

**Particle Trap®**

**Operation Manual**



**PT6000**  
**PT6000-230**



**PT-Mini**  
**PT-Mini-230**



<b>Specifications</b>	<b>PT6000</b>	<b>PT-Mini</b>
Width	21 inch (w/o latches)	11 inch (w/o latches)
Height	12 inch	12 inch
Depth Total	20 inch	17-3/8 inch
Depth of Cabinet	9 inch	9-1/2 inch
Depth of Hood	11 inch	8 inch
Weight	36 Pounds	21.5 pounds
Max. Current	0.88 Ampere	0.88 Ampere
Nominal Current	0.60 Ampere	0.60 Ampere
Input Power		
PT6000 & PT-Mini	115 VAC 50/60Hz	115 VAC 50/60Hz
PT6000-230 & PT-Mini-230	230 VAC 50/60Hz	230 VAC 50/60Hz
Sound	67 dB @ 3' Front	62 dB @ 3' Front
Face Velocity	115 feet per minute	115 feet per minute
Volume Flow	200 cfm	96 cfm
Cabinet	Welded steel	
Paint	Epoxy Powder-Coat thermally processed	
Fan	Plastic PA6, fiberglass reinforced	
	Thermal Overload Protector wired internally	
Certifications (CE)	Low Voltage Directive (LVD) – 2014/35/EU	
	Electromagnetic Compatibility Directive (EMCD) – 2014/30/EU	

## Specifications

### Operating Temperature

0C to 40C / 32°F to 104°F ambient

### Mains-Input Connection

IEC-320 receptacle

### Input Ratings

230VAC @ 50/60Hz nom. ±10%, 1.5ARMS max.

115VAC @ 50/60Hz nom. ±10%, 3ARMS max.

### Thermal Protection

shutdown internal fan (over-temperature)

The HEPA-Filter is a custom-made pleated media, aluminum frame, sealed unit.

	<b>PT6000</b>	<b>PT-Mini</b>
Efficiency	99.99 at 0.3 micron	
WG	0.81 at 100 fpm	
Width	20 inch	9-1/8 inch
Height	10 inch	9-1/8 inch
Depth	2-1/2 inch	3 inch

The Medical Grade Pre-Filter is a custom selected pleated media, all plastic framed unit.

	<b>PT6000</b>	<b>PT-Mini</b>
MERV-11	ASHRE Std. 52,2 1999	
WG	2.0 at 100 fpm	
Width	20 inch	10 inch
Height	10 inch	10 inch
Depth	1 inch	1 inch

## Installation

*This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack the experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.*

### Choosing a Suitable Location

Location impacts the nature and extent of external airflow disturbances, which may affect performance of the cabinet when it is exposed to these disturbances.

When installing the cabinet, it should be located as far away as possible from sources of airflow disturbance and in an orientation that optimally shields the cabinet's airflow from all external airflow disturbances. Please note that the cabinet should not be placed in front of another cabinet.

Please follow these guidelines when choosing a suitable location for your cabinet:

The location must be far away from:

- a. personnel traffic flows
- b. air vents (in and out)
- c. door and window
- d. any other sources of disruptive air currents or air drafts

If drafts or other disruptive air currents exceed the face velocity of the filter, the potential exists for contaminated air to enter the work zone of the cabinet.

- A minimum distance of one foot from the rear is recommended for exhaust air flow.
- A clearance of six feet in front of cabinet is strongly advised in order to maintain proper airflow.

## Cleaning

Turn off the power to the Particle Trap<sup>®</sup> when cleaning the interior of the unit.

Periodic cleaning of all polycarbonate sheet products can be accomplished easily and without the need for specialized cleaning agents. However, as is the case with all thermoplastic materials, certain chemicals can cause structural as well surface damage and precautions need to be taken to avoid any aggressive cleaning agents.

The basic cleaning agent for all polycarbonate products is a solution of lukewarm water with mild soap or household detergent, using a soft cloth or sponge to loosen any dirt and grime. All surfaces are then rinsed with cold water and dried with a soft cloth to prevent water spotting. However, in some cases this may not be enough and certain solvent cleaners may be needed to remove stubborn stains, graffiti etc. In these cases, the following list of cleaning agents are approved for use at room temperature:

Methyl alcohol, Ethyl alcohol, Butyl alcohol, Isopropyl alcohol, White spirit, Heptane, Hexane



## Maintenance

The Particle Trap® Product Line requires very little maintenance other than routine replacement of the Pre-Filters and HEPA Filter at various intervals. The Pre-Filter should be replaced on a monthly Preventive Maintenance (PM) schedule or by visual inspection for earlier replacement if the need dictates. Replace pre-filters every 30 days or 650 hours of operation; whichever comes first. Change the pre-filter element more frequently if contamination is seen accumulating on the pre-filter element prior to the regularly scheduled replacement. Replace the HEPA Filter every 1 to 3 years or 6200 hours of operation; whichever comes first. Failure to properly maintain and replace the pre-filter may shorten the effective life of the HEPA filter. Like most HEPA Filters, the life expectancy is between one and three years depending on usage and environment. For Cleanroom environments the HEPA Filter can last closer to three years, but in low level cleanroom or general production environments, the HEPA Filter will have a lower lifespan.

