Lab2000 series split-type double-sided glove box

The Lab2000 glove box is a high-performance, high-quality closed-loop working system that automatically absorbs water and oxygen molecules, purifying the working environment. It provides an inert atmosphere with ≤1 ppm of O_2 and H_2O, meeting your specific cleanliness requirements. This system is an economical circulating purification system designed to meet the research and development needs of our customers.

The Lab2000 system includes a sealed enclosure, a set of (large and small) transfer chambers, a rotary vane vacuum pump, and a circulation purification system integrated with a microcontroller-based control panel. The standard Lab2000 system is equipped with an inert gas purification system that uses a set of purification columns (fully automatic and regenerative) to purify and maintain the atmosphere inside the glove box.

Performance Characteristics

Stainless steel cabinet design, tempered glass or polycarbonate front window (optional);
Specifications: Water, oxygen ≤1ppm;
Leak rate: ≤0.05vol%/h;
Solenoid valves adopt a modular design, reducing leakage and facilitating replacement;
Large transfer chamber with sliding tray, uniquely designed transfer chamber door, lightweight and easy to open;
GP-20 inert gas purification system;
SIEMENS microcontroller;
SIEMENS touch screen operation, easy access to various functions;
Data logging: automatic recording of system data;
Closed gas circulation, oil-free and vacuum;
Foot pedal instead of manual pressure control;
All stainless steel gas flow pipes and fittings;
EDWARDS RV12 vacuum pump;
HEPA high-efficiency filter;
Automatic pressure control, working pressure can be set within ±12mbar range;
Height-adjustable stand;
Adjustable casters for easy movement;Lamp cover with anti-reflective film;

Technological advantages

1. The glove box features an aesthetically pleasing design, compact structure, and exquisite workmanship;

2. The inert gas inside the glove box is circulated in a closed loop by a circulation fan and purifier, continuously absorbing oxygen and water;

3. The water and oxygen removal materials are regenerable, and the regeneration process is automatically controlled by a program;

4. Utilizing the latest European technology, all key components are imported from world-renowned manufacturers in Europe;

5. The control system includes self-diagnosis, power-off self-start characteristics, pressure control and adaptive functions, password protection, and uses a Siemens PLC touchscreen control unit;

6. The water analyzer has strong corrosion resistance and a wide range of applications, especially for users in lithium battery manufacturing and organometallic industries. It can be cleaned and reused three times free of charge, avoiding the problem of being discarded after a single contamination;

7. The oxygen analyzer uses a ZrO2 sensor, avoiding the problems of short fuel cell lifespan and continuous exposure to air;

8. The integrated valve structure reduces and optimizes the system piping layout, reduces leakage points, simplifies leak detection, and makes the product more stable and reliable;

9. The equipment operates stably and can run continuously 24/7;

10. Automatic control, simple operation, and low operating and maintenance costs;

11. Professional, standardized, and large-scale production of all parts of the glove box;

12. Providing products for customers with various special requirements;

13. All components undergo strict review and control;

14. Rich design and control experience;

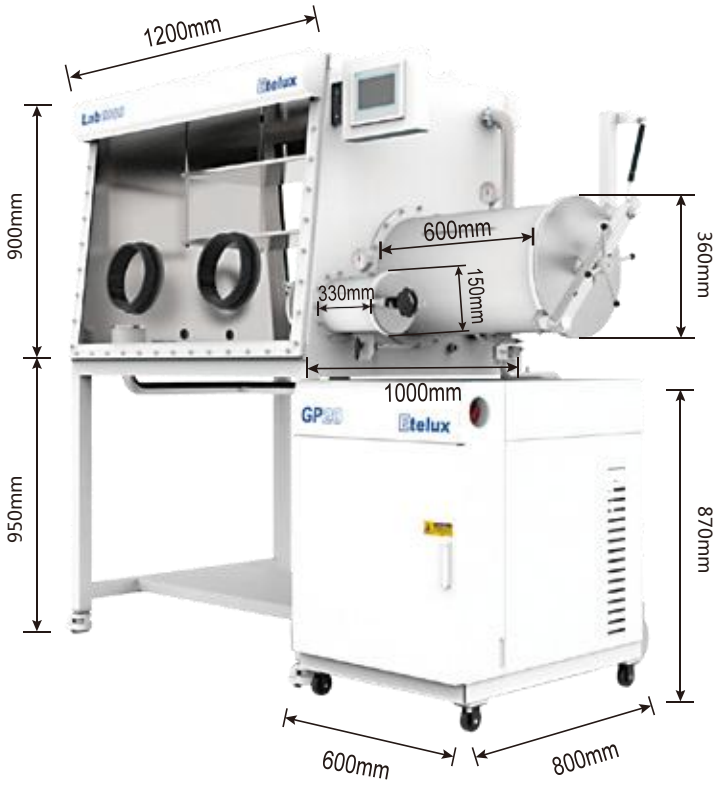
15. The production process strictly follows ISO9001 standards;

