

Technical Bulletin VAC 109035

GENESIS Glovebox System and Accessories



Description: The GENESIS System provides an inert atmosphere glovebox platform that is easily configurable to your application by selecting from our array of optional accessories.

VAC designed the GENESIS to be the most cost effective stainless steel inert atmosphere glovebox on the market. The GENESIS was born from VAC's ongoing research and development and our pursuit to simplify the user experience by our advancements in inert atmosphere technologies.

When used with optional GENESIS purifiers, the system will achieve and maintain oxygen and moisture levels of less than 1 ppm.

Glovebox: Single Sided and Single Length (2 Port). 45" width x 30" deep x 36" height (1143 x 762 x 914 mm), stainless steel construction with removable end panels. Full view ¼" thick scratch-resistant polycarbonate front panels, with aluminum glove ports. One dual AC electrical junction box and one dual DC electrical junction box inside of glovebox.

Stand: Welded steel construction supporting the glovebox, instrumentation and controls. Stand has height levelers and casters. System can be ordered without stand.

Antechamber: 10" x 10" x 12" (254 x 254 x 305 mm), stainless steel construction, mounted on right panel. Manual ball valves for evacuation and refill.



Glovebox Purge: Manual 1 ½" ball valve. Standard feature.

LED Light: Energy efficient glovebox luminaire, 4500K color temperature for optimum visibility in glovebox. Standard feature.

Shelves: One set of three adjustable shelves, 8 inches deep x 24 inches wide (203 x 610 mm). Standard feature.

Glove Port Cover: Protects atmosphere during glove replacement. One cover included as standard.

Gloves: One pair included with each system, see options for selection.

Power: 115 or 230 VAC, 50/60 Hz Operation. See **ORDERING** for part numbers

Vacuum Pump: Edwards RV5, 4.1 cfm direct drive pump included with each system, see options for other choices.

System Weight: 800 lb.

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Pressure Control: Glovebox pressure is monitored and controlled by the Dwyer Photohelic® gauge, a proven pressure control system for decades.

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Glove Options:

Type	Part Number	Note
Gloves, Butyl Rubber, Ambidextrous 0.030"	VAC 2682	Choose one type
Gloves, Butyl Rubber, L & R, 0.030"	VAC 2682-2	"
Gloves, Butyl Rubber, Ambidextrous 0.015"	VAC 2681	"
Gloves, Butyl Rubber, L & R, 0.015"	VAC 2681-2	"

Vacuum Pump Options

Type	Part Number	Note
Vacuum Pump Assy, 4.1 cfm	VAC 100617	Included in std price
Vacuum Pump Assy, 6.9 cfm	VAC 100618	See quote for price
No Vacuum Pump	N/A	See quote for credit

Optional Purification Accessories for GENESIS System

Purification Kit, Oxygen: Includes fan assembly and oxygen removal cartridge. These low cost cartridges are designed to be replaced by fully activated replacements purchased from Vacuum Atmospheres Company.
P/N VAC 109038

Purification Kit, Moisture: Includes fan assembly and moisture removal cartridge. These low cost cartridges are designed to be replaced by fully activated replacements purchased from Vacuum Atmospheres Company.
P/N VAC 109037

Cartridge, Oxygen Removal: As required, purchase these low cost cartridges to replace an existing customer purifier cartridge. Please ask your service contact about our cost saving exchange program.
P/N VAC 109192

Cartridge, Moisture Removal: As required, purchase these low cost cartridges to replace an existing customer purifier cartridge. Please ask your service contact about our cost saving exchange program.
P/N VAC 109191



Optional Accessories for GENESIS System

Analyzer Assy, Oxygen: LCD display, calibration system and electrolytic fuel cell. Monitors and displays the glovebox levels from 0.1 ppm to 25% oxygen.

P/N VAC 109297

Analyzer Assy, Moisture: LCD display, aluminum oxide probe and NIST traceable calibration. Monitors and displays the glovebox levels to 0.5-ppm moisture (-80°C dew point).

P/N VAC 401301

Cold Storage Assy: Refrigerator, to -35°C. Mounted to glovebox on left end panel and provides immediate access from the inside of the glovebox. Includes an extension module to mount refrigerator outside of glovebox for increased space savings.

P/N VAC 109047

Cold Well: Stainless steel well, 6 1/2" I.D. by 7 1/2" deep (165 x 190mm). Dewar to be filled with LN₂ coolant for low temperature work in glovebox.

P/N VAC 019333



Cold Well

Glove Port Cover: Installs over each glove to secure glovebox during tests. Either internal or external models.

P/N VAC 019281 (External)

P/N VAC 019282 (Internal)

Glove Port Cover, Evacuatable: Allows evacuation after a glove change to minimize O₂ influx.

P/N VAC 020321

Interface Assy, NW40-KF:

Welded feedthru penetration into a glovebox

P/N VAC 102833



NW40-KF

Interface Assy, NPT: Welded feedthru penetrations into a glovebox. Also vacuum feedthru with 1/4" valves on interior and exterior of glovebox.

