

If there were a way to provide  $mechanical distancing^m$  so front-line medical workers could have peace of mind in your ambulance – even during airborne disease outbreaks – would you take it?



## Air Purification Designed for Hospitals: Also Provides Protection for Ambulances

Airgle air purifiers, which were originally designed for hospitals, can introduce *mechanical distancing*<sup>TM</sup> for front-line medical workers in ambulances by powerfully and rapidly purifying the air. Combined with frequent and consistent surface sanitation, Airgle's **AG25** air purifier can reduce the chance of cross-infection from airborne pathogens.

UV sterilization can't be used when people are in ambulance. Cabin air filters can't filter out viruses and even standard HEPA filters only clean to 0.3 $\mu$ m. Nanoparticles, such as viruses, can pass through ordinary filters and may remain airborne almost indefinitely. Influenza and corona viruses can be as small as 80nm (0.08  $\mu$ m). And, the common cold virus is even smaller – only 30nm (0.03 $\mu$ m).

#### The Airgle AG25 FDA Class I disinfectant medical device is different:

- MERV-19, cHEPA Filter removes particles as small as 3nm (0.003μm) with a 99.999% efficiency.<sup>1</sup>
- Patented **Titanium Pro**° module sends out millions of hydroxyl radicals into the air to destroy harmful organics, like viruses.
- Activated carbon blend in the Gas & Odor Filter removes dangerous gasses and chemicals.
- Its quiet and highly efficient fan ensures fast air changes reducing the time you and your passengers may be exposed to pathogens and viruses in the air.

An air change is when the entire volume of air in a space has been processed through the purification system. ACH refers to the number of air changes per hour.



# Small droplets filled with COVID19 can stay afloat in the air for 3 hours

(National Institutes of Health)

What if you could reduce those 3 hours to 15 minutes or less?

## Airgle Helps Achieve Mechanical Distancing™

*Physical distancing* keeps people away from potential pathogens. Another option is to keep potential pathogens away from people through *mechanical distancing*<sup>M</sup>.

In a 300 ft<sup>3</sup> ambulance, two FDA Class I disinfectant medical device AG25 units deployed fore and aft will achieve 4ACH – cleaning the entire volume of air every 15 minutes.

4 ACH and Triple Purification helps realize Mechanical Distancing™.

#### Zero Particles at Air Outlet





#### **Triple Purification**

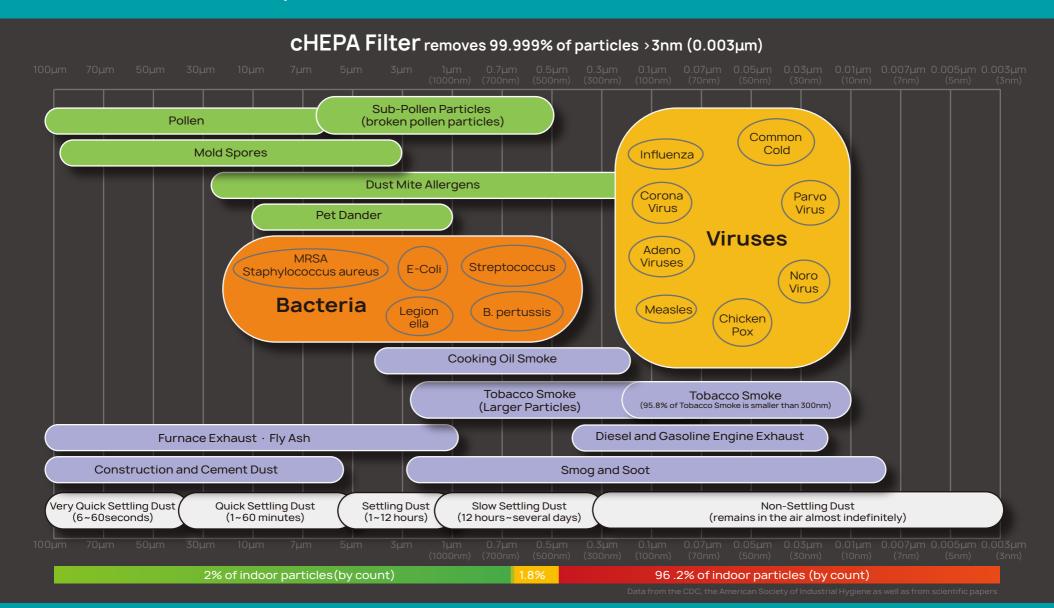
- 100g of Activated Carbon blend in the Gas & Odor Filter removes VOCs, odors, and ozone.
- 2 1.1sq.ft. of **cHEPA Filter** removes particles down to 3nm (0.003µm). Filtering out virtually all sizes of airborne bacteria, viruses and other harmful particles.
- Patented **Titanium Pro°** PCO Technology generates millions of hydroxyl radicals that attach to organic compounds and break them down into CO<sub>2</sub> and water. Generates no ozone.

