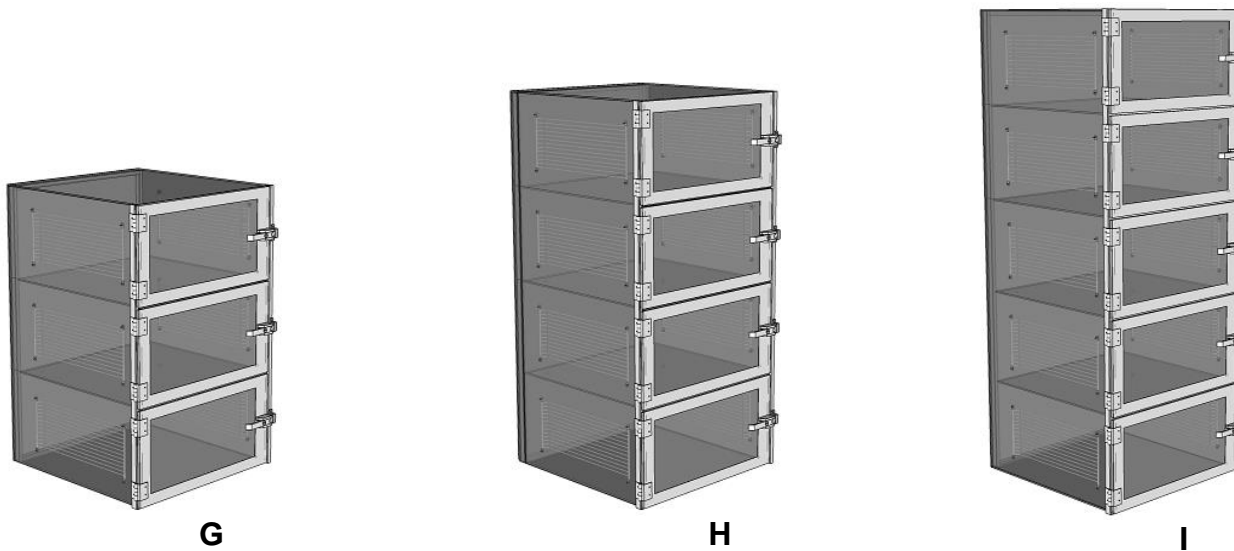


## Micron-Aire™ Large "Single Tier" Plastic Desiccator Cabinets / Dry Boxes



Micron-Aire™ Large "Single Tier" Plastic Desiccator Cabinets / Dry Boxes							
Type	Desiccator Series #	Desiccators Nominal Overall Cabinet Dimensions in inches (mm) W x D x H	Number of Chambers	Shelves / Trays Nominal Inside Usable Dimensions in inches (mm) W x D	Clear Acrylic*	Amber Acrylic*	Static Dissipative PVC**
					Part #	Part #	Part #
G	D118	17.5" x 18" x 36" (445 x 457 x 914)	3	14.75" x 14.5" (375 x 368)	D118-3C	D118-3A	D118-3D
	D124	17.5" x 24" x 36" (445 x 610 x 914)	3	14.75" x 20.5" (375 x 521)	D124-3C	D124-3A	D124-3D
	D218	22.5" x 18" x 36" (572 x 457 x 914)	3	19.75" x 14.5" (502 x 368)	D218-3C	D218-3A	D218-3D
	D224	22.5" x 24" x 36" (572 x 610 x 914)	3	19.75" x 20.5" (502 x 521)	D224-3C	D224-3A	D224-3D
H	D118	17.5" x 18" x 48" (445 x 457 x 1219)	4	14.75" x 14.5" (375 x 368)	D118-4C	D118-4A	D118-4D
	D124	17.5" x 24" x 48" (445 x 610 x 1219)	4	14.75" x 20.5" (375 x 521)	D124-4C	D124-4A	D124-4D
	D218	22.5" x 18" x 48" (572 x 457 x 1219)	4	19.75" x 14.5" (502 x 368)	D218-4C	D218-4A	D218-4D
	D224	22.5" x 24" x 48" (572 x 610 x 1219)	4	19.75" x 20.5" (502 x 521)	D224-4C	D224-4A	D224-4D
I	D118	17.5" x 18" x 60" (445 x 457 x 1524)	5	14.75" x 14.5" (375 x 368)	D118-5C	D118-5A	D118-5D
	D124	17.5" x 24" x 60" (445 x 610 x 1524)	5	14.75" x 20.5" (375 x 521)	D124-5C	D124-5A	D124-5D
	D218	22.5" x 18" x 60" (572 x 457 x 1524)	5	19.75" x 14.5" (502 x 368)	D218-5C	D218-5A	D218-5D
	D224	22.5" x 24" x 60" (572 x 610 x 1524)	5	19.75" x 20.5" (502 x 521)	D224-5C	D224-5A	D224-5D

