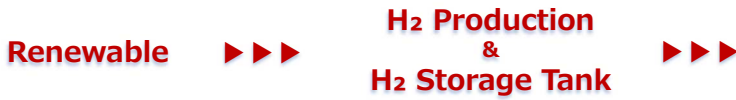


Electrolysis Hydrogen Generator with Renewable Energy

Converting and storing renewable energy as hydrogen and then using it to generate electricity with Fuel Cells.

Although wind and solar power are making it possible to move away from a carbon society, some problems must still be solved to produce hydrogen from renewable energies at stable operation levels. This is where **Enoah** provides its customizable electrolysis hydrogen generator for renewable energy use.



Features :

- Production of purified water from tap water
- Hydrogen generation through PEM water electrolysis stack
- PSA dehumidification provides high purity grade hydrogen

Configuration :

- Water Purification Device , Water Electrolysis Stack , PSA
- Pure Water Circulation Loop , Dilution Air Blowers ,etc.

Technical Specifications		
Main Configuration	Water electrolysis tank	Flow: 0~2Nm ³ /h Pressure: ~0.8MPa.G Purity: 5N or more
	PSA	65A × 700L
	Refrigerator	Cooling capacity: 6,000W@15°C (water temperature) Flow Monitor: Included
Condition Monitoring	Input Section Output Section Others	Tap-water: Hydrogen: Pressure, Temperature, Dew Point Water leakage detection, Current & Voltage monitoring, communication status
Outer Interface Connection	Piping Outer Signals	Exhaust Hydrogen and Oxygen, Pure Water Supply, Drain, Coolant Signaling Ready, Abnormal External Signals
Controlling Element	Touch Panel	Monitoring & Manual Operation, Alarms, etc.
External Dimensions	W × H × D	1800 × 1900 × 1000 (mm)

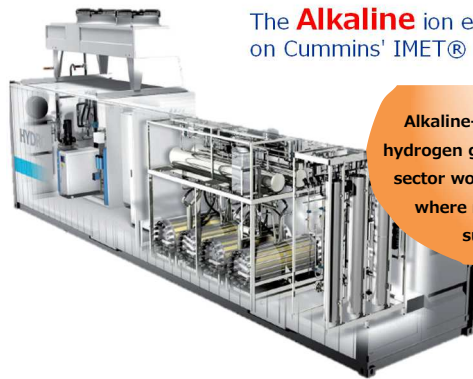
Electrolysis H₂ Generator with Renewable Energy

Amount of Hydrogen Generated:
Support for at least 10Nm³/hr



Cummins On-Site Hydrogen Generator [Alkaline Type and PEM Type]

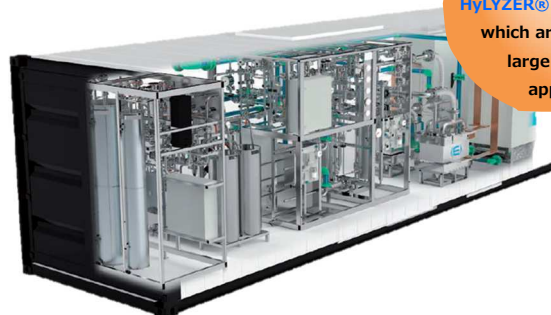
It is plug-and-play, safe, and reliable, can be operated continuously as well as dynamically, and delivers high purity water. The complete system comprises a water supply system, water purification equipment, power conversion, water purification, and remote service.



The **Alkaline** ion exchange membranes remove OH⁻ ions from water and produce hydrogen. This technology is based on Cummins' IMET® membranes and provides the safest, most reliable system available.

Alkaline-type technology delivers **HySTAT®** hydrogen generators aimed at the industrial sector worldwide, where reliability is required in the daily supply of hydrogen.

Alkaline-Type Technical Specifications	HySTAT®-15-10/30	HySTAT®-60-10	HySTAT®-100-10
Output Pressure	10 barg-27 barg		
Number of Stack Cells	1	4	6
Rated H ₂ Flow	15Nm ³ /h	60Nm ³ /h	100Nm ³ /h
Rated Input Voltage	80kW	300kW	500kW
Power Consumption(AC,Auxiliary)	5.0-5.4kWh/Nm ³		
H ₂ Flow Range	40-100%	10-100%	5-100%
H ₂ Purity	99.998% O ₂ <2ppm,N ₂ <12ppm(higher purities optional)		
Tap Water Consumption Rate	<1.7liters/Nm ³ H ₂		
Container Size	20ft container	40ft container	40ft container



PEM-type technology delivers **HyLYZER®** hydrogen generators, which are particularly suited for large industrial and energy applications.

PEM-Type Technical Specifications	HyLYZER®-100-30	HyLYZER®-400-30	HyLYZER®-3,000-30
Output Pressure	30 barg		
Number of Stack Cells	1	2	10
Rated H ₂ Flow	100Nm ³ /h	400Nm ³ /h	3,000Nm ³ /h
Rated Input Voltage	500kW	2MW	15MW
Power Consumption(AC,Auxiliary)	5.0-5.4kWh/Nm ³		
H ₂ Flow Range	1-100%		
H ₂ Purity	99.998% O ₂ <2ppm,N ₂ <12ppm(higher purities optional)		
Tap Water Consumption Rate	<1.4liters/Nm ³ H ₂		
Container Size	40ft container	40ft +20ft container	600m ² (indoor)

The **PEM model** is driven by the latest technology after over a decade of development. In 2014, it was the first hydrogen generator to supply at MW-scale, displaying its outstanding performance. The hydrogen changes into molecules to form hydrogen gas. The technology can operate at high current densities and pressures and, in combination with renewable energy, is useful for projects with fluctuating demand or where space is limited.

Please note that the technical specifications for this device, as provided by the manufacturer in Japan, may differ depending on the country in which you plan to use the device. Please consult the relevant documentation or seek expert advice if you have any concerns or questions about using this device in a particular location.