Etelux

Etelux Inert Gas System (Beijing) Co., Ltd.

Simple • Safe • Efficient • Energy saving

Lab2000 Series Split-type Single-sided Glove Box

Lab2000 glove box is a set of high-performance, high-quality closed-loop working system that automatically absorbs water and oxygen molecules and purifies the working environment, providing an inert atmosphere of O_2 and $H_2O \leq 1ppm$ that can meet your specific cleaning requirements. This system is an economical circulating purification system designed to meet customer research and development.

The Lab2000 system includes a closed chamber, a set of (main and mini) antichamber, a rotary vane vacuum pump, and a set of circulating purification system integrated with a microcontroller operation panel. The inert gas purification system equipped with the standard Lab2000 system is equipped with a set of purification columns (fully automatic and renewable) to purify and maintain the atmosphere inside the glove box.

CERTIFIED ISO 9001:2008 COMPANY

CE

c UL us LISTED

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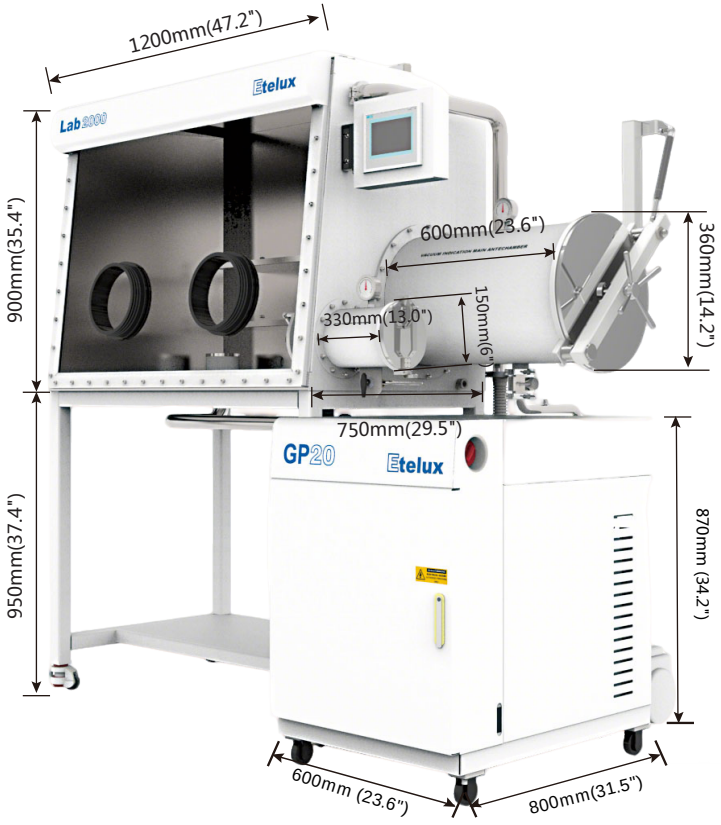
Performance Specifications

- Stainless steel chamber design, tempered glass or polycarbonate front window (optional);
- Index: H_2O, O_2 ≤1ppm;
- Leakage rate: ≤0.05 vol% / h;
- Solenoid valve adopts modular design, leakage rate is reduced, easy to replace;
- Main antechamer with sliding tray, unique antechamber door design, light and easy to open;
- GP-20 inert gas purification system;
- SIEMENS Microcontroller;
- SIEMENS operation touch screen, easy to enter various functions;
- Data memo: Automatically record system data;
- Closed gas circulation, no oil and vacuum;
- Foot pedal instead of manual adjustment pressure control; All stainless steel gas flow pipes and accessories; EDWARDS RV12 vacuum pump;
- HEPA high efficiency filter;
- Automatic pressure control, working pressure can be set within ± 12mbar;
- Height adjustable bracket;
- Adjustable casters for easy movement;
- Lampshade with anti-reflection film.

