

OVERVIEW

GLX-280AS is a mini-computer controlled glovebox, allowing access and control of the system through 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 internet.



FEATURES

- Mini-computer based control system
- Remote control of the system through internet
- Multiple pre-defined operation routines for easy use of system
- Very low leakage rate
- Multiple electrical and gas ports
- O₂, H₂O, VOC, P and DP sensors installed on system
- Easy system troubleshooting by company through internet

SPECIFICATIONS

GLX-280 AS Technical Specifications	
Glovebox size (l x w x h)	138 cm x 65 cm x 85 cm
Main chamber size (l x w x h)	82 cm x 60 cm x 70 cm
Loading chamber size	l = 25 cm, D = 20 cm (Volume = 7 lit)
Main chamber walls	Stainless steel, t = 1.5 mm
Glovebox window	Tempered glass, t = 10 mm
Glove Port	Round Al port, for 8 inch gloves
Shelves	2 shelves, 60 cm x 12 cm, mounted at different height
Gas Ports	KF16 port (1x), 1/4 inch manual on/off valve (2x)
Gloves	Butyl gloves, l = 80 cm, D = 8 inch, t = 0.4 mm
Light	Warm white (1x), Cool white (1x)
Manual pressure gauge	2 manual pressure gauge: vacuum gauge (-1 - 0 bar), Input gas pressure gauge (0 - 2.5 bar)
Loading chamber doors	Outside door: rotation sliding, screw lock ; Inside door: Jack-lift, screw lock
Sensors	Oxygen sensor: Electrochemical, 0-100% , Resolution 0.01%
	Temperature sensor: Resolution 0.1 °C
	Humidity sensor: 0-100%, Resolution 0.1%
	Differential pressure sensor: 0-4000 Pa, Resolution 1 Pa
	Absolute pressure sensor: -1000 mbar - 1000 mbar, Resolution 1 mbar
Mini-computer and electronics system	VOC sensor: 0-100 ppm, Resolution 1 ppm
	7 inch touch LCD, Resolution 480x800
	Ethernet port, 4 USB 2.0 ports, Wifi, Bluetooth
Software features	Automatic saving of sensors and valves data (one dataset per second)
	Automatic control of pressure by tuning the rate of gas input and exhaust
	Pre-defined routine for sample loading and unloading
	pre-defined routine for continuous or vacuum purging
	Manual mode to turn on/off the valves
	Automatic control of vacuum pump
	Online display of the sensor values
Internet access and control of the system	
Electric ports	USB port, 4 banana plug connections
Pneumatic system	Electric valves, 1/4 inch and 1 inch.
	Pressure regulator 0-2.5 bar at the gas input line
	Stainless steel below for vacuum connections
	Exhaust foot pedal (to ease of working with gloves)
Power	Single phase, 220 VAC, 1000W
	16A surface socket inside main chamber (2x)
	6 A circuit breaker for electronic system
	6 A circuit breaker for electric valves
	16 A circuit breaker for the surface sockets
	Safety switch
Weight	150 Kg