

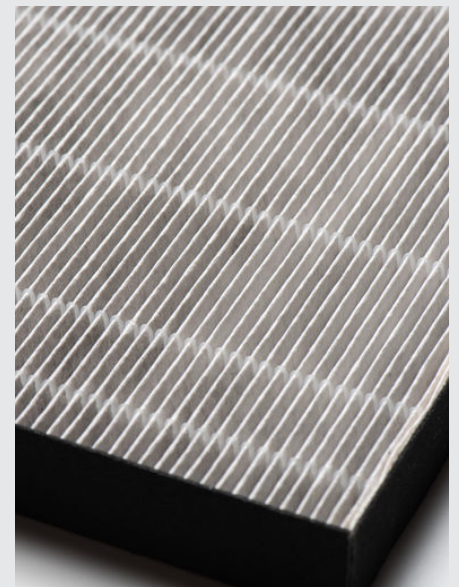
### Pros & Cons of the Most Common Air Purification Systems

There are a wide variety of air purifying systems available on the market, which grow in number every day amidst the COVID19 Pandemic. Below is a short summary of these systems to help make an informed decision.

#### Filter Based Systems

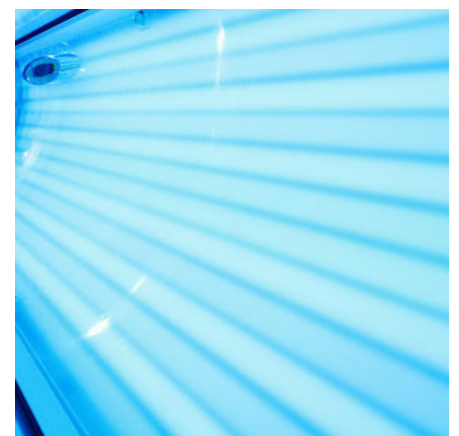
Hepa Filters, Charcoal Filters, 4 stage Filters, Medical Filters (Such as Dyson)

- Filters of any type are passive systems, which means air is only treated once it has passed through the filter. If someone were to enter the space and cough or sneeze, the pathogens would be free to travel around the space, infecting people and surfaces before eventually passing through the filter to be cleaned.
- The air comes out clean but it may take many hours for all the air in a space to be treated. In reality, with people coming and going the likelihood of all the air getting treated is very slim.
- These technologies do nothing to sterilise surfaces.
- All the pathogens are still living in the filter, which means changing and cleaning filters carries its own risks.
- Provides little protection against person to person transference.
- These are usually the least expensive purification method (you get what you pay for).



#### HVAC UV Treatment

- Much like filter based systems, installing UV lights in ducted HVAC systems does not treat the air until it has travelled past the light. Once it passes the light there is no further treatment. This means that if someone were to enter the space and cough or sneeze, the pathogens would be free to travel around the space, infecting people and surfaces.
- These are much more effective than filter based systems as they kill the pathogens instead of capturing them.
- These systems do not clean surfaces.
- Provides little protection against person to person transference.
- When people from outside enter the space, they instantly contaminate the environment.



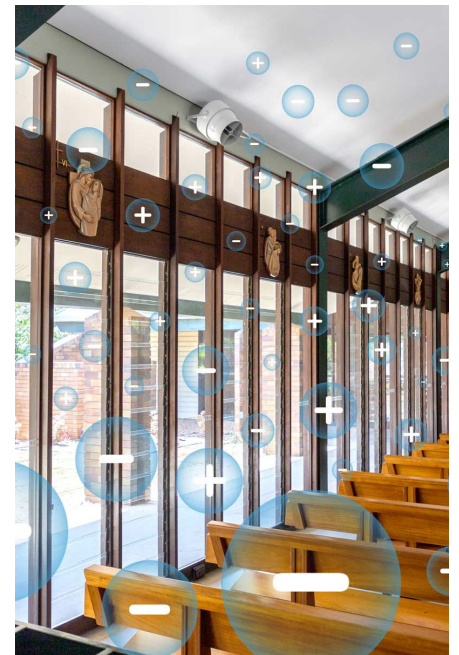
### Fogging or direct UV

- Fogging or direct UV are both effective methods for cleansing both the air and surfaces within a space.
- Neither of these are very convenient as the space cannot be used during the process, due to either the intrusive nature of fogging, or the dangerous levels of UV required to have a germicidal effect on its own.
- Provides little protection against person to person transference.
- Also, once people return to the space, they instantly contaminate the environment. If someone were to cough or sneeze following treatment, the pathogens would be free to travel around the space, infecting people and surfaces.