\* Acrylic desiccator cabinets are susceptible to damage with the prolonged use of alcohol and other cleaning/disinfecting agents. Desiccator cabinets fabricated out of Static Dissipative PVC may be a better choice in these instances.

\*\* It is highly recommended that stainless steel shields be installed in Static Dissipative PVC desiccators to protect the chambers bottom surface from repeated scraping and rubbing, which can lead to loss of dissipative properties.

### Additional product information:

1. The above reference 3D renderings shown with optional stainless steel door frames, which are listed below.
2. Amber acrylic desiccator cabinets are ideal for storage of materials and devices that are sensitive to ultraviolet light.
3. Pre-tapped inlets/outlets for connection of optional gas purge devices & controllers and Auto-Adjust™ RB (relief/bleed) valve.
4. Static-dissipative PVC desiccator cabinets provide added contamination control by dissipating static charges that attract air-borne particulate.
5. Exterior removable back plenum panel is made of non-dissipative material. Static dissipative PVC available upon request (at additional charge).
6. Static-dissipative PVC desiccator cabinets feature system grounding, where the door latch set, hinges and racks are interconnected with conductive tape and terminated at a multi lug grounding block. Grounding is optional on clear and amber acrylic desiccator cabinets. See Grounding (desiccator) option below for further information.
7. Nominal dimensions reference the cabinet storage section and do not include the access door(s), hinge & catch strips and miscellaneous hardware & fasteners.

## Static and Relativity Humidity Control Solutions

### Static Control Solutions:

1. Conductive stainless steel shields, shelves and trays, which when grounded and properly positioned can create a Faraday cage that prevents penetration of electric fields and the resulting static charges. Stainless steel shelves and trays can also help to protect static sensitive materials from electro-static discharge when transporting materials from one location to another. See the following ordering charts
2. Desiccator grounding (standard on static dissipative PVC cabinets) provides interconnection of the racks, latches and stainless steel hinges with conductive tape and terminated at a multi-lug grounding block
3. Ion Power™ Unit and ionizing nozzles provide positive and negative ions into desiccator cabinet storage chambers to neutralize static charge build-up
4. [Click here for additional information](#)

**Relative Humidity Control:** For automated control over low R/H levels (0% to ambient RH) or for complete R/H control (0% - 100%), select the optional Gas Purge™, Gas Monitor™ and Gas Humidifier™ control systems listed in the "Automated Gas Control Solutions" section found at the bottom of this page or [Click here for additional information](#)

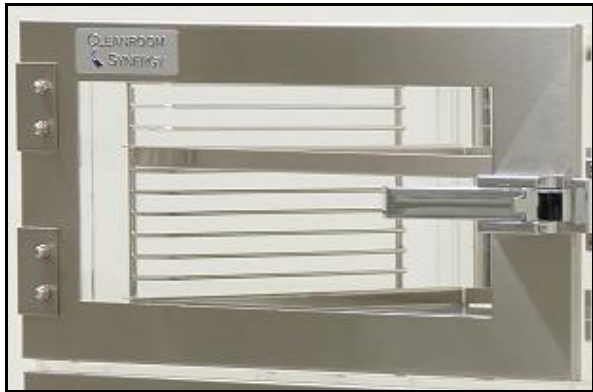


Gas Monitor™ & Gas Purge™ Controllers

**Select corresponding door frames, shelves, gas purging devices & controllers and other system options from the following ordering charts**

**Stainless Steel Door Frames**

- Re-enforces and prevents potential damage to the plastic doors, increasing overall cabinet life
- Enhances sealing performance by securely holding a one-piece gasket material in place to virtually eliminate gasket movement or failure
- Select the appropriate part number and quantity needed for the selected dry box desiccator cabinet(s)



