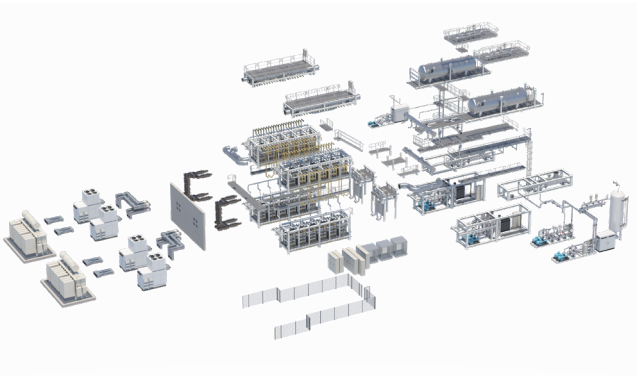
Pressurized. **Modularized.** **Compact.**



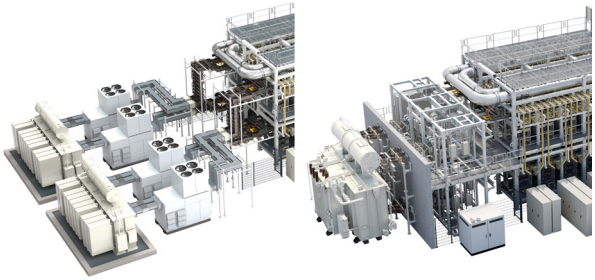
Stack design philosophy proven in operation in ~500 Elyzer P-300 stacks.



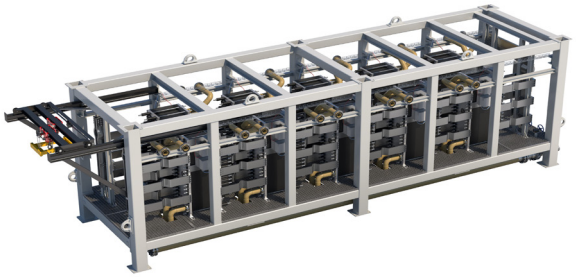
Highly modularized and pre-manufactured skids for minimum onsite effort.



Grid compliant – IGBT or thyristor-based rectifiers available. Flexible operation with high ramp-up and ramp-down.



High serviceability and accessibility. Easy access by integrated lift and drop stack exchange tool.



Facts and figures

Electrolysis type	Proton Exchange Membrane
System size	~ 50 MW
Hydrogen production	~ 920 kg/hour
System AC efficiency (including power electronics)	< 55.5 kWh/kg
Dry gas quality (with DeOxo)	99.999 %
Demineralized water consumption	~ 10 l/kg H_2

Delivery pressure (H_2 and O_2)	10 bar
Footprint (50 MW system IGBT-based, transformers outdoor)	48 x 20 m²
Start-up time	30 sec[1], enabled for FCR[2]
Dynamics in range	10% /s in 0 – 100%
Minimal load	40% single stack
Certification	CE acc. PED[3] LVD[4], ATEX[5], SIL[6] conform

1 in ready-to-operate mode **2** Frequency Containment Response **3** Pressure Equipment Directive **4** Low Voltage Directive **5** Explosive Atmospheres Directive **6** Safety Integrity Level

Published by

Omterra Global GmbH & Co. KG
Siemenspromenade 9
91058 Erlangen, Germany

For the U.S. published by
Omterra, Inc.
4400 N Alafaya Trail
Orlando, FL 32826
USA

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.
All product designations may be trademarks or product names of Omterra Global GmbH & Co. KG or other companies whose use by third parties for their own purposes could violate the rights of the owners.

© 2026 Omterra

