



## Lab2000 Series Split Single-Sided Glove Box

The Lab2000 glove box is a high-performance, high-quality, automatically absorbing water and oxygen molecules to purify the working environment in a closed-loop system. It provides an inert atmosphere of  $\leq 1\text{ppm}$  O<sub>2</sub> and H<sub>2</sub>O to meet your specific cleaning requirements. This system is an economical circulating purification system designed to meet the needs of customer research and development.

The Lab2000 system includes a sealed enclosure, a set of transition chambers (large and small), a rotary vane vacuum pump, and a circulating purification system integrated with a microcontroller operation panel. The standard Lab2000 system is equipped with an inert gas purification system that installs a set of purification columns (fully automatic and renewable) to purify and maintain the atmosphere inside the glove box.



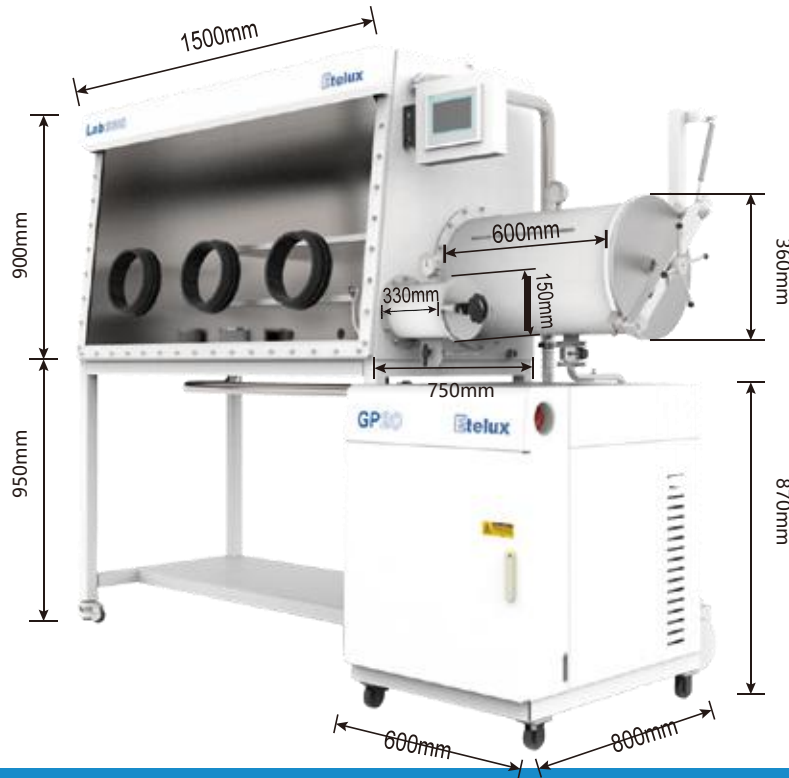
## Performance characteristics

1. Stainless steel box design, tempered glass or polycarbonate front window (optional);
2. Indicator: Water and oxygen  $\leq$  1ppm;
3. Leakage rate:  $\leq$  0.05vol%/h;
4. The solenoid valve adopts modular design, which reduces leakage rate and is easy to replace;
5. Large transition cabin with sliding tray, unique design of transition cabin door, lightweight and easy to open; GP-20 inert gas purification system;
6. SIEMENS microcontroller;
7. SIEMENS operation touch screen, easy to access various functions;
8. Data memo: Automatically record system data;
9. Closed gas circulation, oil-free and vacuum free;
10. Use foot pedals instead of manual pressure control;
11. All stainless steel gas flow pipes and fittings;
12. EDWARDS RV12 vacuum pump;
13. HEPA high-efficiency filter;
14. Automatic pressure control, the working pressure can be set within a range of  $\pm$  12mbar;
15. Adjustable height bracket;
16. Adjustable casters for easy mobility;
17. Lampshade with anti reflective film;