Stainless Steel Door Frames for Micron-Aire™ Large "Single Tier" Plastic Desiccator Cabinets		
Type	Desiccator Series #	304 Stainless Steel Door Frame
		Part #
G, H & I	D118	D17-DF
	D124	
	D218	D22-DF
	D224	

Shields, Shelves & Trays for Micron-Aire™ Large "Single Tier" Plastic Desiccator Cabinets								
Type	Desiccator Series #	Stainless Steel, Non-Perforated			Electro-Polished Stainless Steel, Non-Perforated			Clear Acrylic* w/ Stainless Steel Flex Guard™
		Shield	Shelf, .5"D	Tray, 2"D	Shield	Shelf, .5"D	Tray, 2"D	Shelf, .25" Material
		Part #	Part #	Part #	Part #	Part #	Part #	Part #
G, H & I	D118	D118-SD	D118-SF	D118-ST	D118-SDE	D118-SDE	D118-STE	D118-ASF
	D124	D124-SD	D124-SF	D124-ST	D124-SDE	D124-SDE	D124-STE	D124-ASF
	D218	D218-SD	D218-SF	D218-ST	D218-SDE	D218-SDE	D218-STE	D218-ASF
	D224	D224-SD	D224-SF	D224-ST	D224-SDE	D224-SDE	D224-STE	D224-ASF



Stainless steel shields and shelves in a Static Dissipative PVC desiccator cabinet

\* Acrylic shelves should not be used with static-dissipative PVC desiccator cabinets.

**Additional product information:**

1. Stainless steel shields being purchased for installation on clear and amber acrylic desiccator cabinet's, should be considered with the addition of desiccator grounding (optional). See Grounding (desiccator) option below for further information.
2. Shields are factory installed. When purchased for use with a static-dissipative PVC desiccator, the shields will be installed and connected to the system grounding, which is a standard feature on these cabinets.
3. Perforated shields, shelves and trays are available upon request (at additional charge)

**Adjustable Shelf Supports**

- Reinforces the desiccators internal fixed in-place plastic shelves for accommodating heavier storage loads
- Minimizes detrimental cabinet damage caused by overloading storage chambers
- Installed below the cabinets ceiling allows convenient placement of Cleanroom Synergy's Gas Purge™ and Gas Monitor™ Controller units
- Adjustable, Low-profile design allows placement without taking away valuable storage space
- Install in pairs for better loading capability
- Select the appropriate quantity needed for the selected desiccator cabinet(s). Install in pairs for better loading capability
- Fabricated out of 304 stainless steel

**Note:** It is recommended that stored materials, whenever possible, be distributed evenly though-out the storage chamber and not centrally located in the center of the chamber as to minimize un-necessary damage to the desiccator cabinet.

Adjustable Shelf Supports (stainless steel)		
Type	Desiccator Series #	Part #
G, H & I	D118	D-SS1
	D124	
	D218	
	D224	

Stands for Micron-Aire™ Large "Single Tier" Plastic Desiccator Cabinets							
Type	Desiccator Series #	Powder Coated*		Stainless Steel**		Electro-Polished Stainless Steel**	
		4"H with leveling glides	12"H with leveling glides	4"H with leveling glides	12"H with leveling glides	4"H with leveling glides	12"H with leveling glides
		Part #	Part #	Part #	Part #	Part #	Part #
G, H & I	D118	D118-SP1	D118-SP2	D118-SS1	D118-SS2	D118-SE1	D118-SE2
	D124	D124-SP1	D124-SP2	D118-SS1	D124-SS2	D124-SE1	D124-SE2
	D218	D218-SP1	D218-SP2	D218-SS1	D218-SS2	D218-SE1	D218-SE2
	D224	D224-SP1	D224-SP2	D224-SS1	D224-SS2	D224-SE1	D224-SE2



Powder coated white stand with optional caster set

**Casters**

- Provides desiccators with mobility for moving from workstation to workstation and for ease of cleaning around its stationary position
- Heavy-duty, low-profile set of 4 caster set, includes 2 with side brakes
- Increases the desiccator stand height from 4" (with leveling glides) to 7.5" (192mm)

