



Plastic Glove Boxes: Series 100

- An economical controlled processing environment for a wide range of manufacturing and testing operations
- Dual-gasketed side doors and a fully gasketed back permit introduction of small and large equipment
- Optional gas purge controls automatically
 - establish a Class 1 particle-free environment
 - maintain a humidity set point down to 0% RH
 - minimize system recovery time
- Arm ports accept a wide variety of gloves, including accordion sleeve and glove assembly
- Select single model (with two glove ports) or twin model (with four glove ports)
- Available in five materials: acrylic, static-dissipative PVC, non dissipative PVC, polypropylene and polycarbonate
- System options include blower/filter module (for recirculating/purifying exhaust), ionizing equipment (for complete static protection), and external fluorescent or UV lighting
- Other designs available

Series 100 Polymer Glove Boxes provide a clean, low-humidity environment for critical processing operations in such industries as semiconductor and pharmaceutical manufacturing. Their modular design lets you select the options you need for your application.

Materials for Every Requirement

Select from a variety of materials to suit your requirements. Economical acrylic is ideal for general purpose processing. Transparent Static-Dissipative PVC helps eliminate static charges and the particles they attract, keeping your glove box clean inside and out. Non dissipative PVC is ideal for operations with many corrosive chemicals, and polypropylene offers even greater chemical resistance (polypropylene glove boxes feature a transparent Static-Dissipative PVC viewing window). Select polycarbonate for operations that involve thermal stress.

All glove boxes are fabricated to meet the most rigorous standards for cleanliness and durability. Solvent welding ensures a strong, noncontaminating structure. The 45° front slope allows the operator an uninterrupted overview of work in progress.

Improved Access Doors Reduce Wear, Enhance Performance

Dual side access doors open inward to allow easy parts transfer from inside the chamber. Doors feature stainless steel reinforcement frames that increase the structural rigidity of the door by a factor of five. A built-in LiftLatch securely seals the door without applying lateral torque that could damage hinges.

All doors include a unique, one-piece "e"-profile elastomer gasket that will not compress or migrate over time. Its superb sealing capability saves nitrogen, eliminates maintenance, and extends the service life of access doors—typically the only component of a glove box that shows wear.

Air Locks Allow Convenient Access

These glove boxes can be outfitted with air locks that maintain the integrity of the controlled environment without sacrificing convenience.

Standard and pass-through air locks mount on the right side of the chamber (left-mounting air locks are available on a custom basis). They minimize nitrogen loss and contamination inflow while parts are introduced or removed. Universal Air Locks extend system flexibility by mounting to either the right or left side of the chamber; their double flange design allows several chambers to be connected in series. All air locks include a .125" NPT pipe-tapped opening for connection of purge gas and a .25" NPT outlet to accommodate an Automatic RB[®] (Relief/Bleed) Valve.

Solutions for Controlled Environments and Cleanrooms.



www.sirus-microtech.com

For applications involving large equipment, you can simply remove and then reinstall the fully gasketed back wall. Dual 8" round arm ports come equipped with flanges for easy connection to our many gloves, including the accordion-type glove assemblies.

Nitrogen Controls Ensure Low-Humidity, Contamination-Free Atmosphere

For optimal processing conditions, select Glove Box Dual Purge™ System and NitroWatch®, which work in tandem to provide completely automatic gas purging.

The Dual Purge™ System delivers a variable nitrogen purge into the glove box. During normal operation, it provides a continuous low-flow purge to maintain a positive pressure that blocks out contaminants. In the event of a sudden pressure drop, it activates a high-flow purge to block out contaminants and to quickly purge any moisture or contaminants that do enter the chamber.

The NitroWatch® provides automatic low-humidity control. It monitors the internal relative humidity and activates the high-flow purge when the moisture climbs above an adjustable set point. The Automatic RB® (Relief/Bleed) Valve provides safe pressure relief with these control systems and also functions as a check valve, ensuring that no moisture or contaminants enter the chamber in the event of a negative pressure. All glove boxes feature a tapped .125" NPT inlet and a .25" NPT outlet for connection to these controls.

Select the single or twin model; twin glove boxes feature two pairs of glove ports to accommodate two operators (order gloves separately). Other system options include a filter/blower module for filtering and recirculating purge gas or purifying exhaust; self-balancing ionizing equipment for complete static safety; and an externally mounted fluorescent or UV illuminator for enhanced viewing (which is especially important in the polypropylene glove box).

Note: These glove boxes are not designed for use under vacuum. Select Terra's Negative Pressure Glove Boxes for low-level vacuum applications

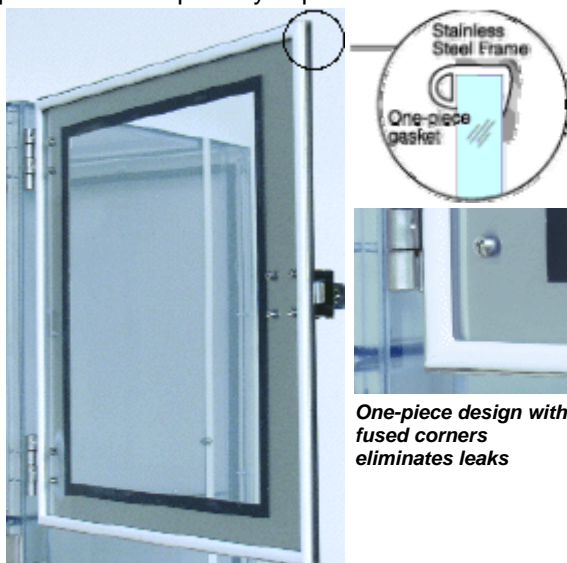
Specifications

Door Openings: 10" x 10" with gasketed doors, on both sides of chamber; doors open inward.

