

## ***Hydrogen generators***

### ***Conventional type: QL-150 /300/ 500***



#### ***Features:***

- Using SPE technology to electrolyze pure water
- Without adding alkali
- Producing highly pure hydrogen
- Highly effective, energy-saving, environmental protection

#### ***Use scope***

Ideal gas sources for gas chromatograph (GC), thin-film chromatographs and small hydrogenation reaction chambers.

#### ***Technical parameter***

Type/ specifications	QL-150	QL-300	QL-500
Output Volume (ml/min)	0-150	0-310	0-510
Output Pressure (MPa)	0.002-0.4(output under stable pressure)		
Fluctuation Rate of output Pressure (%)	<0.2		
H <sub>2</sub> Purity (%)	>99.997		
Second Protective Pressure (V)	0.42		
Power Voltage (V)	220±15% 110±15% 50~60Hz		
Input Power(W)	<90	<150	<200
Contour dimension (L×W×H)	431×228×343		
Weight of A Complete set (Kg)	<13		

**Large type QL-2000 /3000 /5000**



**Features:**

- Using SPE technology to electrolyze pure water
- Without adding alkali
- Producing highly pure hydrogen
- Highly effective, energy-saving, environmental protection

**Use scope**

This kind of products can be used when a large quantity of highly pure hydrogen is needed

**Technical parameter**

Type/ specifications	QL-2000	QL-3000	QL-5000
Output Volume (ml/min)	0-2020	0-3050	0-5050
Output Pressure (MPa)	0.002-0.4(output under stable pressure)		
Fluctuation Rate of output Pressure (%)	<0.2		
H <sub>2</sub> Purity (%)	>99.997		
Second Protective Pressure (V)	0.42		
Power Voltage (V)	220±15% 110±15% 50~60Hz		
Input Power (W)	<1000	<1500	<2500
Contour dimension (L×W×H)	550×398×400		
Weight of A Complete set (Kg)	<25		

**Pure Air Pumps**



***Technical parameter:***

Type/ specifications	QL
Output Volume (ml/min)	0-3000
Output Pressure (MPa)	0-0.4
Input Power (W)	<160
Power Voltage (V)	220V±10%
Contour dimension (L×W×H)	431×246×398
Weight of A Complete set (Kg)	<26

# Hydrogen Generator LM Series

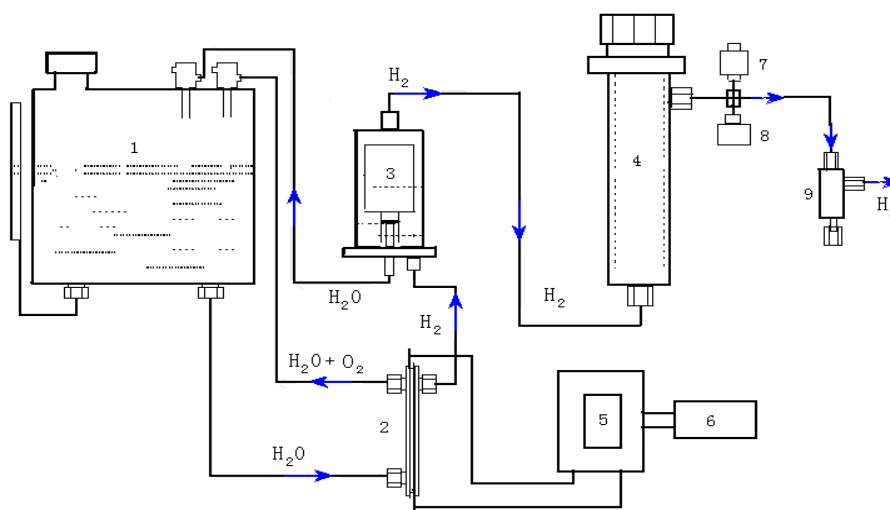
Conventional type:LM-200/LM-300/ LM-500



## Specifications:

Item	LM-200	LM-300	LM-500
Purity	>99.99%	>99.99%	>99.99%
Flow rate	200ml/min	300ml/min	500ml/min
Delivery pressure	20-450KPa	20-450KPa	20-450Kpa
Water tank capacity	3L	3L	3L
Pure water	>2MΩ deionized water	>2MΩ deionized water	>2MΩ deionized water
Consumption of Pure Water	12ml/hr (200ml/min)	12ml/hr (200ml/min)	12ml/hr (200ml/min)
Power Supply	AC200-240V 50HZ-60HZ	AC200-240V 50HZ-60HZ	AC200-240V 50HZ-60HZ
Power consumption	<135W	<200W	<330W
Weight	<10Kg		
Size	W180×H370×D380(mm)		

## Technological Process of Hydrogen Generator LM Series



**Fig.1** Technological Process

No	Item
1	water tank
2	electrochemical cell
3	desiccant cartridge
4	digital display
5	hydrogen/water separator
6	trap
7	control circuit board
8	supplementary constant-current device
9	main constant-current device
10	safety controller
11	Sensor

## SPN Series of Nitrogen Generators



Model	SPN-300A	SPN-300	SPN-500A	SPN-500
Nitrogen Purity	O <sub>2</sub> <3PPM Dew point: -56 °C	O <sub>2</sub> <3PPM Dew point: -56 °C	O <sub>2</sub> <3PPM Dew point: -56 °C	O <sub>2</sub> <3PPM Dew point: -56 °C
Nitrogen Flow	0-300ml/min	0-300ml/min	0-500ml/min	0-500ml/min
Working Pressure	0.4MPa	0.4MPa	0.4MPa	0.4MPa
Power Consumption	60W	60W	100W	100W
Dimension (mm)	360x200x260	370x180x330	360x200x260	370x180x330
Net Weight	10kg	10kg	10kg	10kg

### **Features:**

1. Fully automatic
2. No backward alkali solution