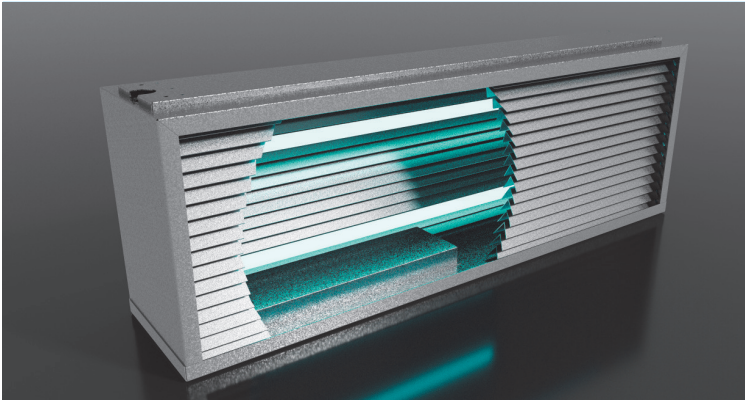


Fan Coil UVGI 2L

Our UVGI range has a lethal effect with micro-organisms such as viruses and bacteria. SARS-CoV-2, the virus responsible for Covid-19, can be inactivated by exposure to UVGI.



KEY FEATURES

- High efficiency technology
- Kill rate up to 99% effective
- Can be retro-fitted to an existing fan coil

The Fan Coil UVGI 2L uses UV-C technology to irradiate virus and bacteria. The unit can be located in line with a new or existing fan coil unit as part of the room air distribution.

Each individual unit sits directly in the air stream and features 2 high output UV-C lamps.

UVGI inactivates micro-organisms by attacking their DNA, permanently destroying and altering the molecular structure, leaving them unable to replicate or grow.

Ultraviolet (UV) light is measured in wavelengths with the UVC wavelength within the range of 100 nanometer (nm) to 280 nm emitting highly effective sterilization power. UVC germicidal wavelength at around 260nm is the most effective to kill harmful microorganisms in the air and on surfaces.

Our lamps

Germicidal lamps utilize powerful UVC wavelength to destroy disease causing germs including viruses, bacteria, fungi, protozoa and algae, effectively sterilizing and purifying air, water and surfaces.

UVC disinfection targets the nucleic acid of these harmful cells, rearranging the genetic information, or DNA, and rendering them harmless. As the UVC radiation is absorbed into the cells they become unable to reproduce or multiply to infectious numbers and are considered inactive or dead.

Our Fan Coil UVGI 2L incorporates:

- **Handling of up to 0.2 m³/sec of air flow**
- **Adapter and installation kits available for most popular brands of FCU.**

Fan Coil UVGI 2L

Technical Specification

Fan Coil UVGI 2L	
Electrical Supply	220/240V 50Hz
Power Consumption *	70 Watts
Max Air Volume	up to 0.2m ³ /sec
Dimensions	W 900mm H 300mm D 200mm
Weight	12kg (APPROX)

We use tried and tested UV-C technology, after extensive research and development Purified Air are able to devise the best combination of lamps to provide the most effective control.

Safety

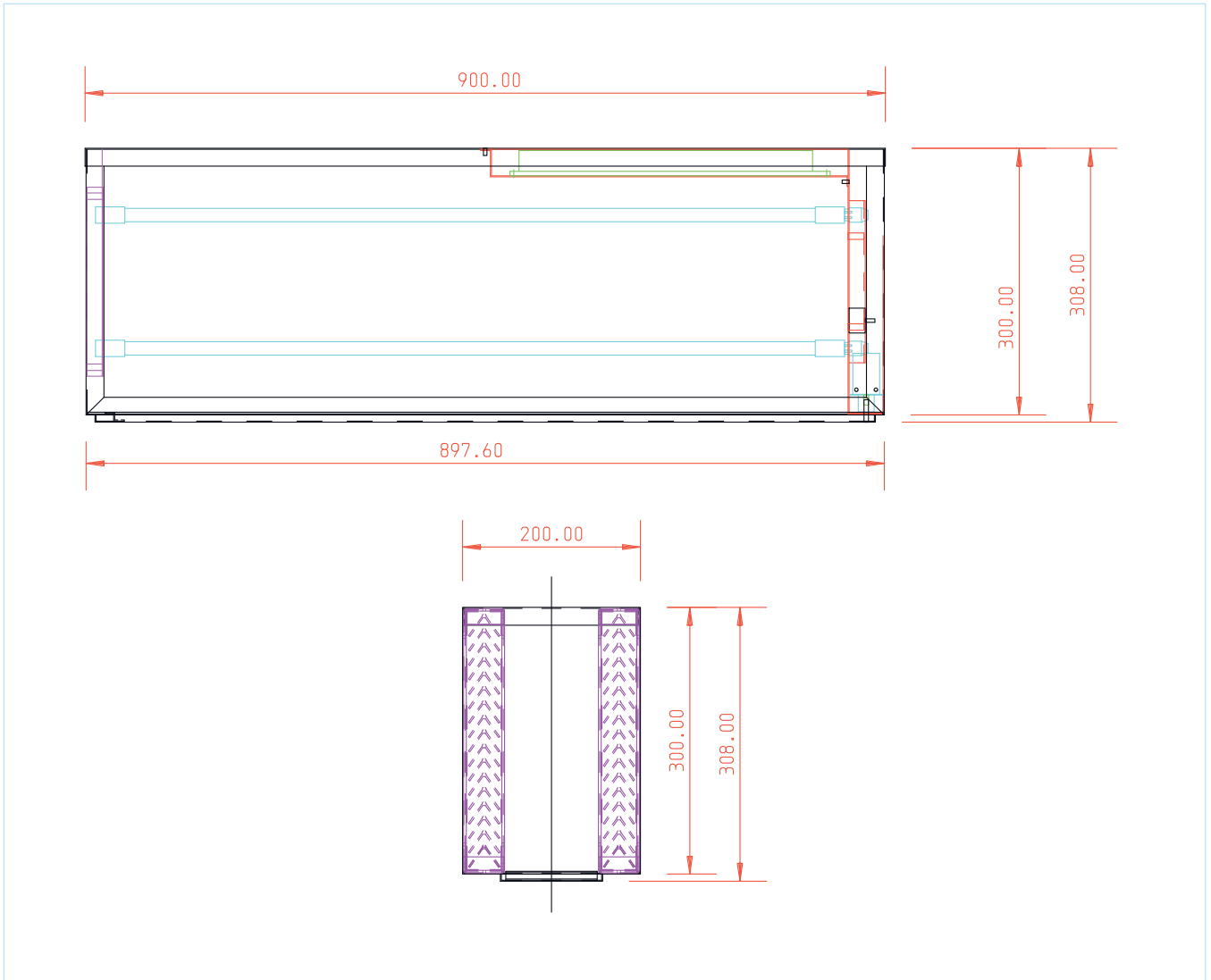
Ultra-Violet band C light is the most powerful of the three bands, it is a very strong oxidant and as such exposure to UV-C light is dangerous. To ensure safety the UV-C lamps are secured behind locked panels and the system has been engineered to shut down automatically when these panels are unlocked.