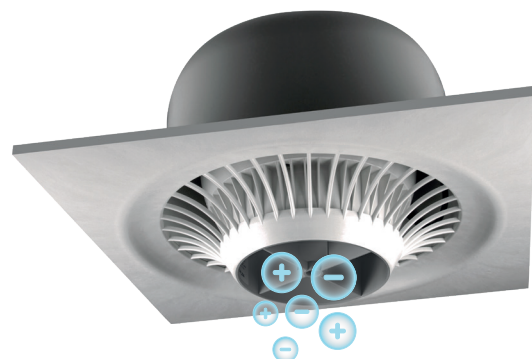


### PureAir Pearl Advanced Active Purification

- The PureAir Pearl Series circulates charged ions into spaces, which neutralise harmful or unpleasant particles, such as viruses, bacteria, VOCs (Volatile organic compounds) and odours.
- Provides 24/7 continuous cleansing of the environment.
- Treats all of the space at the same time without the need for air to go through a filter.
- Purifies air and sterilises surfaces, coating them with a protective shield.
- Uses natural, safe and accredited BiPolar ionisation to clean environments.
- The PureAir Pearl active natural cleaning agents provide ongoing protection, attacking any new containments brought in to the space.
- Installation and operation cause little to no disruption to normal operational or business activities.
- Designed with no parts to replace or filters to change.
- No Ozone certified - UL 2998.
- Testing carried out by the Spanish Ministry of Defense using MS2 Bacteriophage, an industry standard surrogate for SARS-CoV-2 (COVID-19), showed a reduction of approximately 2 log units in air treated with BiPolar Ionisation. This corresponds to a 99% reduction rate.



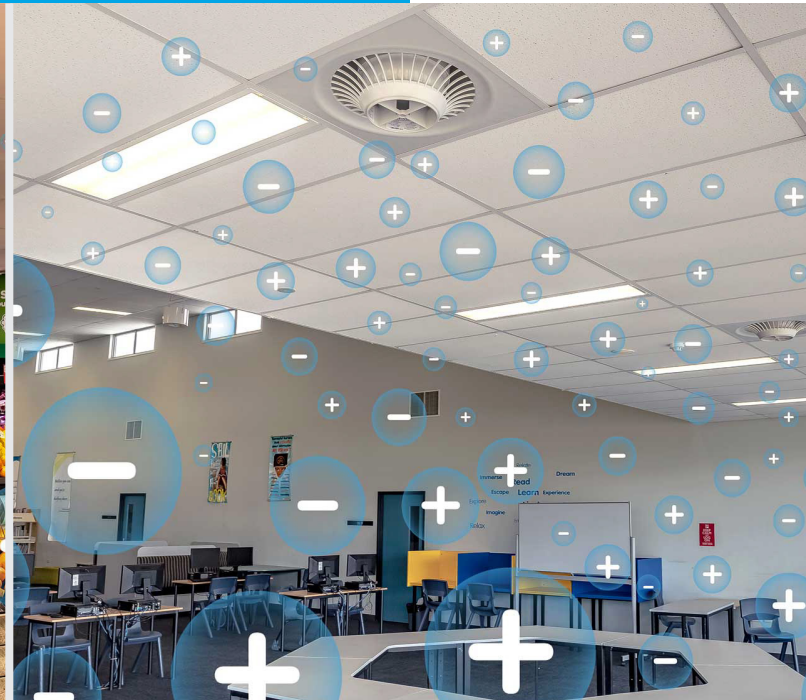
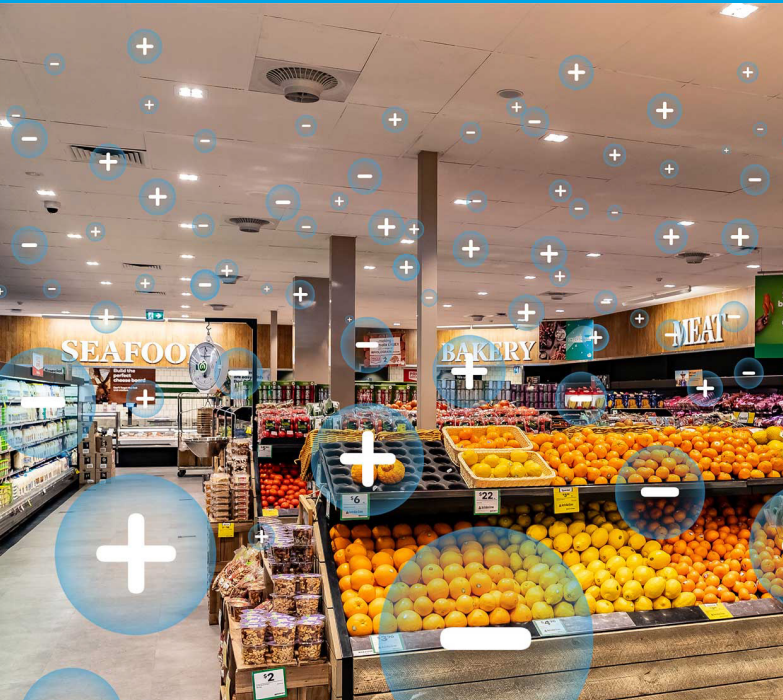
PureAir Pearl  
Standard Series (Short)



