Protecting 1st Responders

Breathe Pure Air

Ultrafine particles make up about 80% of all particles generated by house or car fires. These particles are smaller than 0.1µm (or 100nm) and can't be seen by the naked eye. Coronary heart disease, various cancers and other diseases in fire fighters have been directly linked to exposure to ultrafine particles and to VOCs generated in fires.

Fire fighters are covered head to toe in particles when fighting a fire. They bring ultrafine particles with them into their firefighting apparatus in their hair, on their clothes and boots. But, in the safety of the cab, where they remove their breathing equipment, they inhale the particles they brought with them.

What can the AG25 do for first responders in this situation?

- Remove 99.999% of airborne particles larger than 0.003µm (that is 100x finer filtration than provided by HEPA filters).
- Remove more than 99.99% of viruses and bacteria from the air (below the range of detection of the testing equipment).
- Remove VOCs like formaldehyde as well as odors from the air with an ultra high surface area coconut shell activated carbon filter.
- Destroy VOCs and organic pathogens like bacteria and mold in the air with the patented Titanium Pro® module.

Fire Chief Testimonial

I will touch on the key points to why this product was such a great purchase for the Fire District.

1) Safety: In this and many other working environments we strive to make the workplace as reasonably safe as possible within the known conditions we face. This product was purchased with 2 main things in mind, one to be able to protect crews in their apparatus from contaminants during this worldwide pandemic, and also to continue to protect them against potential free floating carcinogens in the cab after responses to structure fires.
2) Convenience: This being the 12V system with both AC and DC power supply options made the decision to mount and use specific dedicated power supply options within the apparatus very easy. We did not have to run long extra cables to just one specific power source because your product provided both options. Weight and size of the unit for mounting made it so easy to place on a vertical surface, up and out of the way of working areas of the apparatus.
3) Operation: Our units run nonstop and have for the last few months. These units run very quiet in either of 2 speed modes to allow for non-obtrusive work environment for crews. This is important due to the fact that if they were loud, the crews would most likely turn them off and this would completely defeat the purpose of the protection of the entire work space. As the Ambulances and Fire trucks are plugged in to the shore lines in the bay the units run to circulate the air in the space before the next call allowing a clean air environment for each call. This process remains going even when the truck is in operation. We have had plenty of notable discussions with crews as to how well the clean air systems work with the "post fire smell" in the fire trucks confirming that they are working as intended.
4) Pricing: In the industry for the size and available options as a unit that provided the type of cleaning, the post installation maintenance, and ease of use, value versus benefit to our employees was a no brainer for procurement for the Fire District.

In conclusion we are very pleased with the purchase of the Airgle AG25, and our units will be moved to the next set of apparatus we purchase. Any further apparatus we purchase will also have these units installed to provide that safer breathing environment for our employees. Thank you again for the development of a product that meets our needs.

Victor Adkins, Fire Chief

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Precisely Pure

Airgle AG25

Clean Air

Triple Purification

1. Activated Carbon Blend in the Gas & Odor Filter removes VOCs, odors, and ozone.
2. cHEPA Filter removes particles down to 0.003µm (3nm). Filtering out virtually all sizes of airborne viruses, bacteria, and other harmful particulates.
3. Patented Titanium Pro® technology generates hydroxyl radicals that attach to organic compounds and break them down into CO2 and water vapor. Generates no Ozone.

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AG25 Specifications

Application: Fire / EMT Apparatus / Cars

cHEPA Filtration Efficiency: 99.999%

Airborne Virus Removal: >99.99%*

Formaldehyde Removal: >99%*

Titanium Pro Bacteria Removal: 99.97%*

Fan Speeds (CFM): Low - 4.2 High - 9.9

Noise dB(A): 42 / 54.5

Voltage: 110-240V AC / 12.5V DC

Power Use: 8W

Dimensions (LxWxD): 9.5 x 9.5 x 2.76

Input: DC12V (cigarette lighter adapter)
DC13.5V 2.6A (AC adapter)

* Exceeded testing equipment sensitivity threshhold.

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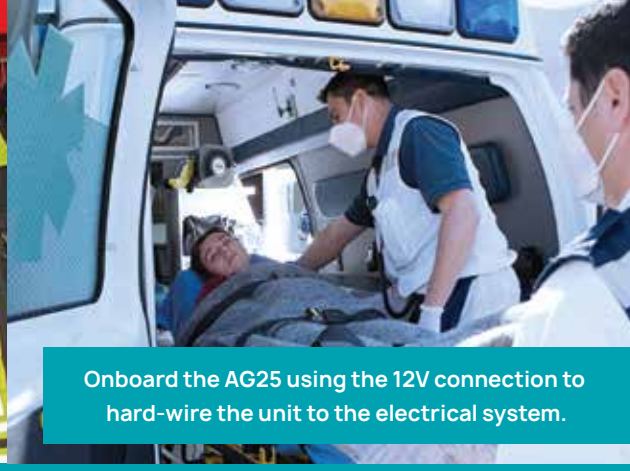
Precisely Pure



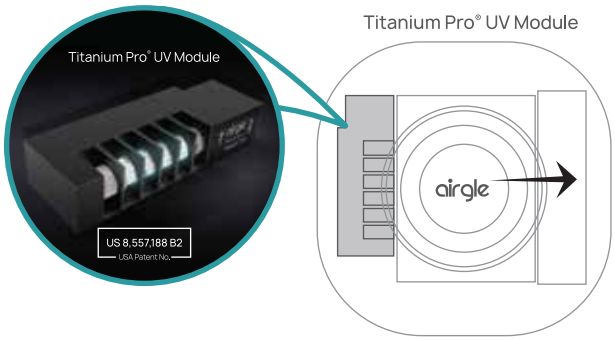
Onboard the AG25 using the 12V connection to hard-wire the unit to the electrical system.