Size	Part Number
1/4"	VAC 100171
3/8"	VAC 100172
1/2"	VAC 100173
3/4"	VAC 100174
1"	VAC 100175
1 1/2"	VAC 100176
1/4" w/valves	VAC 100594

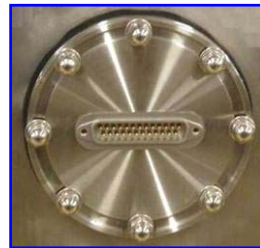


5-way binding posts

1/4" NPT with valves

Fiber Optic

1/4" NPT



25-Pin, D



BNC

Interface Assy, 20 amp: 5-way binding posts feedthru for electrical signals.

P/N VAC 100626

Interface Assy, 25-Pin D, Data or RJ-45: Electrically connects instruments into a glovebox.

P/N VAC 401161, 9 Pin, D

P/N VAC 401162, 15 Pin, D

P/N VAC 401163, 25 Pin, D

P/N VAC 400164, RJ-45

P/N VAC 400980, USB

Interface Assy, BNC: Feed thru electrically connects instruments into a glovebox with BNC connector.

P/N VAC 100627

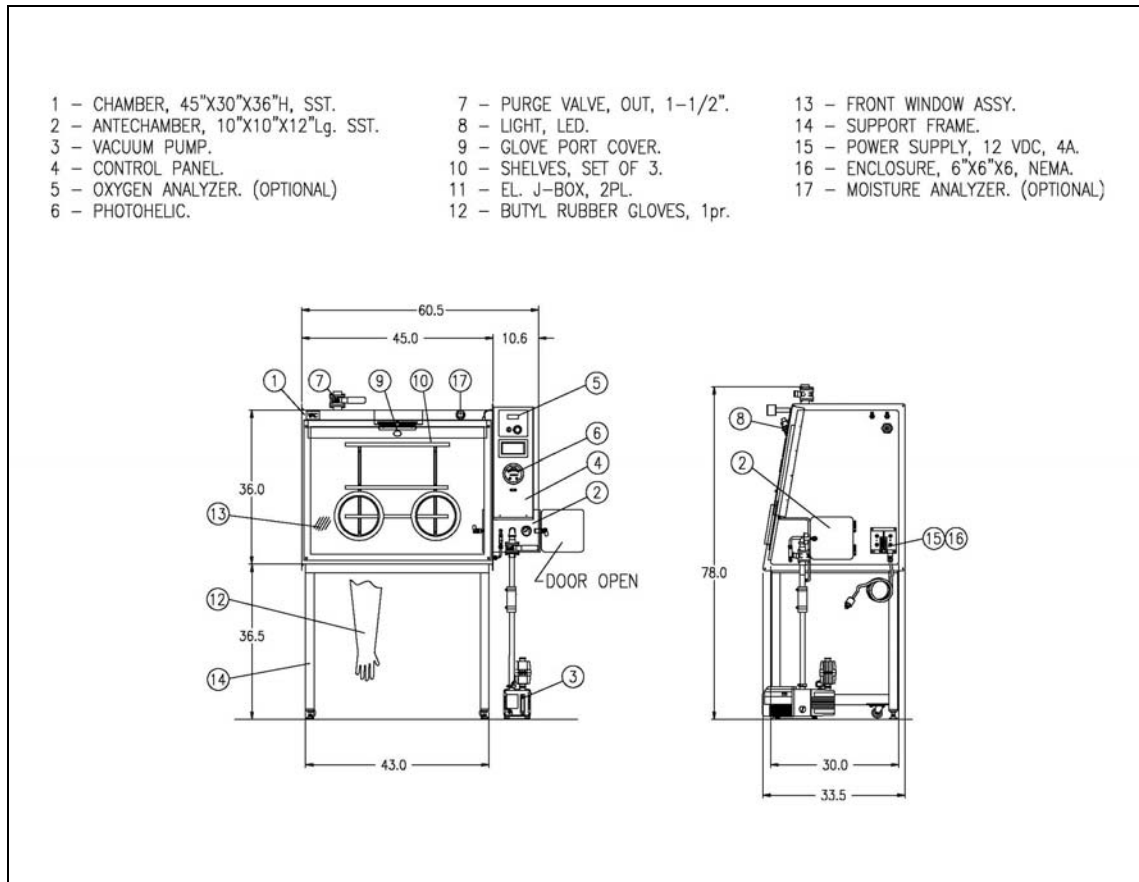
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Workstation Ionizer, No Fan: Excellent static control for working with an analytical balance or powders. Free standing.
P/N VAC 101373, 110 VAC, 60 Hz
P/N VAC 101467, 220 VAC, 50 Hz

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Workstation Ionizer, with Fan: For coverage of greater work area. Free standing.
P/N VAC 400259, 110 VAC, 60 Hz
P/N VAC 400260, 220 VAC, 50 Hz

CALL FACTORY FOR OTHER ACCESSORIES AND OPTIONS



Ordering

- 1) GENESIS: VAC 109035 for 110 VAC or VAC 109286 for 220 VAC.
- 2) Glove Style choice by part number
- 3) Vacuum Pump choice by part number
- 4) Accessory choice by part number

Shipping

Domestic Shipping Weight: 1,000 lb. (single)
Export Shipping Weight: 1,200 lb. (single)
Export Crate Dimensions: 65" w x 40" d x 93" h



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