

### **EMPOWER A GREENER FUTURE**

Seamless Integration, Superior Safety: Dependable Hydrogen for Every Experiment

**Scientific Hydrogen Generator** 



#### **Generator System**

# Hovogen LH PEM Scientific Hydrogen Generator 200-4000L/min

Can be customized according to application requirement



- Remote monitoring function, automatic system control, 24-hour unattended safe and dynamic operation
- Adjustable operating conditions, allows prefabricated conditions
- ✓ hydrogen production pressure can reach 1.6Mpa
- Power supply output voltage, current, power monitoring and protection
- Temperature and pressure monitoring and protection
- Can be stacked in multiple units

Hydrogen flow rate	ml/Min	200, 400, 600, 800, 1200, 1600, 2000, 2500, 3000, 4
Oxygen flow rate	ml/Min	0-2000
Hydrogen Purity	%	>99.999
Dimensions	mm	500 X 400 X 505
Operating Temperature	ml/Min	5-60
Operating Pressure	MPaG	≤1.6
Electrolyzed water inlet pressure	Barg	1-4
Supply Voltage ( AC )	V	110-220
Startup Time	Sec	12
Electrolysis Efficiency	ml/Min	>77.7% HHV
Dew Point	℃	< -45
Stackable Configurations		/

#### **Generator System**

Hovogen LX PEM Scientific Hydrogen Generator 200-4000L/min

Can be customized according to application requirement



- Remote monitoring function, automatic system control, 24-hour unattended safe and dynamic operation
- Adjustable operating conditions, allows prefabricated conditions
- ✓ Hydrogen production pressure can reach 1.6Mpa
- Power supply output voltage, current, power monitoring and protection
- Temperature and pressure monitoring and protection
- Can be stacked in multiple units

LX Series Hydrogen Generator (200-4000 ml/min)			
Hydrogen flow rate	ml/Min	200, 400, 600, 800, 1200, 1600, 2000, 2500, 3000, 4000	
Oxygen flow rate	ml/Min	0-2000	
Hydrogen Purity	%	>99.99999	
Dimensions	mm	500 X 400 X 505	
Operating Temperature	ml/Min	5-60	
Operating Pressure	MPaG	≤1.6	
Electrolyzed water inlet pressure	Barg	1-4	
Supply Voltage ( AC )	V	110-220	
Startup Time	Sec	12	
Electrolysis Efficiency	ml/Min	>77.7% HHV	
Dew Point	℃	< -45	
Stackable Configurations		✓	
Application area	GC Applications, Spectroscopy Applications, Analyzer Applications, Chemical Vapor Deposition (CVD) Instrumentation, Auxiliary Deposition Processes		



Technical advantages

Master PEM water electrolysis hydrogenproductioncore technology.

(Supply chain supporting

R&d, production, sales and service quality supply chain system to shorten the development cycle;

Service advantages

High Standard, high quality, high efficiency, high cost-effective customer-centric, according to demand professional customization.

200000 m²/Production base Lay the foundation for efficient production

 $5500^{rac{m^2}{Diversity}}$  office High-quality technology development space

500 m²/ Exhibition Hall Provide the ultimate experience environmen

#### PEM HYDROGEN ELECTROLYSER SUPPLIER

As a leading technology company in the hydrogen industry, we are driven by an unwavering commitment to the development and research of PEM (Proton Exchange Membrane) hydrogen electrolyzers and cutting-edge products. By leveraging our technical expertise, we are paving the way for a sustainable future.

HOVOGEN is a state-level high-tech enterprise dedicated to the advancement of the hydrogen energy industry. It operates research and development, production, and operational facilities in both the Songshan Lake Hi-Tech Industrial Development Zone and the Zhuzhou Hi-Tech Industrial Development Zone.







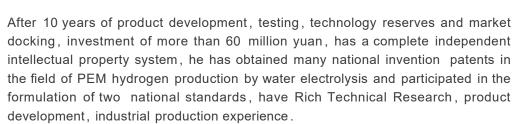












#### **CORPORATE HONOR**



















To participate in the formulation of national standards

The company has participated in the formulation of two hydrogen production industry standards: technical requirements for hydrogen production system by pressure water electrolysis (GB/T 37562-2019) and safety requirements for hydrogen production system by pressure water electrolysis

(GB/T37563-2019)











Passed ISO14001 Environmental Management System certification

Through ISO9001 Quality Management System certification

Occupational Health and Safety Management System certification



Obtained AAA Credit Rating Qualification CertificateCredit-abiding enterprises model units of credit management, quality service units of credit, Credit Enterprises, credit suppliers, credit enterprises





## HOVOGEN obtained a number of PEM hydrogen electrolysis invention patents



Patent certificate



Authoritative Product Inspection Reports









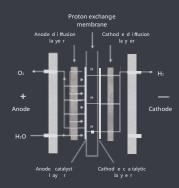




#### Technology and products

## Master PEM water electrolysis hydrogen production core technology

Compared with other water electrolysis technology, PEM can work at high current density, small size, high efficiency, the purity of hydrogen generated by up to 99.999%, is considered as the most promising water electrolysis technology. HOVOGEN hydrogen can improve the quality of PME water electrolysis cell by fine work, and strict process requirements, committed to become the world's leading PEM water electrolysis hydrogen production equipment provider.



A series of high- efficiency membrane elect rode preparation and production technology

Preparation and production technology of super corrosion resistant collector

High performance bi polar plate design technology and processi ng technology

High energy efficiency and high pressure resistance

Series PEM water elect rolytic reactor design and integrated test technology

P EM hydrogen production system design and system i ntegration technology

#### Self-developed PEM water electrolysis hydrogen production core products

Hydrogen production equipment

Hydrogen industrial PEME

Hydrogen PEME for consumer product











