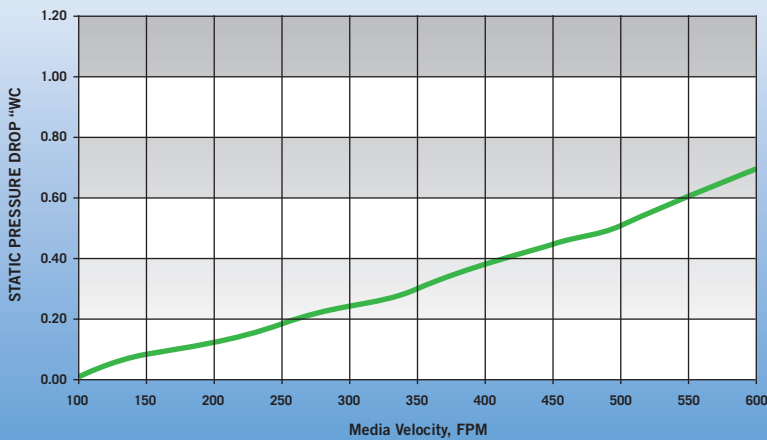




2" PANEL AIR CLEANERS



High Efficiency Filtration and Odor Removal for Applications with 2" Filter Racks

- Polarized-Media Electronic Air Cleaners bring powerful air cleaning to RTUs and applications with 2" filter racks
- Captures ultrafine particles, VOCs and odors
- Can help implement the IAQ procedure of ASHRAE Standard 62 to possibly reduce outdoor air
- Longer life than disposable or passive electrostatic filters
- Operates on less than 2VA of 24VAC
- Typically wired to unit control transformer
- Available in any size up to 20" x 40"
- Compatible with Sterile Sweep™ UVC Systems
- Limited 5 year warranty includes electronics
- Tested to meet CSA Standard C22.2 No. 187-M19986 and UL Standard 867

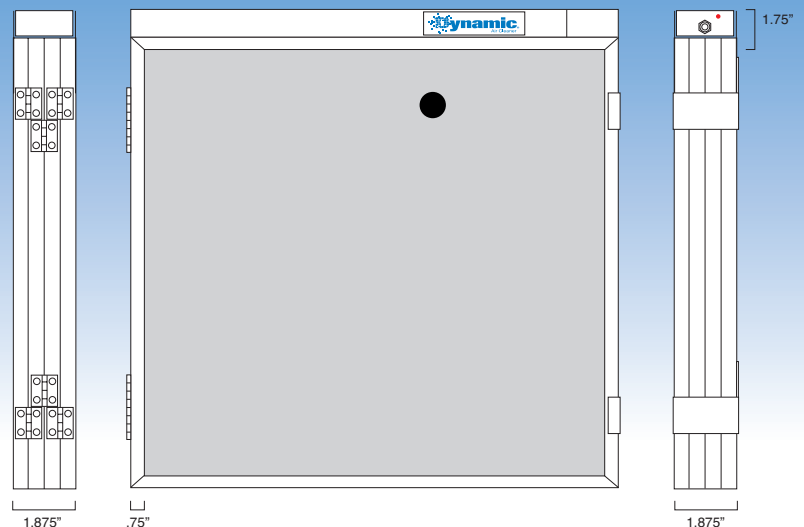
2" TANDEMS

For ease of installation in units with multiple or large filters, "tandem" Panels are available. These connect together mechanically and electrically and allow one row of Air Cleaners to have a single electrical connection point. The frames of each panel in the row are hinged together, so that all may be removed together. Neoprene foam strips are used on the mating faces of the Air Cleaners to block the flow of air between panels.

PERFORMANCE DATA

| | P2000 |
|------------------------------------|-----------|
| Electrical Input: | 24 VAC |
| Powerhead Output Voltage: | 7 kV (DC) |
| Power Consumption: | 2.8 Watts |
| Powerhead Volt/Amps Draw: | 3 VA |
| Ozone Generation: | None |
| Initial Static Pressure @ 300 fpm: | .24 w.g. |

* Final pressure drop is a function of the equipment. Typical "dirty" static pressure is initial static pressure X2.