The Pre-filter element is replaced by releasing the draw latches on each side and removing the clear polycarbonate Hood, which releases the front grill with the incorporated Pre-Filter channels. Slide the old filter out and the new filter in, (see the illustration on page 6)

**NOTICE:** the wire support mesh built into each Pre-Filter should be at the back, “downstream” and facing inside the cabinet. If you can see the wire after reassembly from the operators view, the filter is installed backward.

Pre-Filters are available as a case of six filters, ordered under part number;

PT6000 680-0006CASE per case of 6. Pre-Filter, Medical Grade

PT-Mini 680-0007CASE per case of 12, Pre-Filter, Medical Grade

### **Safety Precaution: HEPA Filter access.**

The power source must be disconnected from the mains when accessing the HEPA Filter. The internal fan blades, and other electrical devices are exposed once the rear panel has been removed, and therefore no longer have a guard. Unplug the power cable to be certain power cannot be applied.

The HEPA Filter is accessed by removing the rear panel that it is attached to.

Remove the front hood and place the cabinet on a table lying face down. Remove the #8 screws (see the illustration on page 7). Loosen and rotate, or completely remove the four Filter Straps. The HEPA Filter may be stuck to the rear panel and require significant persuasion to break free. The filter housing has a gasket on one face, the gasket must engage the rear panel and be compressed, when placing the new filter on the rear panel be mindful of the perimeter flanges, they must seat inside the filter metal frame.

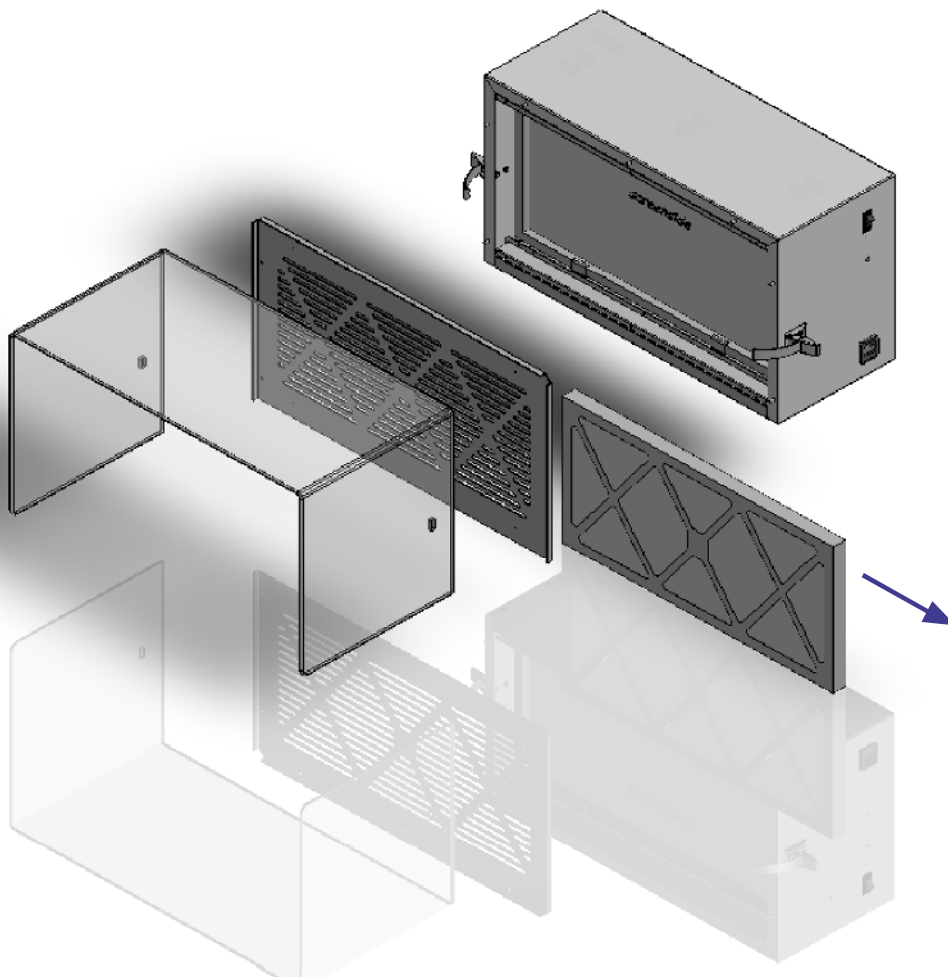
Procedure; At re-install, lay the rear panel on a work surface with flanges up-facing; place the HEPA Filter onto the rear panel with the gasket down-facing and centered on the opening; engage (4) clips then tighten slightly as you carefully align the HEPA filter so the flanges fit inside the HEPA filter frame. Tighten all (4) clips to seal gasket to rear panel.