## Technical Advantage

1. The glove box has a beautiful design, compact structure, and fine workmanship;
2. The inert gas inside the glove box is circulated in a closed manner through a circulating fan and purifier, continuously absorbing oxygen and water;
3. The material for removing water and oxygen can be regenerated, and the regeneration process is automatically controlled by a program;
4. Adopting the latest European technology, all key components are imported from Europe and sourced from world-renowned manufacturers;
5. The control system includes self diagnosis, power-off self starting characteristics, pressure control and adaptive functions, password protection, and the control unit adopts Siemens PLC touch screen;
6. The water analyzer has strong corrosion resistance and a wide range of applications, especially for users in lithium battery manufacturing and metal organic industries. It can be cleaned three times free of charge and reused, avoiding the problem of being scrapped after one pollution;
7. The oxygen analyzer uses ZrO<sub>2</sub> sensors to avoid the problem of short lifespan and continuous exposure to air in fuel cells;
8. Adopting an integrated valve structure reduces and optimizes the system pipeline layout, reduces leakage points, simplifies the leak detection process, and makes the product more stable and reliable to use;
9. The equipment runs stably and can operate continuously for 7 × 24 hours for a long time;
10. Automatic control, simple operation, low operation and maintenance costs;
11. Specialized, standardized, and large-scale production of various parts of the glove box;
12. Provide products for customers with various special requirements;
13. All components have undergone strict review and control;
14. Rich experience in design and control;
15. The production process strictly follows the ISO9001 standard;
16. High precision modern testing methods are used to conduct helium based leak detection on key links during the production process, ensuring that product quality is foolproof;
17. Excellent technical team to achieve continuous improvement and perfection of products;
18. With a comprehensive after-sales service system and rich after-sales service experience, setting up service agencies in Beijing, Shanghai, Guangzhou, Wuhan, Chengdu, Xi'an, Changchun and other places can achieve fast and thoughtful after-sales service

## Product Dimensions



## Accessories List

			
oxygen analyzer 1pc	Water analyzer 1pc	oil mist filter 1pc	bello 3pcs
			
glove 3pcs	Edward vacuum pump 1pc	clamp 7 sets	Glove sealing ring 6pcs

## Technical parameters

### Box

Describe	Material: 1.4301 stainless steel (SUS type 304), thickness 3 Size : 1500mm (L) x 750mm(W) x 900mm(H)
Volume	0.8 m <sup>3</sup>
Front Window	Panel: 8 mm thick tempered safety glass or 10 mm thick polycarbonate (optional) Dimensions: 1435 mm (L) x 839 mm (H)
Glove Mouth	Hard aluminum alloy or polyoxymethylene (POM) material (optional), 220 mm diameter, O-ring seal.
Gloves	Material: Butyl rubber; Thickness: 0.4 mm or 0.8mm (available)
Filter	Inlet and outlet filters, filtering <0.3μm
Illumination	LED lighting is located at the top of the front windshield.
Leakage rate	Final acceptance testing will be conducted according to the standard of leakage rate < 0.05 vol%/h.

### GP20 Gas Purification System

Describe	Automatically remove H <sub>2</sub> O and O <sub>2</sub> ; Single purification column system, automatic regeneration (optional GP200 dual purification column); Closed gas circulation pipeline
Use Voltage	AC 230 V / 50-60 Hz, 10 A or AC 115 V / 50-60 Hz, 20 A (optional)
Working Gas	Working gas: N <sub>2</sub> , Ar, He (purity ≥ 99.999%); Rebirth: H <sub>2</sub> accounts for 5% -10%, the rest is working gas (purity ≥ 99.999%)
Vacuum Pump	Specification: rotary vane vacuum pump, equipped with oil mist filter, with pneumatic control; Flow rate: 12 m <sup>3</sup> /h (7 cfm), vacuum degree<2 x 10 <sup>-3</sup> mbar (optional dry pump)
Loop Unit	Oil-free high-speed fan; air volume: 0 - 100 m <sup>3</sup> /h
Valve	Electromagnetic high vacuum valve
Leakage Rate	Final acceptance testing will be conducted according to the standard of leakage rate < 0.05 vol%/h.

