

PEM Electrolyzer Catalog

- Stability
- Reliability
- Safety

- Stable product performance, reliable quality and long service life; low-voltage design, compact and lightweight.
- A high-tech enterprise holding multiple invention patents.
- Adopts high-quality aerospace-grade materials to ensure no harmful impurities in generated hydrogen and oxygen. Imported high-efficiency proton exchange membrane is applied to guarantee the service life and reliability of the electrolyzer.





Hydrogen output: 50 mL/min, 100 mL/min

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
- Low current density, compact electrolyzer, stable water supply to the electrolyzer
- Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

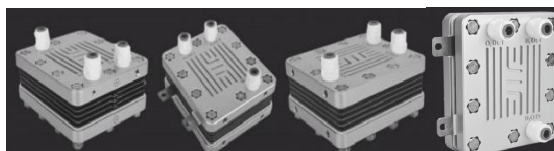
Item	Unit	50 mL/min Electrolyzer	100 mL/min Electrolyzer	Remarks
Hydrogen Output	mL/min	50	100	Tolerance: $\pm 3\%$
Oxygen Output	mL/min	25	50	Tolerance: $\pm 3\%$
Pure Water Consumption	mL/h	≤ 6	≤ 12	Water discharged from hydrogen and oxygen outlets flows back to the water storage tank
Pure Water Supply Mode	/	Pump feeding	Gravity circulation	Height difference ≥ 15 cm between water- tank outlet and electrolyzer water inlet
Electrolysis Mode	/	Pure- water electrolysis	Pure- water electrolysis	
Max. Hydrogen Pressure	MPa	0~3	0~3	
Pure Water Quality Requirement	ppm	≤ 5	≤ 5	Purified water recommended
Power Consumption- Current	A	7	14	Constant- current power supply
Power Consumption- Voltage	V	3.5	3.5	
Dimension (L×W×D)	mm	$\leq 60 \times 60 \times 23$	$\leq 73.5 \times 83.5 \times 23$	Power cord and connector supplied separately
Weight	kg	≤ 0.26	≤ 0.4	
Application	Hydrogen generator, hydrogen- oxygen generator, hydrogen- water maker, hydrogen- health equipment, hydrogen- bath device, beauty equipment			



Hydrogen output:150 mL/min, 300 mL/min

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
- Low current density, compact electrolyzer, stable water supply to the electrolyzer
- Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

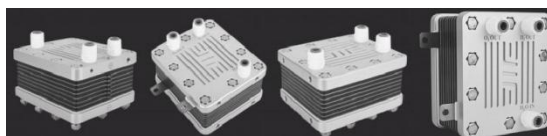
Item	Unit	150 mL/min Electrolyzer	300 mL/min Electrolyzer	Remarks
Hydrogen Output	mL/min	150	300	Tolerance: $\pm 3\%$
Oxygen Output	mL/min	75	150	Tolerance: $\pm 3\%$
Pure Water Consumption	mL/h	≥ 18	≥ 36	Water discharged from hydrogen and oxygen outlets flows back to the water storage tank
Pure Water Supply Mode	/	Pump feeding	Pump feeding	Height difference ≥ 15 cm between water- tank outlet and electrolyzer water inlet
Electrolysis Mode	/	Pure- water electrolysis	Pure- water electrolysis	
Max. Hydrogen Pressure	MPa	0~3	0~3	
Pure Water Quality Requirement	ppm	≤ 5	≤ 5	Purified water recommended
Power Consumption- Current	A	20	20	Constant- current power supply
Power Consumption- Voltage	V	3.5	7	
Dimension (L×W×D)	mm	$\geq 99*113*31$	$\geq 99*113*35.5$	Power cord and connector supplied separately
Weight	kg	0.97	1.08	
Application	Hydrogen generator, hydrogen- oxygen generator, hydrogen- water maker, hydrogen- health equipment, hydrogen- bath device, beauty equipment			



Hydrogen output: 600 mL/min, 1200 mL/min

- Long service life, low voltage, compact and lightweight
 - Ultra-long service life backed by solid brand credibility
 - Adopts PEM hydrogen-oxygen separation technology
 - Low-temperature design for electrolyzer
 - Sufficient hydrogen and oxygen output with error within $\pm 3\%$
 - Low current density, compact electrolyzer, stable water supply to the electrolyzer
 - Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