Casters	
Chrome Forks	Stainless Steel Forks
Part #	Part #
D-4CFC	D-4SFC

\* Includes high capacity leveling glides with zinc-plated threaded stud and base cover. Base is a non-conductive, non-marring white plastic  
 \*\* Includes high capacity leveling glides with stainless steel threaded stud and base cover. Bottom glide is a non-conductive, non-marring white plastic

**Flow Meter**

- Scales are hot stamped into the front of the acrylic body and will not wear off
- Bodies are precision cut and machined from clear acrylic blocks with a smooth tapered bore that provides perfect visibility of the indicating float
- Accuracy is ±5% of full scale with a scale average 2" long
- Features brass (stainless steel optional) inlet and outlet connections, black glass float, Buna-N O-rings and tapped for 1/8" NPT female process connection (vertical mounting)
- Service: Compatible gases and liquids
- Includes nickel plated brass hex nipple and 90 degree elbow (female x male), 1/8" (3.18mm) pipe size for connection to Cleanroom Synergy desiccators, glove boxes or other gas purged enclosures

Flow Meter (fittings included)		
.6 - 5 SCFH	1 - 10 SCFH	2 - 20 SCFH
Part #	Part #	Part #
CCE-FME	CCE-FMH	CCE-FMK

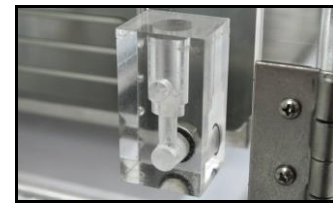
**Auto-Adjust™ RB Valve**

- Automatically adjusts to gas flow rates and possible sudden surges
- Eliminates possible negative pressure incidents due to its one way air flow design
- Continuously bleeds off excess internal gas to maintain a safe pressure within desiccators, glove boxes and other hermetically sealed enclosures
- Includes a nickel plated brass hex nipple fitting (1/8" NPT) with a polyurethane O-ring to ensure a positive seal against the hermitically sealed enclosure

**Notes:**

1. One Auto R/B Valve per cabinet is required if desiccator is to be purged with dry gas
2. Installation of one Auto-Adjust™ RB Valve in each desiccator storage chamber eliminates cross contamination and R/H fluctuation in the unopened chambers

Auto-Adjust™ RB Valve
Part #
CCE-PRV



Auto-Adjust™ RB Valve

**Static Control Solutions**

**Grounding (Desiccator)**

- Safely discharges the operator when accessing stored material
- Helps protect sensitive materials from electro static discharge damage
- Provides interconnection of the door latch, door catch, hinges and racks with conductive tape and termination at a multi lug grounding block

**Notes:**

1. Charge for grounding is per desiccator chamber, therefore, quantity should correspond with the number of chambers on the affected desiccator cabinet
2. Grounding is a standard feature on all static dissipative PVC desiccator cabinets
3. A ground fault circuit interrupter should be considered to provide personnel protection

Grounding
Part #
D-1CG

Cost is per chamber



Multi-lug grounding block



Shield, rack and shelf grounding

**Desiccator Cabinet Grounding**

Static Dissipative PVC features a surface resistivity of approximately 10<sup>7</sup> ohms/square that dissipates static charges from the cabinet's surface. Grounding is standard on Static Dissipative PVC desiccators, which safely directs charges to a multi lug termination grounding block. To protect the Static-Dissipative PVC interior bottom surface, it is "highly recommended" that a stainless steel shield be installed in each desiccator cabinet chamber. Stainless steel shield installation within these cabinets, include connection to the desiccators grounding.

Acrylic (clear and amber) desiccators can also be fitted with grounding by purchasing the optional "Desiccator Grounding". Charge for the desiccators grounding is per chamber. Stainless steel shield installation within these cabinets, include connection to the desiccators grounding if optional grounding is purchased.