HEPA Filters are available individually, ordered as part number:

PT6000	680-0001	sold as each.
PT-Mini	680-0005	sold as each.



Flip the toggle clamps open to remove the polycarbonate Hood and the Front Grill. Slide the filter out toward the right.



Replace the filter with the wire support side facing inward, toward the blower.

Pre-Filter Part Number:

PT6000 #680-0006CASE = Carton of (6), Medical Grade

PT-Mini #680-0007CASE = Carton of (12), Medical Grade

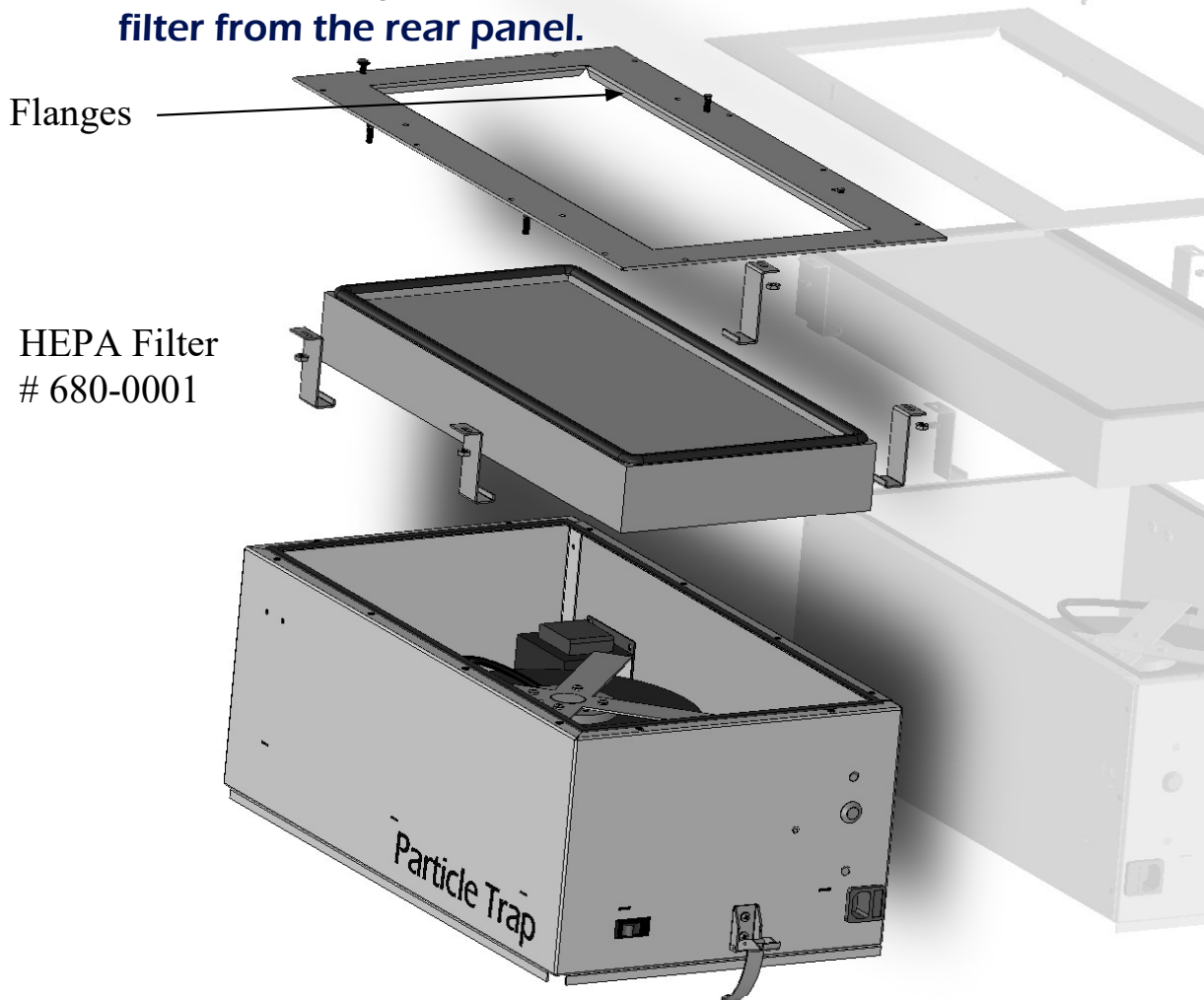
Static Clean Particle Trap, pre-filter removal

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**Remove the Hood, place the unit face down.**

**Remove qty (12) #8 rear panel screws. Loosen or remove the qty (4) filter brackets. Separate the filter from the rear panel.**



**Attach the new filter to the rear panel, the gasket faces the rear panel, be mindful to remain clear of the rear panel flanges (see full instructions).**

**Tighten the qty (4) nuts until they bottom snug, this will properly compress the gasket.**