| APPLICATION EFFECTIVENESS COMPARISON | | Dynamic Air Cleaners | Throw-away Pleated Filters |
|--------------------------------------|---|----------------------|----------------------------|
| Particle Size | Airborne Contaminant(s) | Capture Efficiency | |
| 3-10 microns | pollen, mold, dust mites, hairspray | 99% | 98% |
| 1-3 microns | auto emissions, lead dust, large bacteria | 98% | Limited Effectiveness |
| .3-1 micron | smoke from tobacco and cooking, small bacteria, fine dust, paint pigments | 97% | Limited Effectiveness |
| <.3 micron | VOCs, odors, formaldehyde and off gases from carpets, furniture and cleaning products | 40% | Limited Effectiveness |

Specifications for P-2000 and P-2000T

- 1.0 General:** The air cleaner shall be a two-inch (nominal) electronically enhanced polarized media air cleaner.
- 1.1 Pre-filters (Optional):** The pre-filters shall be 25-30 % ASHRAE-rated pleated disposable filters. They shall be sized as noted on the drawings.
- 1.2 Non-ionizing, polarized media electronic air cleaners:**
- 1.2.1 Certifications:** The air cleaner shall be tested and meet CSA Standard C22.2 No. 187-M19986 and UL Standard 867 for electrostatic air cleaners.
- 1.2.2 Operation:** The air cleaner shall have an active electrostatic field that polarizes a dielectric media. It shall not ionize airborne particles or produce ozone.
- 1.2.3 Performance:** The air cleaner shall be able to remove 97% of the airborne particulates 0.3µm and greater in a re-circulating system. Pressure drop across the air cleaner will be no more than 0.31" w.g. @ 300 fpm. There shall be documented field data showing a greater than 50% reduction in ambient TVOC levels. There shall be documented field data showing up to 29% single-pass removal of hydrocarbons at 500 fpm.
- 1.2.4 Construction:** The construction of the air cleaner frame and screens shall be aluminum and galvanized steel. Two electronic power supplies (power heads) shall be mounted in a channel on the frame of the air cleaner. Glass fiber media pads shall be placed between the outside grounded frame/screens. The power heads shall impart a high DC voltage to the center conductive mesh of the center screen. The air cleaner frames shall be hinged so as to allow easy access to the media pad for replacement. Tandems Only - Each air cleaner shall be able to be connected both mechanically and electrically to the adjacent air cleaner. The frames of each air cleaner in the row will be latched together, so that all may be removed together. Neoprene foam strips will be used on the mating faces of the air cleaners in a row to block the flow of air between air cleaners.
- 1.2.5 Electronics:** The power supplies shall be capable of converting 24VAC to 7 kV (DC) and draw no more than two watts of power. The power supplies shall be insulated from the air cleaner frame and it shall transmit the 7 kV (DC) to the center screen of the media pads through a titanium filament. Each air cleaner shall have a "Power On" lamp and be equipped with a high-voltage resistor to de-energize the air cleaner when the power is shut off. Tandems Only - Each power supply shall have an input and an output so that the power supply of each air cleaner may plug into the next. The power supplies will be connected in parallel so that if one fails, it will have no effect on the other power supplies in the row.
- 1.2.6 Power Supply:** Each 24VAC power supply must be a UL or CSA certified transformer, class "2" type, which shall permit one side of the secondary output (24V) to be attached to electrical ground.
- 1.2.7 Filter Media:** Replaceable filter media shall be individual, disposable glass fiber "pillows", which shall consist of two ply of fiber glass with a conductive center screen of activated carbon mesh. This center screen shall be permanently enclosed between the two pieces of fiberglass and shall be disposed of when the media pad is changed. The glass fiber media must be fabricated from a constant filament so that any shed fibers are not respirable. The glass fiber must have a minimum of a class "2" fire rating.
- 2.0 Reduced Outside Ventilation Air (Optional):** The system shall be designed to remove particulates and contaminants and meet ventilation rate requirements using the ASHRAE Standard 62.2 Indoor Air Quality Procedure.
- 2.1 Alternates:** Any alternately specified system shall have demonstrated the ability to remove particulates and contaminants and meet ventilation rate requirements using the ASHRAE Standard 62.2 Indoor Air Quality Procedure.
- 2.1.1 Test Reports:** Alternately specified air cleaners shall be required to conduct air quality tests before and after the installation to demonstrate that indoor air quality is at least as good as it would have been had outside air been brought in at ventilation rates using the ASHRAE Standard 62.2 Ventilation Rate Procedure.
- 3.0 Warranty:** The air cleaner shall carry a written Five (5) Year Limited Warranty on parts. The warranty shall provide that a replacement will be furnished at no charge for any part of the product which fails in normal use and service during the warranty period and shall commence on the date of installation.

