



## Advanced PCO System



The Dynamic Advanced PCO System installs directly into the central heating and cooling system ductwork or plenum. Photo-catalytic oxidation (PCO) eliminates odors and gas phase contaminants using a high intensity UV-C ultraviolet lamp and Titanium Dioxide catalyst screens that utilize twenty four (24) square feet of catalyst surface area. Odors and VOCs become vaporized in much the same way that a drop of cold water is vaporized when it drops into a hot frying pan. The Dual-Radiant™ UV-C lamp disinfects the air and controls airborne pathogens such as viruses and mold.

### Features

#### FAST INSTALLATION

- Installs in just minutes without costly ductwork modifications.

#### VERSATILE

- Can be installed as PCO System or UV-C Germicidal Lamp only.

#### SAFE, QUIET, DEPENDABLE OPERATION

- Runs on 24Volts.
- Does not produce ozone.
- PCO technology reduces gas phase contaminants to harmless carbon dioxide and water vapor.

#### REMOVES ODORS & VOCs

- Extra surface area on two pleated Titanium Dioxide catalyst screens for photo-catalysis to eliminate airborne chemicals and VOCs.

#### OPTIONAL ACCESSORIES

- Duct Board Mounting Plate kit.
- 24V AC 100VA Transformer with four 24 volt wiring taps for additional accessories.

#### EASY MAINTENANCE

- 9000 hour UV-C lamp requires replacing once a year. The PCO catalyst material is washable in the event it becomes dirty.

#### ECONOMICAL OPERATION

- Low static pressure drop lets blower run efficiently.

#### WARRANTY

- PCO Titanium Dioxide catalyst assembly is warranted for ten (10) years.
- UV Ballast is warranted for three (3) years.
- UV lamp is warranted against defects for one (1) year.

## Specifications

Specifications:	
Electrical Input:	24 VAC
UV Lamp:	33 watt, 95 $\mu\text{w}/\text{cm}^2$ @ 1 meter
Amp Draw:	1.5 Amp
TiO <sub>2</sub> Surface Area:	24 Square Feet
Ozone / Formaldehyde Generation:	None

## Performance Testing

The Dynamic Advanced PCO System will provide a **reduction of VOCs of up to 93%**.

Independent testing conducted by EMSL Analytical Laboratories using a gas chromatograph/mass spectrometer (GC/MS) in a test room measured over sixty various VOCs over a twenty-four hour period. The test room contained typical furnishings and fixtures as found in most homes/offices along with several samples of chemicals placed on open trays for normal evaporation. Tests conducted with and without the Dynamic Advanced PCO System showed VOC reductions in air samples ranging from 3% to 93%. The entire test report is available at [www.DynamicAQS.com](http://www.DynamicAQS.com).

## Accessories

Each Dynamic UV lamp is shipped with a power supply cord. On one end is a plug that connects to the UV lamp assembly, 6' of shielded wire, 24V ballast and an additional 3' of shielded wire terminating with a pig tail that requires connection to a 24V transformer. A 70VA minimum is recommended.

### Dynamic Transformer (Part No. AGT100V)

Dynamic Transformer (Part No. AGT100V) is a foot mounted 120/208/240Vac input/24Vac output 100VA transformer that is designed to provide power to the Dynamic UV/PCO lamp and up to three additional Dynamic Air Cleaners or other 24Vac accessories.

### Duct Board Mounting Plate Kit (Part No. AGMPD1)

The Duct Board Mounting Plate Kit (Part No. AGMPD1) is required for non-rigid duct board applications but can be used on any installation to help provide a neat finished installation. The bracket can be used as a mounting template and includes a screw kit with molly bolts and an adhesive back to facilitate installation.



AGT100V Transformer

<b>PCO Systems:</b>	<b>Dynamic Part No.</b>
PCO Catalyst Assembly	PCO-5000-CAT
UVC Lamp Assembly with 24V ballast	PCO-5000-UV
Complete 24V PCO System with mounting kit & transformer	PCO-5024-SYS
UVC Lamp Assembly with 24V ballast, mounting kit & transformer	PCO-5024-UVS
<b>Accessories:</b>	
Replacement UV Lamp	AGL1430
Replacement 24V Ballast	AGB2436
100VA Multi-Tap Transformer	AGT100V
Duct board Mounting Kit	AGMPD1

## Dimensions & Specifications

### Dimensions

- Overall: 4" x 4" x 15-1/2" (102 mm x 102 mm x 394 mm)
- PCO Mounting Plate: 4" x 4" (102 mm x 102 mm)
- PCO Screens: 3" x 14" x 3/4" (7.6 x 35.6 cm x 19 mm)
- Ballast (UL Listed): 7-1/4" x 2-1/2" x 1-3/8" (18.4 cm x 6.4 cm x 35 mm)
- Ballast & Wire Assembly: 9' (2743 mm)

