



### lpha-1500u Series Split Single-sided Glove Box

 $\alpha$ -1500u 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 02 and H20 $\leq$ 1ppm that can meet your specific cleaning requirements. This system is an economical circulating purification system designed to meet customers' research and development.

The 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  $\alpha$ -1500u system is equipped with a set of purification columns (fully automatic and renewable) to purify and maintain the atmosphere inside the glove box.

### **Performance Specifications**







- Stainless steel chamber design, tempered glass or polycarbonate front window (optional);
- Index: H2O, O2 ≤1ppm;

- Leakage rate: ≤0.001 vo1% / 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;



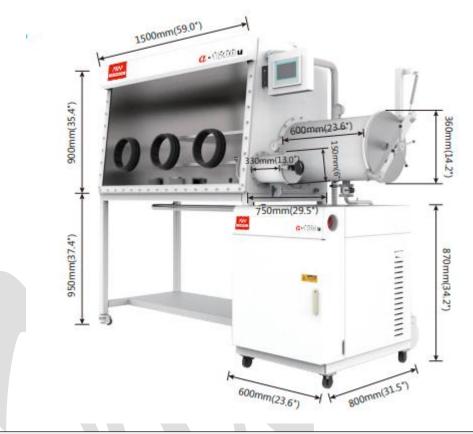
#### **Technical advantag**

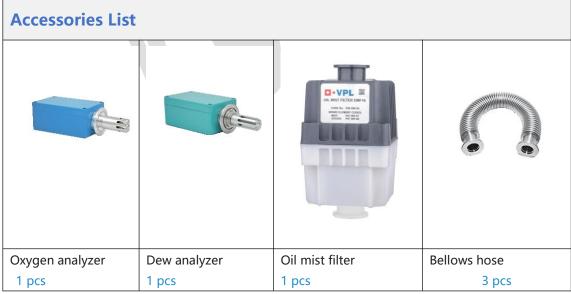
- 1. The glove box has beautiful design, compact structure and fine workmanship;
- 2. The inert gas in the glove box is circulated in a closed cycle by a circulation fan and a purifier, continuously absorbing O2 and H2O;
- 3. The H2O and O2 removal materials can be regenerated, and the regeneration process 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 ZrO2 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  $7 \times 24h$ ;
- 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 ISO 9001 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**









		E C	
Gloves	Edward vacuum	Clamps	Glove seal rings
4pcs	pump1 pcs	3 pcs	8 pcs

#### **Technical Parameters**

Chamber  Stainless steel 1.4301 (SUS type 304); Thickness 3 mm;Dimensions: 1500mm(59.0") x 29.5") x 900mm(35.4") L x W x H
29.5") x 900mm(35.4") L x W x H
5.3cu)
mm thick safety tempered glass or 10 mm thick polycarbonate (optional);Dimensions:
(56.5") x 839mm (33.0") L x H
minum alloy material or polyoxymethylene material (optional); Glove port diameter:
(8.7"); O-ring seal
Butyl rubber; Thickness: 0.4 mm or 0.8 mm (available for selection)
nd inlet filters, filter rate<0.3µm
ing is located on the top of the front window
eptance test according to the standard of leakage rate <0.001 vol% / h
GP20 Gas Purification System
ic removal of H2O and O2; single purification column system, automatic regeneration
I GP200
purification column); closed gas circulation line
/ / 50-60 Hz, 10 A or AC 115 V / 50-60 Hz, 20 A (Available for selection)





Working gas	Working gas: N2、Ar 、He(purity≥99.999%); Regeneration gas: H2 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 m³/h  (7 cfm), vacuum degree < 2 x 10-3 mbar (dry pump optional)			
Circulation unit	Oil-free high-speed fan; air volume: 0-100 m³ / h (0-59 cfm)			
Valve	Electromagnetic high vacuum valve			
Leak rate	Final acceptance test according to the standard of leakage rate <0.001 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	Mode	AF-360Z		
	Measurement range	0-1000 ppm		
	Other oxygen transmitter	GE oxy.IQ™ Oxygen Transmitter		
Dew analyzer	Mode AD-160P			
	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") $\Phi$ x H High-quality activated carbon				
Optional equipment					
Refrigerator	Independent control system, integrated in the side panel of the chamber, temperature -35 °C, 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 $^{\circ}$ C and a temperature control of $\pm$ 1 $^{\circ}$ C				
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**

Е	1	2	3	4	5	Instruction
Standard	1200					Chamber size
glove box						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		U				Standard integrated glove box
configuration	configuration S					Standard split glove box
D					Equipped with operable double-sided glove box	
Function	on options		P			With automatic cleaning function, can quickly replace
						the gas in the chamber
G				Quickly absorb the small amount of H2O,		
				O2≤1ppm(including H2O, O2 analyzers)		
0				With organic solvent adsorption system, equipped		
			with high-quality activated carbon			
Antichamber A0			Main antechamber 360mm(14.2")×600mm(23.6") $\phi$ ×			
					L	
A1			A1		Big antechamber 390mm(15.3")×600mm(23.6") $\phi \times L$	
A2			A2		Small antechamber 150mm(5.9")×330mm(13.0") $\phi \times L$	





	А3		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 ℃

1, 2 are basic mandatory options, 3, 4, 5 are optional order numbers, which can be configured according to needs. If you have special order, you can contact us.

Examples of order numbers:

①E-1200UPGO, which means an integrated single station 1200mm(47.2") glove box, with automatic cleaning, H2O and O2 purification

system, solvent adsorption system;

②E-18 00SDPG-A3, which means split 1800mm(70.8") double-sided four-station glove box, with automatic cleaning, H2O and O2 purification

system, and a square antechamber.

After-sales Service

Nichwell "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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