(Filter sizes listed are for the AG25)

### The Airgle Filtration Difference

If pollen were the only thing to be concerned about in ambulance air, then a regular HEPA filter system is probably adequate.

But, if front-line medical workers need **protection against viruses**, with average diameters less than 0.1µm, such as the COVID 19 corona virus, the influenza virus, the norovirus, the common cold, or whatever the next pandemic virus may be, your ambulance needs Airgle. The Airgle **cHEPA Filter** provides medical-grade, clean-room-level purification by removing pollutants as small as 0.003 µm (3nm) with an efficiency over 99.999%.



## Airgle cHEPA Filter - MERV 19

Airgle cHEPA fiter features medical-grade, clean room level purication with an efficiency over 99. 999%. The cHEPA removes pollutants as small as 0.003 microns. It poweruilly and rapidly removes pollutants in the air such as dust, pollen, tobacco smoke, bacteria, viruses, and more.

#### cHEPA Filter removes 99.999% of particles > 3nm (0.003µm

MERV Rating	Air Filter will trap Air Particles size .03 to 1.0 microns	Filter Type
		Removes These Particles
MERV 1	<20%	Fiberglass & Aluminum Mesh ~ Pollen, Dust Mites, Spray Paint, Carpet Fibres
MERV 2	<20%	
MERV 3	<20%	
MERV 4	<20%	
MERV 5	<20%	Cheap Disposable Filters ~ Mold Spores, Cooking Dusts, Hair Spray, Furniture Polish
MERV 6	<20%	
MERV 7	<20%	
MERV 8	<20%	
MERV 9	<20%	Better Home Box Filters ~ Lead Dust, Flour, Auto Fumes,Welding Fumes
MERV 10	<20%	
MERV 11	<20%	
MERV 12	<20%	
MERV 13	Less than 75%	Superior Commercial Filters
MERV 14	75%~84%	
MERV 15	85%~94%	Bacteria, Smoke, Sneezes
MERV 16	95% or Better	
MERV 17	99.97%	HEPA & ULPA
MERV 18	99.997%	
MERV 19	99.9997% <b>—</b> Airg	viruses, Carbon Dust, < .30 pm
MERV 20	99.99997%	

**CHEPA Filter** 

seconds

minutes

hours

Permanently suspended - always in the breathing zone

Includes 98% of the germs that cause diseases

20



## Microbial mitigation Bacteria and Virus

Titanium Pro° breaks apart organics, chemicals, bacteria and viruses in the air. This patented photocatalytic oxidation (PCO) technology features a catalytic metal plate, electronics, germicidal UV lamp and ballast in one disposable module designed for easy insertion and removal. The Titanium Pro° module safely breaks down harmful chemicals and odors down to 0.1 micron in size, while effectively killing bacterial and viral pollutants.