Arm Ports: 8" round with flange for connecting glove assembly

Gas Ports: Tapped .125" NPT inlet (for connecting flowmeter or Dual Purge™ System) and .125" NPT system pressure port; .25" NPT outlet

Note: A stainless steel work surface is recommended on all plastic glove boxes to prevent scratching; this protection is especially important with static-dissipative PVC.



Stainless steel door frames with unique "e" profile elastomer gasket increase structural rigidity, extend service life, improve sealing performance

One-piece design with fused corners eliminates leaks


Phone: +44 [0] 1823 660665. sales@sirus-microtech.com Fax: +44 [0] 1823 665321

The Old Stables, Linden Hill, Wellington, Somerset, TA21 0DW, England

Company Reg No. 191 02 63 VAT Reg No: 429 0172 65



- A. NitroWatch® Humidity Controller
- B. Glove Box Dual Purge™ System
- C. Universal Air Lock
- D. Changeable Sleeve and Glove Combination
- E. Powder-Coated Stand
- F. Casters



IonBar™ (with fan module)
Safe static neutralization.

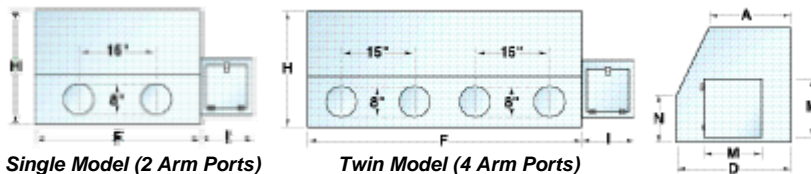
Cat. #

22" Long 2005-30

44" Long 2005-31

How to Order:

1. Select the glove box of the desired size (single or twin) and material from the ordering table below.
2. Select the Air Lock for your application. The Standard or Pass-Through Air Lock is for connection to one glove box; Universal Air Lock allows connection of two glove boxes in series. Right-side mounting is standard.
3. Select the appropriate accessories for your system; all prices include installation. Other optional accessories are listed below.



Type	A	D	F	H	I	M	N
Single	16.25	24	35	22.125	11.5	10	11
Twin	16.25	24	59	22.125	11.5	10	11

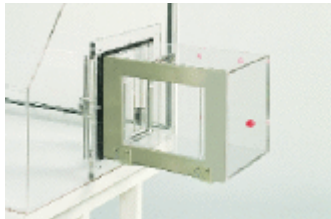
Type	Series 100 Plastic Glove Boxes*		
See Dimensions above	Acrylic	Static Dissipative PVC**	Nondissipative PVC
	Cat.#	Cat.#	Cat.#
Single Models (2 glove ports)	1689-00C	3305-00C	3305-03C
Twin Models (4 glove ports)	1689-16C	3305-10C	3305-11C



Type	Series 100 Plastic Glove Boxes*		
See Dimensions above	Polypropylene (Dissipative PVC*** viewing window)	Polycarbonate	Stainless Steel Work Surface (prevents scratching)
	Cat.#	Cat.#	Cat.#
Single Models (2 glove ports)	1681-29C ***	1681-31C	1689-11
Twin Models (4 glove ports)	1681-30C ***	1681-32C	1681-33

* Complete with .125" NPT inlet and .25" NPT outlet.

** Includes grounding terminals. The Stainless Steel Work Surface is required with the Static-Dissipative PVC glove box to prevent scratching.



Standard Air Lock

These air locks mount on the right side of the glove box to allow easy pass-through of parts into and out of the chamber. They feature a swing-down door on the front (outside) and a second door that is easy to open by a gloved hand from inside the glove box. One-piece nonadhesive gasket enhances sealing performance and extends service life. Capped ports are provided to allow purging of the air lock with nitrogen. Right mounting is standard.

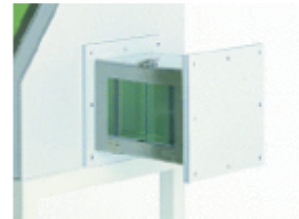


Pass-Through Air Lock

Feature chrome-plated racks that accommodate adjustable shelves. Their in-line double-door construction lets you pass small parts easily into the glove box; you simply slide a shelf through the outside door to load parts and then through the inside door to unload them in the chamber. Order shelves separately. Right mounting is standard.