### Clearances

- Inside Duct Clearance: 3" x 3" x 14-1/4" (76 mm x 76 mm x 362 mm)
- Outside Duct Clearance: 4" x 4" x 2-1/2" (102 mm x 102 mm x 63 mm)
- PCO Duct Opening Required: 3.5" x 3.5" (89 mm x 89 mm)
- UV Lamp Opening Required: 2" round (51 mm)

### Weight

- PCO Catalyst Assy: 15.6 oz. (442 g)
- UV Lamp Assembly: 5 oz. (142 g)
- Ballast & Wire Assembly: 3 oz. (85 g)

### PCO Material

- Titanium Dioxide Coated Nickel

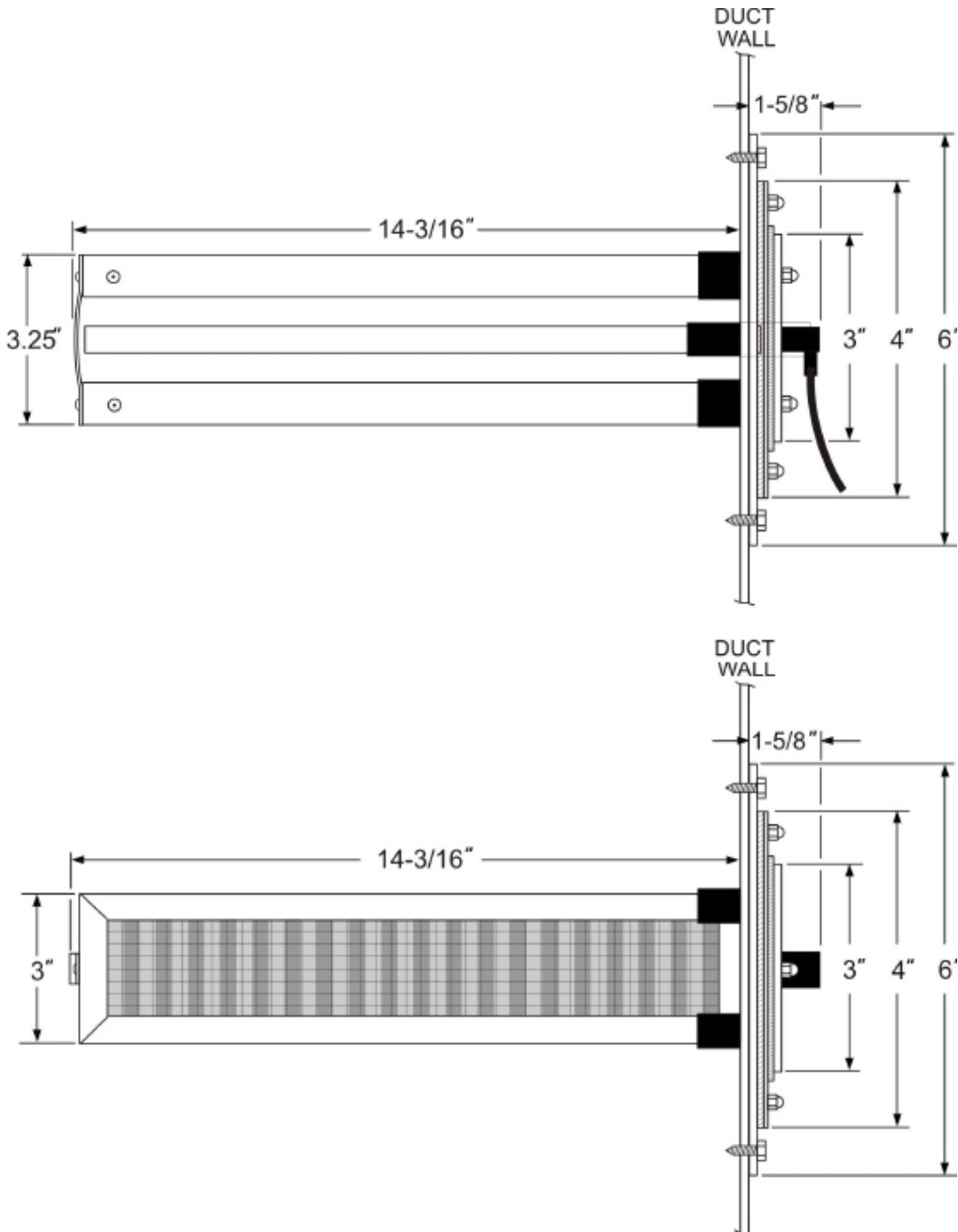
### Electrical

- 24VAC, 2 Amps

### UV Lamp (9000 Hour)

- 33 watt, 95  $\mu\text{w}/\text{cm}^2$  @1 meter

**Dimensions (shown with 6"x 6" AGMPD1 Mounting Plate Kit)**



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