### Cleaning System

Describe	Once the appropriate time and pressure are set, the system can automatically replace the gas in the chamber.
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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
Gloves	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	Material: 1.4301 stainless steel (SUS type 304), 3 mm thick; Internal dimensions: 220 mm (Φ) x 450 mm (H); High-quality activated carbon;	
Optional Equipment		
Refrigerator	Independent control system integrated into the side panel of the cabinet; temperature -35°C; 18L or 32L capacity optional; Main body made of 304 stainless steel plate; 5-layer variable partition; R404 environmentally friendly refrigerant, original import;	
Heated Chamber	The large transition chamber is equipped with a heating system with a temperature of 200°C and a temperature control range of ±1°C.	
Other Notes		
Product Certification	ISO9001 certification, CE certification, UL certification	
Warranty Period	One-year warranty, lifetime repair	
Application Notes	For details, please refer to the danger, warning, and precaution clauses in the instruction manual.	

## Ordering Information

E	*	1	2	3	4	Illustrate
Standard Enclosure	1200					The box measures 1200mm (L) × 750mm (W) × 900mm (H).
	1500					The box measures 1500mm (L) × 750mm (W) × 900mm (H).
	1800					The box measures 1800mm (L) × 750mm (W) × 900mm (H).
	2400					The box measures 2400mm (L) × 750mm (W) × 900mm (H).
Structural Configuration	U					Standard integrated glove box
	S					Standard split glove box
	D					Configured with operable double-sided glove box
Function Options	P					Equipped with an automatic cleaning function, it can quickly replace the gas inside the chamber.
	G					Trace H <sub>2</sub> O and O <sub>2</sub> ≤ 1ppm in the rapid absorption box (water oxygen analyzer)
	O					Equipped with an organic solvent adsorption system and high-quality activated carbon
Transition Cabin	A0					Large transition cabin φ360mm×600mm(L)
	A1					Large transition cabin φ390mm×600mm(L)
	A2					Small transition compartment: φ150mm×330mm (L)
	A3					Square cabin: 400mm (L) × 300mm (W) × 300mm (H)
Other Function Options	FW					With an openable front window
	18F					Includes a refrigerator with a capacity of 18L and a temperature of -36°C.
	32F					Includes a refrigerator with a capacity of 32L and a temperature of -36°C.

\* Indicates a mandatory field; 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:

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

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

## After-sales Aervice

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

The "365 Worry-Free" Extended Warranty Service Offers Value:                      Worry-free, timely, reassuring, and convenient service with controllable repair costs. Professional maintenance services

★ Full Process: One-stop repair, maintenance, and training services, with complete user files established.

★ Save more money:

- 1) After purchasing the extended warranty service, you will not need to pay any additional fees for equipment repair (excluding consumables);
- 2) Free value-added services, timely replacement of parts that you usually don't pay attention to when reporting for repair, eliminating potential problems and ensuring that the equipment is always in good working order;
- 3) More affordable hardware upgrades to meet your higher demands for equipment;
- 4) Purchase consumables at a more favorable price.

★ More timely:

By choosing the extended warranty service, the company can stock commonly used modular spare parts with engineers, who can efficiently and promptly replace faulty modules, shorten the maintenance cycle, make your production work smoother and more efficient, and create higher profits for you.

★ More peace of mind:

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

★ More convenient:

You only need to call the Etelux Unified Customer Service Hotline: 400-086-8156. The 400 call center will be at your service 24 hours a day, and we can meet all your needs immediately.

★ Repair costs are controllable:

Without extended warranty service, repair costs will be charged based on the faulty equipment and the extent of the fault, and the company has no control over the equipment repair costs; with extended warranty service, repair costs become controllable, turning into budgeted investment, which can significantly reduce the risk of increased equipment repair costs.

★ Professional Maintenance Service: Let our service team provide you with more professional support and work together to create a better future!

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