## The Airgle Titanium Pro® Difference

Every minute, the patented, state-of-the-art **Titanium Pro**® module sends out millions of hydroxyl radicals ¹ into the air - molecules made up of oxygen and hydrogen atoms. Hydroxyl radicals chemically react with airborne organic pollutants, breaking them into simple molecules such as carbon dioxide and water. They destroy living spores, bacteria, molds and viruses. Hydroxyl radicals also break down volatile organic compounds (VOCs) such as the odor-causing gasses from cleaning fluids, as well as other unpleasant odors.

Cabin air is pulled into the Airgle unit where it is filtered and purified first by the **Gas & Odor Filter**, and then by the **cHEPA Filter**. The **Titanium Pro®** then adds its hydroxyl radicals to the air just cleaned by those two powerful filters, before it is circulated back into the room. In other words, the air drawn into the Airgle unit will already be pre-purified by those hydroxyl radicals!

- 3 Watt UVC Lamp
- Plug and play technology
- Very efficient at room temperature
- No chemical additives
- No residual ozone

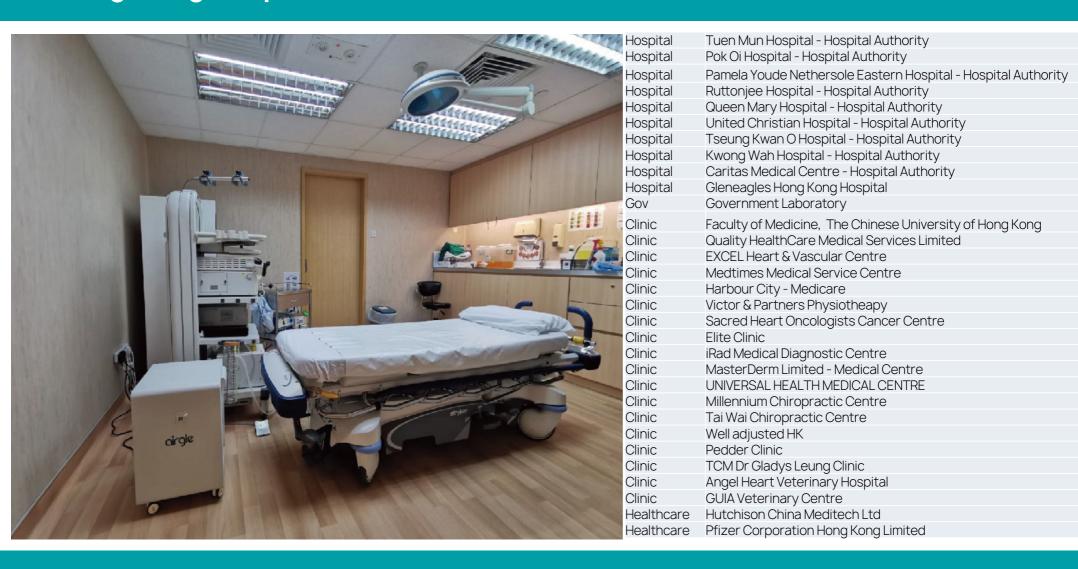
- High oxidation yields for odors and VOCs
- Low energy consumption
- T Works in humid conditions
- Long service life
- Low maintenance requirement

#### Effectively destroys chemicals, bacteria, viruses, and VOCs Cells, sources of Titanium Pro® UV Module Titanium Pro® UV Module Titanium dioxide Destroy pollution and under the effect virus cell allergens are of UV lamp destroved structures Results in Destroy Form a strong harmless water US 8.557.188 B2 oxidizing hydroxyl molecules and volatile gases radical (OH) carbon dioxide and odors