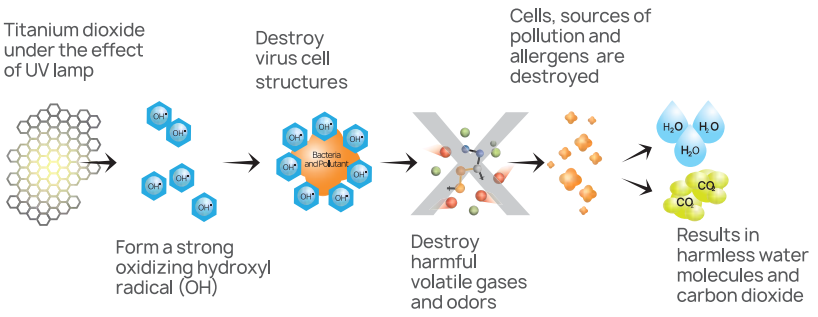
Off-gassing and Ultrafine Particles in the Station House

At the station house, personal equipment is stored and other equipment is cleaned and put away. In this process, ultrafine particles that had been on that equipment can be launched into the air. And, like the ultrafine particles, VOCs get absorbed into fabrics and hoses and other permeable items and are carried back to the fire station. Over time, these VOCs off-gas from those items and enter the station's air.

Placing one of Airgle's larger units, an AG600 or AG900 in the equipment room can eliminate those off-gassed pathogens from the air and the hydroxyl radicals generated by the Titanium Pro® module can break down those VOCs and pathogens in the air and on the equipment.

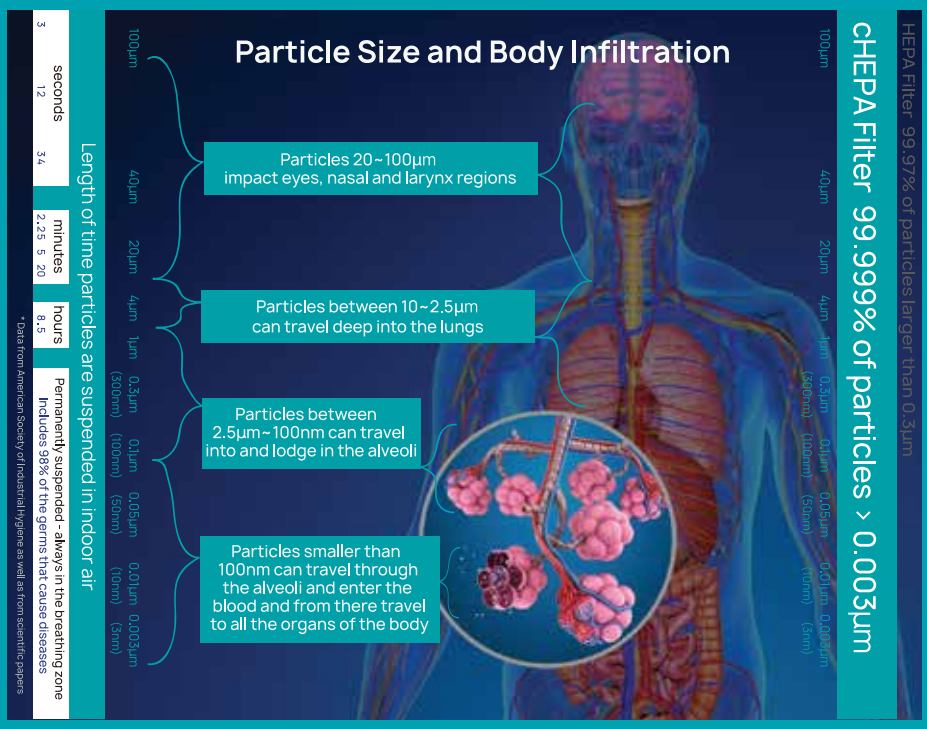
How Hydroxyl Radicals Work





Airgle's patented Titanium Pro® technology destroys pathogens in the air and on surfaces be breaking them apart into harmless compounds such as CO_2 and water.

Dangers of Ultrafine Particles



Toxic fumes and VOCs from burning synthetics are dangerous. But they are not the only danger in the air for 1st responders. Each breath taken near a house fire can contain trillions of ultrafine particles smaller than 0.1µm. As much as half of the ultrafine particles that are inhaled are not exhaled. They stay inside the lungs, or they pass through the lungs and into the blood where they travel throughout the body causing a variety of health problems. But, they are too small to be seen and so are hard to protect against.

Particles visible as smoke and haze are the 20% of particles larger than 0.1µm.

Distributor Information