16. High-precision modern testing methods, with helium leak detection performed on key links during the production process to ensure impeccable product quality;

17. An excellent technical team ensures continuous improvement and perfection of the products;

18. A comprehensive after-sales service system and rich after-sales service experience, with service centers in Beijing, Shanghai, Guangzhou, Wuhan, Chengdu, Xi'an, Changchun, and other locations, enabling fast and attentive after-sales service.

Size:



配件清单

			
Oxygen analyzer 1 Pc	Water analyzer 1 Pc	Oil mist filter 1 Pc	Bellows hose 3 Pcs
			
Glove 4 Pcs	Vacuum pumps 1 Pc	Clamp 7 Sets	Glove sealing ring 8 Pcs

Technical Parameters

Main body	
Description	Material: Stainless steel 1.4301 (SUS type 304), thickness 3 mm Size: 1200mm(L) x 1000mm(W) x 900mm(H)
Volume	0.8 m^3
Front window	Panel: 8 mm thick safety tempered glass or 10 mm thick polycarbonate (optional) Size :1123mm(L) x 839mm(H)
Glove opening	Hard aluminum alloy or polyoxymethylene material (optional), 220 mm diameter, O-ring seal.
Glove	Material: Butyl rubber Thickness: 0.4 mm or 0.8 mm (optional)
Filter	Outlet and inlet filters, filtering particles<0.3μm
Illumination	LED lighting is located at the top of the front window.
Leakage rate	The final acceptance test was conducted according to the leakage rate standard of < 0.05 vol%/h.
GP20 Gas Purification System	
Description	Automatic removal ofH_2O and O_2; single purification column system with automatic regeneration (optional GP200 dual purification column); sealed gas circulation pipeline.
Operating voltage	AC 230 V / 50-60 Hz, 10 A or AC 115 V / 50-60 Hz, 20 A (optional)
Working gas	Working gas: N_2、Ar 、He(Purity≥99.999%); Renewable gas: H_2 accounts for 5%-10%, the rest are working gases (purity≥99.999%)
Vacuum pump	Specifications: Rotary vane vacuum pump, equipped with oil mist filter and gas ballast control; Flow:12 m^3/h (7 cfm), Vacuum level< 2 x 10^{-3} mbar(Dry pump optional)
Loop unit	Oil-free high-speed fan ; Air volume : 0 - 100 m^3/h
Valve	Electromagnetic high vacuum valve
Leakage rate	The final acceptance test was conducted according to the leakage rate standard of < 0.05 vol%/h.
Cleaning system	
Description	By setting the appropriate time and pressure, the system can automatically perform gas exchange within the chamber.

Analyzer		
Volume	Size	205 mm (L) x 80 mm (W) x 60 mm (H)
	Measurement range	0-1000 ppm
	Other oxygen analyzers	GE oxy.IQ™ Oxygen Transmitter
Glove	Size	205 mm (L) x 80 mm (W) x 60 mm (H)
	Measurement range	0-500 ppm
	Other water analyzers	GE VeriDri™ Dew-Point Transmitter
Solvent purification system		
Leakage rate	Materials: Stainless steel 1.4301 (SUS type 304), 3 mm thickness; Internal dimensions: 220mm(Φ) x 450mm(H) High-quality activated carbon;	
Optional equipment		
Refrigerator	Independent control system, integrated into the side panel of the cabinet; temperature -35℃, 18L or 32L volume optional; Main body made of 304 stainless steel, with 5 adjustable shelves; R404 environmentally friendly refrigerant, originally imported.	
Heating chamber	The large transfer chamber is equipped with a heating system, with a temperature of 200℃ and a temperature control accuracy of ±1℃.	
Other instructions		
Product certification	ISO9001 certification, CE certification, UL certification	
Warranty period	One-year warranty, lifetime repair service.	
Warranty application precautions	For details, please refer to the sections on dangers, warnings, and precautions in the instruction manual.	