Technical advantages

1. The glove box has beautiful design, compact structure and fine workmanship;
2. The inert gas in the glove box is circulated in a closed cycle by a circulation fan and a purifier, continuously absorbing O_2 and H_2O;
3. The H_2O and O_2 removal materials can be regenerated, and the regeneration process is automatically controlled by the program;
4. Using the latest European technology, all key components are imported from Europe, from world-renowned manufacturers;
5. The control system includes self-diagnosis, power-off and self-starting features, pressure control and adaptive functions, password protection, and the control unit uses Siemens PLC touch screen;
6. The water analyzer has strong corrosion resistance and wide application fields, especially for users of lithium battery manufacturing and metal organic, etc., it can be cleaned for 3 times and reused repeatedly, avoiding the problem of scrapping once pollution;
7. The oxygen analyzer uses the ZrO_2 sensor to avoid the problem of short life of the fuel cell and continuous exposure to the air;
8. The use of integrated valve structure reduces and optimizes the system pipeline layout, reduces leakage points, simplifies the leak detection link, and the use of products is more stable and reliable;
9. The equipment runs stably and can run continuously for 7 × 24h;
10. Automatic control, simple operation, low operation and maintenance cost;
11. Specialized, standardized and large-scale production of all parts of the glove box;
12. Provide products for customers with various special requirements;
13. All parts have been strictly audited and controlled;
14. Rich design and control experience;
15. The production process is strictly based on the ISO9001 standard;
16. High-precision modern test methods, helium mass spectrometer leak detection for key links in the production process, to ensure that the product quality is foolproof;
17. Sophisticated technical team to achieve continuous improvement and improvement of products;
18. Perfect after-sales service system and rich after-sales service experience, setting up service organizations in Beijing, Shanghai, Guangzhou, Wuhan, Chengdu, Xi'an, Changchun and other places can achieve fast and thoughtful after-sales service.

Product Size



Accessories List

Oxygen analyzer 1 pcs	Dew analyzer 1 pcs	Oil mist filter 1 pcs	Bellows hose 3 pcs
Gloves 2 pcs	Edward vacuum pump 1 pcs	Clamps 7 sets	Glove seal rings 4 pcs

Technical Parameters

Chamber	
Description	Material: Stainless steel 1.4301 (SUS type 304); Thickness 3 mm;Dimensions: 1200mm(47.2") x 750mm(29.5") x 900mm(35.4") L x W x H
Volumn	0.8 m^3(28.2cu)
Front window	Panel: 8 mm thick safety tempered glass or 10 mm thick polycarbonate (optional);Dimensions: 1123mm (44.2") x 839mm (33.0") L x H
Glove port	Hard aluminum alloy material or polyoxymethylene material (optional); Glove port diameter: 220 mm (8.7"); O-ring seal
Gloves	Material: Butyl rubber; Thickness: 0.4 mm or 0.8 mm (available for selection)
Filter	Outlet and inlet filters, filter rate<0.3μm
Illumination	LED lighting is located on the top of the front window
Leak rate	Final acceptance test according to the standard of leakage rate <0.05 vol% / h
GP20 Gas Purification System	
Description	Automatic removal of H_2O and O_2; single purification column system, automatic regeneration (optional GP200 double purification column); closed gas circulation line
Use voltage	AC 230 V / 50-60 Hz, 10 A or AC 115 V / 50-60 Hz, 20 A (Available for selection)
Working gas	Working gas : N_2、Ar 、He(purity≥99.999%) ; Regeneration gas : H_2 accounts for 5% -10%, the rest is working gas (purity ≥99.999%)
Vacuum pump	Specifications: Rotary vane vacuum pump, equipped with oil mist filter, with gas ballast control; flow rate: 12 m^3/h (7 cfm), vacuum degree < 2 x 10^{-3} mbar (dry pump optional)
Circulation unit	Oil-free high-speed fan; air volume: 0-100 m^3 / h (0-59 cfm)
Valve	Electromagnetic high vacuum valve
Leak rate	Final acceptance test according to the standard of leakage rate <0.05 vol% / h
Cleaning system	
Description	After setting the corresponding time and pressure, the system can automatically perform gas replacement in the chamber.

Analyzer		
Oxygen analyzer	Size	205 mm（8.1"） x 80 mm（3.1"） x 60 mm（2.4"）L x W x H
	Measurement range	0-1000 ppm
	Other oxygen transmitter	GE oxy.IQ™ Oxygen Transmitter
Dew analyzer	Size	205 mm（8.1"） x 80 mm（3.1"） x 60 mm（2.4"）L x W x H
	Measurement range	0-500 ppm
	Other water transmitter	GE VeriDri™ Dew-Point Transmitter
	Solvent purification system	
Leak rate	Material: Stainless steel 1.4301 (SUS type 304), thickness 3 mm Internal size: 220mm (8.7") x 450mm (17.7") Φ x H High-quality activated carbon	
Optional equipment		
Refrigerator	Independent control system, integrated in the side panel of the chamber, temperature -35 ℃, volume 18L or 32L optional; main chamber 304 stainless steel sheet, 5 layers of variable compartments R404 environmentally friendly refrigerant, imported	
Heating chamber	The main antechamber is equipped with a heating system with a temperature of 200 ℃ and a temperature control of ± 1 ℃	
Other instructions		
Product certification	ISO9001 certification, CE certification, UL certification	
Warranty	One-year warranty period, lifetime maintenance	
Application considerations	For details, please refer to the instruction manual danger, warning, caution, etc	