**Ion Power™ Unit**

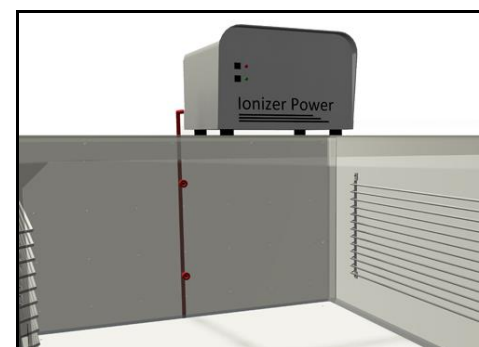
- Neutralizes static charge build-up by introducing positive and negative ions into the desiccator cabinets storage chamber
- Provides electro-static-discharge of non-conductive materials, which cannot dissipate or transfer charges to ground
- Helps to neutralize electrostatic charges on interior cabinet surfaces that induce contamination influx by attracting air borne particulates
- 120/240V, 50/60Hz, requires no manual power selection

**Note:** Select ionizing nozzles for each desiccator storage chamber

Ion Power™ Unit
Part #
D-IPU-1

Ionizing Nozzles
Part #
D-1NS

Two nozzles per desiccator chamber required



Desiccator cabinet with Ion Power™ Unit and system ionizing nozzles

## Automated Gas Control Solutions

### Gas Purge™ Control System

- Automatically activates a high-flow gas purge when a chamber door is accessed
- Protects moisture sensitive materials against oxidation, increasing product yield
- Ensures a constant positive pressure within desiccator cabinets and other hermetically sealed enclosures, blocking out contamination influx
- Dramatically reduces purge gas cost when compared to systems using only a mechanical flow meter
- Adjustable electronic flow meter precisely regulates the flow rate of the purge gas
- Digital pressure regulator safely adjusts the pressure of the incoming gas
- Operates in conjunction with the optional Gas Monitor™ Control Unit to maintain desired sub-ambient moisture level (down to 0% RH)
- High-reliability door switches are rated for millions of operations. One per desiccator chamber required
- Works with 120/240VAC, 50/60Hz, and requires no manual power selection

The Gas Purge™ Controller monitors and regulates the dry gas that will flow into the desiccator when it is needed to lower the R/H or when a chamber door is opened. It has a gas regulator to control the pressure of the incoming gas and electronic flow meter that regulates and maintains the low flow of gas. Also provides audible/visual warnings when the supply gas is getting low, a desiccator door has been left opened or if the R/H set point has not been reached.



Gas Purge™ Control Unit

Gas Purge™ Controller	Sensor Switch
Part #	Part #
GPC-D1	GPC-D1S

One sensor switch required per desiccator chamber

### Gas Monitor™ Control System

- The Gas Monitor™, when used in conjunction with the Gas Purge™ Controller will automatically maintain desiccator R/H levels from ambient down to R/H of the purge gas (0% for most dry gases)
- Incorporates a state of the art micro-controller, a bright readable R/H display and simple control buttons
- Since the desiccator only needs gas when the R/H rises above the set point, it uses much less gas resulting in large cost savings
- Small solid state humidity sensor never needs calibration, easily installed and takes a small amount of desiccator space
- Can be used to monitor R/H levels in any enclosure without the use of the Gas Purge™ controller
- Works with 120/240VAC, 50/60Hz, and requires no manual power selection

The Gas Monitor™ controller measures the R/H of the chamber which contains the Gas Sensor. It has provisions to enter a desired R/H set point and will issue a command to the Gas Purge™ controller to lower the desiccator cabinet's humidity level whenever it senses a reading above the R/H set point. It also monitors the open and closed positions of the desiccator doors and issues a command to the Gas Purge™ controller to introduce dry gas at a high flow rate while the door is opened and for a preset time after the door is closed (factory set at 60 seconds).



Gas Monitor™ Control Unit

Gas Monitor™ Controller	Gas Monitor™ Sensor
Part #	Part #
GMC-1	GMC-1S

One sensor required per Gas Monitor™

### Sonic Humidifier™

- Provides a stream of high humidity gas to enclosures that require higher than ambient R/H level
- Automatically generates moisture using a sonic transducer and a connected water source
- Can be used for environmental testing of a large variety of devices to determine performance in wet conditions
- Works in conjunction with the Gas Purge™ and Gas Monitor™ control systems to maintain a specific R/H set point
- Works with 120/240VAC, 50/60Hz, and requires no manual power selection

For actual control of the humidity level, the Sonic Humidifier™ must be used in conjunction with the Gas Purge™ and Gas Monitor™ control systems.



Sonic Humidifier™

Sonic Humidifier™
Part #
SH-1A

All Specifications are subject to change without notice.

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