Ordering Information:

E	*	1	2	3	4	Instructions
Standard enclosure	1200					1200mm (L) ×750mm (W) ×900mm (H)
	1500					1500mm (L) ×750mm (W) ×900mm (H)
	1800					1800mm (L) ×750mm (W) ×900mm (H)
	2400					2400mm (L) ×750mm (W) ×900mm (H)
Structural configuration		U				Standard integrated glove box
		S				Standard split-type glove box
		D				Configured with operable double-sided glove box
Function Options			P			Equipped with an automatic cleaning function, allowing for rapid replacement of the gas inside the chamber.
			G			Rapid absorption of trace amounts of H_2O and O_2 in the chamber, resulting in levels ≤1 ppm (with water and oxygen analyzer).
			O			Equipped with an organic solvent adsorption system and high-quality activated carbon.
Transition chamber				A0		Large transfer chamber φ360mm×600mm(L)
				A1		Large transfer chamber φ390mm×600mm(L)
				A2		Small transfer chamber φ150mm×330mm(L)
				A3		square cabin 400mm (L) ×300mm (W) ×300mm (H)
Other function options					FW	With an openable front window
					18F	It comes with a refrigerator with a capacity of 18L and a temperature of -36℃.
					32F	It comes with a refrigerator with a 32L capacity and a temperature of -36℃.

Items marked with an asterisk (*) are basic mandatory options, while 1, 2, 3, and 4 are optional order numbers that can be configured according to your needs. For special order requirements, please contact us.

Example of an order number:

① E-1200UPGO indicates an integrated single-station 1200mm long glove box with automatic cleaning, water and oxygen purification system, and solvent adsorption system;

② E-1800SDPG-A3 indicates a split-type 1800mm double-sided four-station glove box with automatic cleaning, a water and oxygen purification system, and a square transfer chamber.

After-sales service

Etelux "365 Worry-Free" - Excellent Value Extended Warranty Service

"365 Worry-Free" Extended Warranty Service Value: Extended warranty service value: All-day, all-process coverage, more cost-effective, faster service, greater peace of mind, more convenient, controllable repair costs, and professional maintenance services.

★ The complete process includes: one-stop repair, maintenance, and training services, and the establishment of comprehensive customer profiles.

★ Save more money:

1) With extended warranty service, you won't have to pay any extra fees for equipment repairs (excluding consumables);

2) Free value-added services, including timely replacement of parts that you might not notice need repair, eliminating potential problems and ensuring your equipment remains in good working condition;

3) More favorable hardware upgrades to meet your higher equipment needs;

4) More favorable prices for purchasing consumables.

★ More timely service:

By choosing our extended warranty service, the company can stock commonly used modular components with our engineers. This allows engineers to efficiently and promptly replace faulty modules, shortening repair times and ensuring smoother and more efficient production, ultimately generating higher profits for you.

★ Greater peace of mind:

After the one-year free warranty period expires, the equipment will no longer be covered by free warranty service. However, by purchasing extended warranty service, you can continue to enjoy free warranty coverage. We will regularly follow up on the equipment's usage and provide you with high-quality and comprehensive equipment warranty services, eliminating your worries.

★ More convenient:

Simply call the Etax unified customer service hotline: 400-086-8156. Our 400 call center is available 24/7 to meet all your needs immediately.

★ Controllable Maintenance Costs:

Without an extended warranty service, maintenance costs will be charged based on the faulty equipment and the nature of the malfunction, making equipment maintenance costs unpredictable for the company. With an extended warranty service, maintenance costs become controllable and can be managed through a budgeted approach, significantly reducing the risks associated with increased equipment maintenance costs.

★ Professional Maintenance Services: Let our service team provide you with more professional support and together we can create a better future!

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