Cat. #	
--------	--

Plexiglass Shelf	1680-67
Stainless Steel Shelf	1680-68



Universal Air Lock

The Universal Air Lock features dual flanges (each with gaskets) to permit mounting on either the right or left side of any Terra plastic glove box. They also allow multiple glove boxes to be connected in series. Each air lock includes a capped .125" NPT inlet and .25" NPT outlet for connection to purge gas and Automatic RB[®] Valve. Select material compatible with your glove box(es). Right mounting is standard.

Stainless steel frames now standard on all access doors.

Type	Series 100 Air Locks (each includes ports for nitrogen purging/bleeding)		
See Descriptions above	Acrylic	Static Dissipative PVC	Nondissipative PVC
	Cat.#	Cat.#	Cat.#
Standard Air Lock	1680-78	1680-81	1680-84
Pass-Through Air Lock	1680-79	1680-82	1680-85
Universal Air Lock	1680-80	1680-83	1680-86

Type	Series 100 Air Locks (each includes ports for nitrogen purging/bleeding)		
See Descriptions above	Polypropylene (Dissipative PVC viewing window)	Polycarbonate	Stainless Steel Work Surface (prevents scratching)
	Cat.#	Cat.#	Cat.#
Standard Air Lock	1680-87	1680-90	1680-69
Pass-Through Air Lock	1680-88	1680-91	1680-69
Universal Air Lock	1680-89	1680-92	1680-69



Bonded Sleeve and Glove Combination

For optimal economy and long-term durability, this combination features gloves that are permanently vulcanized to sleeves. The sleeves are made of heavy-duty, chemical-resistant neoprene and are

designed for 8" port size. Hands are also made of sturdy neoprene; select desired size. Clamps included. *6" Port Size Available*

Bonded Sleeve and Glove Combination

Glove Size	Cat. #
8	1689-02
9	1689-03
10	1689-04



Changeable Sleeve and Glove Combination

These accordion sleeves can be used with a variety of gloves, allowing you to change glove size or type without changing the sleeve itself. The convoluted section keeps the

sleeve off the operator's arm for better air circulation and greater comfort. Supplied with one pair of tempered latex industrial gloves (select desired size). Clamps included.

Changeable Sleeve and Glove Combination

Glove Size	With 12" Sleeve	With 24" Sleeve
	Cat. #	Cat. #
8	1689-05	1681-90
9	1689-06	1681-91
10	1689-07	1681-92

Corresponding Options

Type	Ionizing Blower*	Fluorescent Illuminator**
	Cat.#	Cat.#
Single	1526-30	1681-78
Twin	1526-32	1681-79

* Requires Transformer and power strip. Models indicated are 120VAC, 60Hz.

** Comes standard on polypropylene models. Add "220" for 220VAC models.

Corresponding Options

Power Strip*	Dual Purge System	NitroWatch Controller	NitroWatch Sensor	Automatic RB Valve	Operating Manual
Cat.#	Cat.#	Cat.#	Cat.#	Cat.#	Cat.#
1681-80	1603-57	9500-00A	9500-02A	1600-60B	1800-42

* Mounted horizontally on the inside rear wall, 3" from the bottom (specify other position, if desired). Includes master on/off switch, 15-Amp circuit breaker and 4 outlets.

Series 100 Glove Box Accessories



**Polypropylene Glove Box
No. 1681-29B**

Stands for Series 100 Glove Boxes

Constructed of all-welded 2" square tubing, these stands are specially designed to support Series 100 glove boxes. Select powder-coated (white) steel or stainless steel stands, with or without hard rubber casters.

For Single For Models

(35"W x 24"D x 30"H)

	Cat. #	
Powder-Coated Steel Stand	1681-48	
Stainless Steel Stand	1681-49	

For Twin Models

(59"W x 24"D x 30"H)

	Cat. #	
Powder-Coated Steel Stand	1681-51	
Stainless Steel Stand	1681-52	

Casters (set of 4, 2 with brakes)

Cat. #
1700-44



Double-Wall Construction with Temperature Control

Double-wall polycarbonate and stainless steel glove boxes feature up to 4" of polyurethane insulation for energy efficiency at process temperatures between 120°F and -40°F. Call to discuss your application!



Filtration Modules

These modules allow continuous recirculation of process gas through a HEPA or ULPA filter to remove particles, aerosols, microbes, chemical powders, and other fine contaminants. A variety of open/closed-loop configurations allow 100% exhaust, 100% recirculation, or a mixture of filtered and fresh make-up air.



Tilt-Up Viewing Window

Swings open for easy access. Dual piston mechanisms hold the window securely open. Price includes modification of Series 100 glove box to include hinged viewing window. Must be ordered together with affected glove box.

Cut-Out Dimensions:	Dissipative PVC with stainless steel frame		Acrylic	
	Cat. #		Cat. #	\$/Each
For single chamber (29"W x 11"H)	1681-81		1681-83	
For twin chamber (53"W x 11"H)	1681-82		1681-84	

Fixed Rear Wall

A fixed rear wall can be specified in place of the removable rear wall furnished standard with Series 100 glove boxes.

Cat. #
1681-58

Detachable Bottom

Allows Series 100 glove box to be lifted for easy placement over large equipment. Bottom attaches and seals to glove box by means of dual-gasketed latches located along the base.

Cat. #
1681-55