

The **VECTORFlo** PC02450

Photocatalytic Ultraviolet Air Purifier



*Products that let you
breathe
a little easier*

Improve the Air You Breathe

The air we breathe in our homes can be up to 100 times more polluted than outdoor air, according to the Environmental Protection Agency. So let GeneralAire provide you with healthier indoor air and "Let the Sunshine In!" with GeneralAire UVC Air Purifiers.

GeneralAire's Ultraviolet (UV) light technology enables you to have whole-house air treatment energy, like the sun, to improve your homes indoor air quality.

Battle microorganisms with highly intensive ultraviolet "C" (UVC) germicidal irradiation. This air treatment is designed to be more effective at significantly reducing unwanted bioaerosols (germs) in your home. Forget about the rest, and decide on the best indoor air quality air purification system. You can count on GeneralAire ultraviolet air treatment products to out last and out perform the other brands.

GENERALAire
Fresh Indoor Air Quality

GeneralAire Lets the Sunshine In!

Light Wavelengths in Nanometers (nm)

Cosmic Rays		0 nm
Gamma Rays		25 to 50 nm
X-Rays		50 to 100 nm
UVC	Short Wave Band	200 to 280nm
UVB	Medium Wave Band	280 to 315nm
UVA	Long Wave Band	315 to 400nm
Visible Light		400 nm
Infrared		700 nm
Radio Waves		1200nm

All ultraviolet (UV) light is measured in units called nanometers. A nanometer (nm) is a wavelength of light approximately 1/25,000,000 inch or a billionth of a meter. Wavelengths of visible light range from about 400 to 700nm. UV wavelengths range from about 1 to 400nm. The UV wavelength is shorter than visual light and is rendered invisible to the human eye.

Let the Sunshine In!

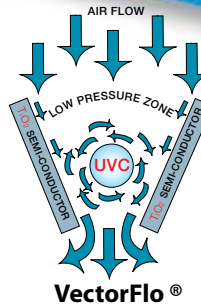
The sun that brings us daylight everyday also delivers UVC energy that protects us from germs, bacteria, viruses, and other destructive bioaerosols outdoors. Installed on your HVAC distribution system, the PCO2450 boast an intensely effective 18 inch 50 watt germicidal lamp (LT-50). The 50 watt lamp radiates a high output of germ killing ultraviolet light in your ductwork, imitating the air purifying intensity of the sun that treats your indoor air. The germicidal bandwidth C (UVC) measuring 200 to 280 nanometers is effective at killing germs and bacteria in your home and will significantly reduce the levels of harmful bioaerosols (viruses, fungi, mold, and allergens).

How are Bioaerosols Eliminated?

The high output UVC energy will break down the electron bonds of an organic molecule. This intense energy will penetrate an airborne microorganism causing cellular and genetic damage that either destroys the microorganism or renders it harmless by robbing it with the ability to reproduce.

Specifications

- 8-1/2" x 7-3/8" x 2" (W x H x D)
- 50 Watt 18 inch UVC Lamp
- 135 $\mu\text{w}/\text{cm}^2$ @ 1 meter UVC Output Potency
- High Output Temperature Compensating (HOTC) 120v / 240v Ballast
- 24 SQFT Titanium Dioxide TiO2 Anatase Semi-conductor
- Max 2000 CFM or 4000 SQFT
- QuartzCoat® Durability
- Effective Lamp Life 18,000 hours (2 year lamp replacement)
- Power Cord Disconnect (Appliance Coupler Design)
- 5 Year Ballast Warranty

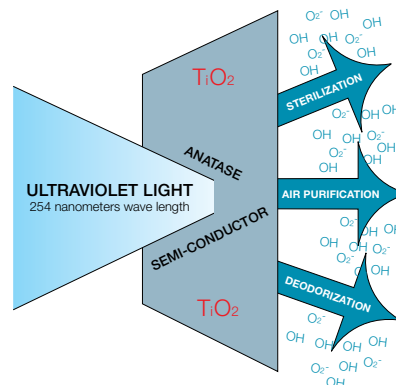


Hybrid PCO2450 UV Air Purifier

The Hybrid PCO2450 (Photocatalytic Oxidation) Air Purifier features the patented VectorFlo® semiconductor designed to deliver a high performance kill rate unmatched by other ultraviolet air treatment brands. The VectorFlo® creates a low pressure area around the high output 50 watt UVC lamp establishing a venturi effect. The venturi significantly increases the time exposure of airborne microorganisms in a bath of sterilizing germicidal ultraviolet light. The treated unrestricted air (.02 inches W.C.) is then accelerated beyond the VectorFlo® semiconductor and introduced into the main airflow for maximum purification.

The patented semi-conductor's exclusive process incorporates 24 SQFT equivalent surface area of honey combed aluminum cells. The cells are electro-statically coated and permanently bonded at high temperatures with nanosized crystallites of titanium dioxide TiO2 in an anatase form. This specific process is proven to be one of most effective photocatalyst.

A photochemical reaction occurs when UVC light is absorbed by the TiO2 semiconductor. An advanced oxidation conversion process occurs where the H2O molecule in the airflow is split to create hydroxyl radicals (OH) and super oxide anions (O2) known to be among the most powerful oxidizing radicals. This Photocatalytic process aggressively deconstructs gaseous contaminants and deodorizes your indoor air safely.



Air Treatment by reducing levels of air borne bacteria, fungus, mold, and other infestations.

Deconstruction of gaseous contaminants and toxic organic molecules to carbon and water.

Neutralizing odors from tobacco, garbage, animals, pet dander, and other volatile organic compounds (VOC)



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