

AirLite<sup>™</sup> provides a dual effect air purification, which is what makes AirLite<sup>™</sup> unique. First, the air is cleaned by passing through multiple filters with UV exposure before it exits the purifier. After the air leaves the purifier (due to our unique TIO2 filtration system), any air pollutants that have not entered the purifier will be cleansed. AirLite<sup>™</sup> achieves this without using any chemicals or harmful materials to purify the air! There are other air purifiers that produce high levels of ozone (by using UV ozone lamps) which is very harmful for people; however, AirLite<sup>™</sup> uses non-ozone producing UV-C that prevents ozone emissions.





AirLite™ is an excellent tool for eliminating indoor odors, killing harmful micro-organisms, and reducing allergens by capturing pollutants and expelling clean air.



AirLite™ was created based on independent research and further customization by top rated air purification specialist.



AirLite™ can be used in any commercial application such as restaurants, retail, hospitality, manufacturing, and industrial.

## **Benefits**

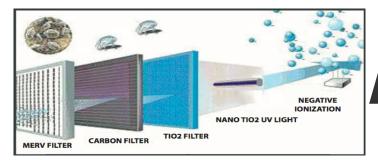
- Easily Customizable
  Size, features, and application all
  can be customized to the customers
  needs.
- Maintenance Plans Fully customizable maintenance plans including component life span tracking, auto-ship, and recycle credit programs.
- Warranty Tracking Fully customizable maintenance plans including component life span tracking, auto-ship, and recycle credit programs.
- Self Contained Unit Independently installed without interference to existing HVAC.

#### TIO2

Light is an amazing source of energy - the power behind virtually everything that happens on Earth. Light from the Sun brightens the dark depths of space, makes plants leap to life, and (indirectly) powers our bodies. But, did you know that it can help *clean* things as well? AirLite™ uses a method called **photo-catalysis** (**TIO2**), light energy kick-starts a process that zaps all of the harmful air pollutants and turns them into harmless substances instead. For people who suffer from asthma and allergies, AirLite™ is the product to use for cleaner air and better health.

#### What is a Catalyst?

A catalyst is a substance that makes a chemical reaction more likely to happen by reducing the energy needed to kick start it ("activation energy," as it's known). A catalyst can speed up a chemical reaction or make it happen at a lower temperature. Once the reaction is finished, the catalyst isn't used up, though it may be physically changed in some way. Photo-catalysis (TIO2) simply means light is involved in making the catalyst do it's job. In other words, light provides the energy that allows the catalyst to work.



### The Components

#### MERV (Minimum Efficiency Reporting Value):

MERV filters are rated for ridding the environment of particulate matter down to the sub-micron level. These filters provide a very high level of filtration efficiency for the smallest as well as the largest particulate contaminants. As defined by the Institute of Environmental Sciences and Technology, IEST-RP-CC001.3 and MIL-STD-282 Method 102.9.1, a MERV filter must capture a minimum of 99.97% of contaminants at 0.3 microns in size. MERV filters can remove most airborne particles that causes allergies. However, MERV filters do not capture Gases and VOCs.

#### Carbon Filter:

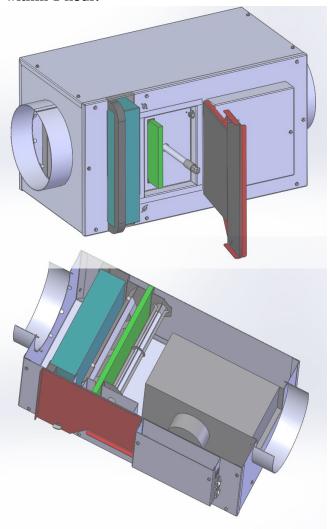
The best type of filtration for VOCs (volatile organic compounds) and other gases in a unit containing activated carbon. These so called active, or activated, charcoals are widely used to adsorb odorous or colored substances from gases or liquids.

#### **UV-C** Light:

Ultraviolet technology is a non-chemical approach to disinfection. In this method of disinfection, nothing is added which makes this process simple, inexpensive and requires very low maintenance. AirLite™ utilizes germicidal lamps that are designed and calculated to produce a certain dosage of ultraviolet, which possesses just the right amount of energy to break organic molecular bonds. As micro-organisms pass by the UV rays radiated from the ultraviolet lamp, this bond breakage translates into cellular or genetic damage for micro-organisms, such as germs, viruses, bacteria, fungi (like molds), etc.

# Power Efficiency & Air Circulation

The total electric power consumption is very low due to the useful power output provided by the AirLite<sup>™</sup> unit. A high grade and a very efficient motor fan used in the AirLite<sup>™</sup> purifier to circulate the air in/out of the device. The motor itself consumes only 98 W, but yet it provides 340 CFM airflow. The UV-C uses only 34 W, so the total power consumption of the AirLite<sup>™</sup> unit is only 132 W, which is similar to a 42" LCD/LED TV which consumes about 127 W. In other words, by using a power consumption similar to a 42" TV, AirLite<sup>™</sup> can clean /change the air about 9 times in a room the size of 15x15x10 [ft] within 1 hour.





The 4 Stages:

Stage 1: Remove large, medium, small/micro particles (e.g. hair, dust, molds, spores, and pollen, etc.) and harmful micro-organisms (e.g. bacteria and viruses) by using the best MERV grade filters.

Stage 2: Remove chemicals, gases, and odors (e.g. sulfuric acid and ammonia) by using a Honeycomb activated filter.

Stage 3: Deactivate the DNA of bacteria, viruses, and other pathogens that pass through the device and thus destroy their ability to multiply and cause disease/smell by using the UV-C light technology.

Stage 4: Reduce and disinfect airborne bacteria, viruses, mold and other air pollutants that are in the air by using PCO(Photo Catalytic Oxidation) process.

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