Item	Unit	600mL/min Electrolyzer	1200mL/min Electrolyzer	Remarks
Hydrogen Output	mL/min	600	1200	Tolerance: $\pm 3\%$
Oxygen Output	mL/min	300	600	Tolerance: $\pm 3\%$
Pure Water Consumption	mL/h	≥ 72	≥ 144	Water discharged from hydrogen and oxygen outlets flows back to the water storage tank
Pure Water Supply Mode	/	Pump feeding	Pump feeding	Height difference ≥ 15 cm between water- tank outlet and electrolyzer water inlet
Electrolysis Mode	/	Pure- water electrolysis	Pure- water electrolysis	
Max. Hydrogen Pressure	MPa	0~3	0~3	
Pure Water Quality Requirement	ppm	≤ 5	≤ 5	Purified water recommended
Power Consumption- Current	A	20	26	Constant- current power supply
	V	12	18	
Dimension (L×W×D)	mm	$\geq 99*113*45$	$\geq 99*113*55$	Power cord and connector supplied separately
Weight	kg	1.3	1.5	
Application	Hydrogen generator, hydrogen- oxygen generator, hydrogen- water maker, hydrogen- health equipment, hydrogen- bath device, beauty equipment			



Hydrogen output: 1400 mL/min, 2000 mL/min

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
- Low current density, compact electrolyzer, stable water supply to the electrolyzer
- Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

Item	Unit	1400mL/min Electrolyzer	2000mL/min Electrolyzer	Remarks
Hydrogen Output	mL/min	1400	2000	Tolerance: $\pm 3\%$
Oxygen Output	mL/min	700	1000	Tolerance: $\pm 3\%$
Pure Water Consumption	mL/h	≥ 168	≥ 240	Water discharged from hydrogen and oxygen outlets flows back to the water storage tank
Pure Water Supply Mode	/	Pump feeding	Pump feeding	Height difference ≥ 15 cm between water- tank outlet and electrolyzer water inlet
Electrolysis Mode	/	Pure- water electrolysis	Pure- water electrolysis	
Max. Hydrogen Pressure	MPa	0~3	0~3	
Pure Water Quality Requirement	ppm	≤ 5	≤ 5	Purified water recommended
Power Consumption- Current	A	26	26	Constant- current power supply
	V	21	30	
Dimension (L×W×D)	mm	$\geq 99*113*60$	$\geq 99*113*75$	Power cord and connector supplied separately
Weight	kg	1.6	1.9	
Application	Hydrogen generator, hydrogen- oxygen generator, hydrogen- water maker, hydrogen- health equipment, hydrogen- bath device, beauty equipment			

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
- Low current density, compact electrolyzer, stable water supply to the electrolyzer
- Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

Item	Unit	Model						
		82E-5	82E-7	82E-8	82E-10	82E-12	82E-14	82E-16
Hydrogen Output	mL/min	3000	4000	5000	6000	8000	9000	10000
Max. Hydrogen Pressure	MPa	0~3						
Hydrogen Purity	%	After drying and purification 99.999						
Oxygen Output	mL/min	1500	2000	2500	3000	4000	4500	5000
Electrolysis Mode	/	Pure- water electrolysis						
Power Consumption	ADC	80	76	83	80	88	85	83
	VDC	15	21	24	30	36	42	48
Electrolysis Efficiency	%	78~84						
Pure- Water Requirement	mS/cm	ASTMD1193 Type I deionized water <0.1uS/cm or>10MQ·cm						
Pure- Water Circulation Method	/	Pump circulation, inlet pressure ≤2bar						
Pure- Water Consumption	L/h	0.27	0.37	0.45	0.54	0.72	0.81	0.90
Operating Temperature	℃	45~65						
Dimension (L × W × D)	mm	≥172*154 *58	≥172*154 *68	≥172*154 *73	≥172*154 *83	≥172*154* 93	≥172*154 *103	≥172*154 *123
Application	Applied in laboratory hydrogen generators, compact portable hydrogen units, hydrogen sources for fuel- cell testing, hydrogen sources for distributed energy storage, semiconductors and other fields.							

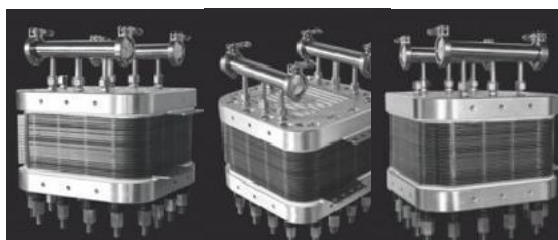


Hydrogen output: 1 Nm³/h

Customizable from 0.5 to 1.5 Nm³/h upon request.