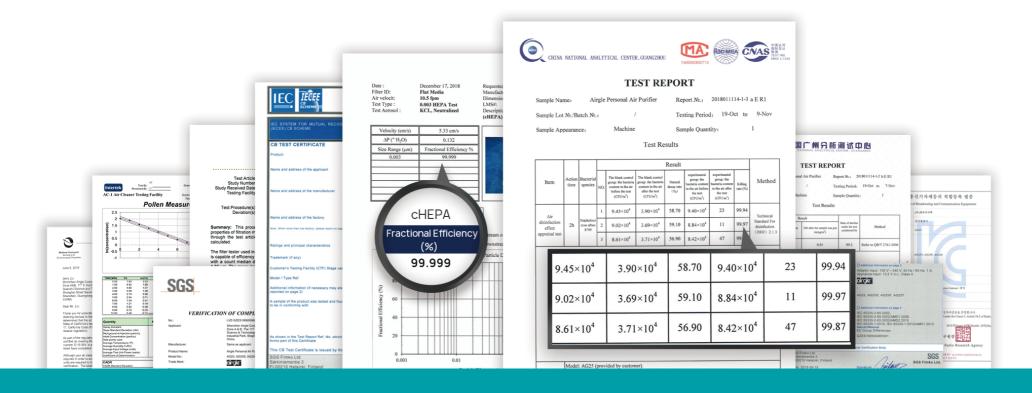
1) The Titanium Pro® module creates hydroxyl radicals by exposing titanium oxide (TiO<sub>2</sub>) to ultraviolet light. Hydroxyl radicals are naturally occurring molecules in the atmosphere. In fact, they are often referred to as the "detergent of the troposphere" because hydroxyl radicals destroy many airborne pollutants by breaking apart the molecules of the pollutant.

Additionally, titanium oxide is a stable and harmless substance that is widely used in American food additives and cosmetics: so, it is totally safe in ambulance

## Hospitals use Airgle Hong Kong hospitals at the forefront of the COVID-19 outbreak







CE

#### CE Certification for International Safety Standards Testing

CE marked products indicate that they meet the requirements of a series of European directives such as safety, hygiene, environmental and consumer protection.

CB

#### International Electrician CB Certification

The CB system (IEC system for the qualification testing and certification of electrical products) is an international system operated by IECEE to promote international trade and reduce international trade barriers.



#### **Korea KC Certification**

Korea KC aims to give consumers a better understanding of the certification marks on the purchased products and reduce the cost of various certifications for product manufacturers.



#### **Basic Installation**

Airgle AG25 Personal Air Purifier can be attached to the bulkhead or to the back of a seat. For ambulance use, the advanced installation should be used.

Airgle AG25 air purifier features an auto temperature control setting. It will automatically monitor the temperature and if the temperature inside a parked ambulance exceeds 113°F (45°C), the machine will automatically activate the self protection function and enter standby mode.

#### **Advanced Installation**

The Airgle AG25 Personal Air Purifier can be hardwired into a car's electrical system. When this advanced installation is done, the AG25 can provide Automatically Activate Operation even when a car engine is off. This ensures refreshing air when you get into the car the next morning! The AG25 air purifier is equipped with auto shut off technology, ensuring you never have to worry about wasting energy.

## Specification



CADR (CFM):       9 CFM         cHEPA Filtration Efficiency:       99.999%         PM2.5 Removal Rate:       99.99%         Titanium Pro:       99.97%         Fan Speeds (CFM):       Low: 4.2 High: 9.9         Noise:       42 / 54.5 dB(A)         Dimensions (LxWxD):       9.5 x 9.5 x 2.76 in.         Power:       8W         Input:       DC 12V	Model:	AG25
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	Input:	DC 12V

A 300ft  $^3$  ambulance should have two units deployed with approximately half of the linear distance of the ambulance compartment between the units.



AIRGLE<sup>®</sup> CUSTOMER CARE Toll-Free: (866) 501-7750 info@airgle.com www.airgle.com

In 1999, we began our mission to design and manufacture the safest, most reliable, and most effective air purification systems on the market.

Our dedication to purifying <u>Air</u> with a <u>G</u>reat <u>L</u>evel of <u>E</u>fficiency (Airgle) has made us a world-class provider of air purification. Outside North America, Airgle Holdings conducts business in many countries including Japan, Hong Kong (SAR China), South Korea, Singapore, Vietnam, Thailand, Malaysia, India, Saudi Arabia, and China.