Order Information

E	*	1	2	3	4	Instruction
Standard glove box	1200					Chamber size 1200mm(47.2")×750mm(29.5")×900mm(35.4") L × W × H
	1500					Chamber size 1500mm(59.0")×750mm(29.5")×900mm(35.4") L × W × H
	1800					Chamber size 1800mm(70.8")×750mm(29.5")×900mm(35.4") L ×W × H
	2400					Chamber size 2400mm(94.5")×750mm(29.5")×900mm(35.4") L × W × H
Structural configuration		U				Standard integrated glove box
		S				Standard split glove box
		D				Equipped with operable double-sided glove box
Function options			P			With automatic cleaning function, can quickly replace the gas in the chamber
			G			Quickly absorb the small amount of H_2O, O_2≤1ppm(including H_2O, O_2 analyzers)
			O			With organic solvent adsorption system, equipped with high-quality activated carbon
Antichamber				A0		Main antechamber 360mm(14.2")×600mm(23.6") φ × L
				A1		Big antechamber 390mm(15.3")×600mm(23.6") φ × L
				A2		Small antechamber 150mm(5.9")×330mm(13.0") φ × L
				A3		Square chamber 400mm(15.7")×300mm(11.8")×300mm(11.8") L × W × H
Other function options					FW	With openable front window
					18F	With refrigerator volume 18L, temperature is -36 ℃
					32F	With refrigerator volume 32L, temperature is -36 ℃

* is basic mandatory options, 1, 2, 3, 4 are optional order numbers, which can be configured according to needs. If you have special order, y ou can contact us.

Examples of order numbers:

①E-1200UPGO, which means an integrated single station 1200mm(47.2") glove box, with automatic cleaning, H_2O and O_2 purification system, solvent adsorption system;

②E-18 00SDPG-A3, which means split 1800mm(70.8") double-sided four-station glove box, with automatic cleaning, H_2O and O_2 purification system, and a square antechamber.

After-sales Service

Etelux "365 days worry-free", value-added warranty service

"365 days worry-free " extended warranty service value, extended warranty service value, all-day, whole process, save more money, more timely, more reassuring and more convenient, controllable maintenance cost, professional maintenance service

★ The whole process: one-stop repair, maintenance and training services, and establish a complete user file.

★ Save more money:
1) After purchasing the extended warranty service, you do not need to pay any additional fees for equipment maintenance (except consumables);
2) Free value-added services, timely replacement of parts you usually do not pay attention to repair, eliminate hidden dangers, and ensure that the equipment has been in good condition;
3) More favorable hardware upgrades to meet your higher demand for equipment;
4) Buy consumables more preferentially.

★ More timely:
After you choose extend the warranty service, the company will store commonly used modular accessories for engineers. Engineers can replace faulty modules efficiently and in a timely manner, shorten the maintenance cycle, and make your production work smoother and more efficient, and make high profits for you.

★ More reassuring :
After the free warranty period of 1 year, the device will no longer enjoy the free warranty service. After purchasing the extended warranty service, you can continue to enjoy the free warranty. We will regularly return to the use of the device to provide you with quality and perfect Equipment warranty service, to avoid your worries.

★ More convenient:
You only need to call the customer service hotline of Etelux: 400-086-8156. The 400 call center will serve you 24 hours, and we can meet all your needs immediately.

★ Controllable maintenance costs:
If the extended warranty service is not purchased, the maintenance cost will be charged according to the faulty equipment and the fault situation. The enterprise cannot control the maintenance cost of the equipment; after purchasing the extended warranty service, the maintenance cost can be controlled, and it becomes a budgetary investment, which can greatly reduce equipment maintenance risks caused by increased costs.

★ Professional maintenance services: Let our service team provides you with more professional support and work together to create a better future!

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