# GLOVEBOX

#### 🔆 Mini-computer-based glovebox with remote access

### OVERVIEW

GLX-280AS is a mini-computer controlled glovebox, allowing access and control of the system through the internet. The mini-computer controls the gas input/output and vacuum pump based on reading multiple sensors. Five sensors are installed on the system: differential pressure sensor, absolute pressure sensor, oxygen sensor, humidity sensor and volatile organic compound (VOC) sensor.

#### One of the main features of the GLX-280AS

is the very low leakage rate. There are multiple pre-defined routines, including: Normal Operation, Sample Load, Sample Unload, Continuous Purge and Vacuum Purge, making the operation of the system very easy.

Besides, in the Manual Mode, one can manually control the valves for custom applications. The mini-computer saves the condition of the system at each second on memory, allowing to analyze the system for possible problems.

It is also possible to check the system through the internet.



## FEATURES

- Mini-computer based control system
- Remote control of the system through the internet
- Multiple pre-defined operation routines for easy use of system
- Very low leakage rate
- Multiple electrical and gas ports
- O<sub>2</sub>, H<sub>2</sub>O, VOC, P and DP sensors installed on system
- Easy system troubleshooting by company through the internet

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## GLOVEBOX

### SPECIFICATIONS

Weight	150 Kg
Power	Safety switch
	6 A circuit breaker for electric valves 16 A circuit breaker for the surface sockets
	6 A circuit breaker for electronic system
	16A surface socket inside main chamber (2x)
	Single phase, 220 VAC, 1000W
Pneumatic system	Exhaust foot pedal (to ease of working with gloves)
	Stainless steel bellow for vacuum connections
	Pressure regulator 0-10 bar at the gas input line
	Electric valves, 1/4 inch and 1 inch.
Electric ports	4 banana plug connections
Software features	Internet access and control of the system
	Online display of the sensor values
	Automatic control of vacuum pump
	Manual mode to turn on/off the valves
	pre-defined routine for continuous or vacuum purging
	Pre-defined routine for sample loading and unloading
	Automatic control of pressure by tuning the rate of gas input and exhaust
Mini-computer and electronics system	Automatic saving of sensors and valves data (one dataset per second)
	Ethernet port, USB port, Wifi, Bluetooth
	7 inch touch LCD, Resolution 480x800
Sensors	VOC sensor: 0-100 ppm, Resolution 1 ppm
	Absolute pressure sensor: -1000 mbar - 1000 mbar. Resolution 2 mbar
	Differential pressure sensor: 0-4000 Pa. Resolution 1 Pa
	Humidity sensor: 0-100% Resolution 0.1%
	Temperature sensor: Resolution 0.1 %
Loading champer doors	Outside door: rotation sliding, screw lock ; inside door: Jack-IIIT, screw lock
	gauge (0 - 10 bar)
Manual pressure gauge	2 manual pressure gauge: vacuum gauge (-1 - 1 bar), Input gas pressure
Light	Warm white (1x), Cool white (1x)
Gloves	l = 70 cm, D = 7 inch, t = 0.6 mm
Gas Ports	KF-40 port (1x), 1/4 inch manual on/off valve (2x)
Shelves	2 shelves, 50 cm x 12 cm, mounted at different height
Glove Port	Round Al port, for 7 inch gloves
Glovebox window	Tempered glass, t = 10 mm
Main chamber walls	Stainless steel, t = 1.5 mm
Loading chamber size	l = 27 cm, D = 20 cm (Volume = 8 lit)
Main chamber size (l x w x h)	82 cm x 60 cm x 70 cm
Glovebox size (l x w x h)	138 cm x 65 cm x 85 cm
Model	GLX-280AS

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