PureAir Pearl  
Suspended Series

# Airius PureAir

## Air Purification System Comparisons



## PureAir Pearl Technology Explained

### How does the PureAir Series BiPolar Ionisation system kill bacteria and viruses in the air and on surfaces?

The PureAir Pearl Series combines Plasma Air's advanced BiPolar Ionisation technology into the Airius World leading Destratification Fan. The BiPolar Ionisation system emits a high concentration of positive (+) and negative (-) ion cleaning agents, which are circulated throughout spaces more efficiently than any other purification fan due to Airius' patented and world leading columnar laminar flow and venturi nozzle system.

The ions polarity attracts them to all particles within the space, causing the particles to cluster together and make them filterable. They also bond with and neutralise pathogens, VOCs and odours by eliminating hydrogen atoms, breaking them down into their basic, harmless and odourless compounds, such as O<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub> and H<sub>2</sub>O.

## Benefits of PureAir Pearl Technology

Choosing an Airius PureAir Pearl Series destratification fan, with its integrated BiPolar Ionisation system is a simple way to reduce bacteria, viruses and odours in your environment.

- Continuous cleanses air and surfaces
- Easy to install in any environment
- Kills more than 99.9% of bacteria and viruses
- Reduces odours by over 99.9%
- Reduces gases, vapours and VOCs by over 99.9%
- No replacement purification parts or filters
- No Ozone certified - UL 2998



# Airius PureAir

## Air Purification System Comparisons



### Tested and Approved by Leading Agencies



Multiple studies have been conducted on Plasma Air BiPolar Ionisation technology and it is widely approved for use to control airborne and surface-based bacteria, viruses, smoke and odours.

- Plasma Air BiPolar technology is already installed in a wide range of applications around the globe.
- Approved by the Spanish Ministry of Defense following in-house analysis on MS2 Bacteriophage, an industry standard surrogate for SARS-CoV-2 (COVID-19), which showed a 99% reduction after exposure to ionisation.
- Testing carried out by:
  - Microbac Laboratories, Inc
  - Istanbul Faculty of Medicine
  - Novaerus Research and Development Labs
  - Airmid Health Group Ltd
  - Aerosol Research & Engineering Laboratories
  - EMSL Analytical Inc
  - Camfil Laboratories
  - Aerosol Research & Engineering Laboratories
  - LAWN Environmental Protection Ltd
  - Intertek

## Contact Airius

Airius PureAir fans are commonly used to purify spaces and balance temperatures for both heating and cooling applications in a wide variety of environments – from homes to warehouses.

Adding an Airius PureAir Home Series air purification, infection and odour control ventilation fan is a simple way to continually clean the air, creating a safer and healthier environment for you, your family and your home.

**Contact Airius to learn more >>**