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
- Low current density, compact electrolyzer, stable water supply to the electrolyzer
- Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

Item	Unit	Model		
		HB1-0.5	HB1-1.0	HB1-1.5
Hydrogen Output	Nm ³ /h	0.5	1.0	1.5
Max. Hydrogen Pressure	MPa	0~3		
Hydrogen Purity	%	After drying and purification 99.999		
Oxygen Output	Nm ³ /h	0.25	0.5	0.75
Electrolysis Mode	/	Pure- water electrolysis		
Power Consumption	ADC	120	120	140
	VDC	25	50	62.5
Electrolysis Efficiency	%	78~84		
Pure- Water Requirement	mS/cm	ASTMD1193 Type I deionized water <0.1uS/cm or>10MQ·cm		
Pure- Water Circulation Method	/	Pump circulation, inlet pressure≤2bar		
Pure- Water Consumption	L/h	0.5	1.0	1.5
Operating Temperature	°C	45~65		
Dimension (L × W × D)	mm	≧195*195*125	≧195*195*175	≧195*195*260
Weight	kg	22	27	37
Application	Applied in laboratory hydrogen generators, compact portable hydrogen units, hydrogen sources for fuel- cell testing, hydrogen sources for distributed energy storage, semiconductors and other fields.			



Hydrogen output: 5 Nm³/h

Customizable from 2 to 20 Nm³/h upon request.

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
- Low current density, compact electrolyzer, stable water supply to the electrolyzer
- Excellent sealing performance of electrolyzer; no air leakage or water leakage
- Safe, stable and highly reliable. High hydrogen purity; no need for alkaline solution replenishment

Item	Unit	Model			
		HB2-3.0	HB2-5.0	HB2-10	HB2-12
Hydrogen Output	Nm ³ /h	3.0	5.0	10	12
Max. Hydrogen Pressure	MPa	0~3.0			
Hydrogen Purity	%	After drying and purification 99.999			
Oxygen Output	Nm ³ /h	1.5	2.5	5.0	6.0
Electrolysis Mode	/	Pure- water electrolysis			
Power Consumption	ADC	480	480	480	480
	VDC	37.5	62.5	125	150
Electrolysis Efficiency	%	78~84			
Pure- Water Requirement	mS/cm	ASTMD1193 Type I deionized water <0.1uS/cm or>10 MΩ·cm			
Pure- Water Circulation Method	/	Pump circulation,inlet pressure≤2bar			
Pure- Water Consumption	L/h	3.0	5.0	10	12
Operating Temperature	°C	45~65			
Dimension (L × W × D)	mm	≧336*336*190	≧336*336*250	≧336*336*395	≧336*336*455
Weight	kg	≈60	≈90	≈150	≈173
Application	Energy storage, portable hydrogen generators, fuel- cell laboratories, semiconductors, optoelectronics and other fields				



Hydrogen output:50Nm³/h

Customizable from 20 to 2000 Nm³/h upon request.

- Long service life, low voltage, compact and lightweight
- Ultra-long service life backed by solid brand credibility
- Adopts PEM hydrogen-oxygen separation technology
- Low-temperature design for electrolyzer
- Sufficient hydrogen and oxygen output with error within $\pm 3\%$
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Item	Unit	Model				
		HB3-20	HB3-30	HB3-50	HB3-80	HB3-100
Hydrogen Output	Nm ³ /h	20	30	50	80	100
Max. Hydrogen Pressure	MPa	0~3.0				
Hydrogen Purity	%	After drying and purification 99.999				
Oxygen Output	Nm ³ /h	10	15	25	40	50
Electrolysis Mode	/	Pure- water electrolysis				
Power Consumption	ADC	1590	1590	1590	1590	1590
	VDC	75	112.5	187.5	300	375
Electrolysis Efficiency	%	78~84				
Pure- Water Requirement	mS/cm	ASTMD1193 Type I deionized water <0.1uS/cm or >10MΩ·cm				
Pure- Water Circulation Method	/	Pump circulation,inlet pressure≤2bar				
Pure- Water Consumption	L/h	20	30	50	80	100
Operating Temperature	°C	45~65				
Dimension (L × W × D)	mm	∅597*503 *353	∅597*503 *446	∅597*503 *630	∅597*503 *908	∅597*503 *1095
Application	Energy storage, portable hydrogen generators, fuel-cell laboratories, semiconductors, optoelectronics and other fields					