CIBSE

CIBSE recognise that special UV treatment is efficient for deactivating and killing virus but note that these systems are only normally applied in medical applications. Our focus is to be able to provide cost effective system for commercial applications.

Fan Coil UVGI 2L

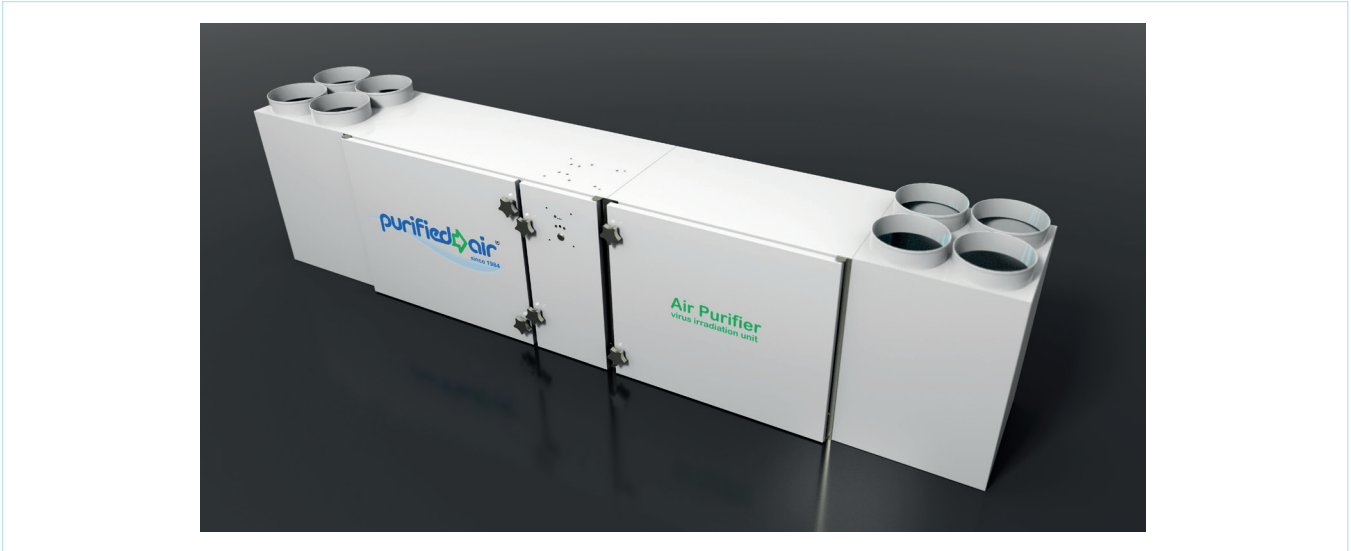
Drawings



VIU1000

Air Purifier & Virus Irradiation Unit

Designed to be installed in offices, gyms and other commercial premises to remove airborne particles and help to destroy viruses including Coronavirus.



ESP TECHNOLOGY

Electrostatic filtration is a method of removing tiny particles from the air, the system works by applying a static charge of around 8000v to particles in the airstream. These particles are then attracted to collector plates which have the opposite electrical potential resulting in them being stripped from the air. Filtration capacity is at a very high efficiency (up to 99%) even with sub-micron sized contaminants such as virus and bacteria.

The filter components used are metal and can be cleaned so there is no filter replacement necessary. A further advantage is that using static force to filter the contaminants provides a very low resistance to the airstream which enables better overall performance.

UVGI TECHNOLOGY

UVGI inactivates micro-organisms by attacking their DNA, permanently destroying and altering the molecular structure, leaving them unable to replicate or grow.

Our UVGI technology incorporates:

- **UV-C lamps are shielded by their module to reduce the collection of dirt on their surface thus extending their optimum efficiency.**
- **The ability to provide the units in simple format or fully monitored with each module of lamps able to provide a local alarm or a BMS signal if in fault.**

Ultraviolet (UV) light is measured in wavelengths with the UVC wavelength within the range of 100 nanometer (nm) to 280 nm emitting highly effective sterilization power. UVC germicidal wavelength at around 260nm is the most effective to kill harmful microorganisms in the air and on surfaces.

Germicidal lamps utilize powerful UVC wavelength to destroy disease causing germs including viruses, bacteria, fungi, protozoa and algae, effectively sterilizing and purifying air, water and surfaces.

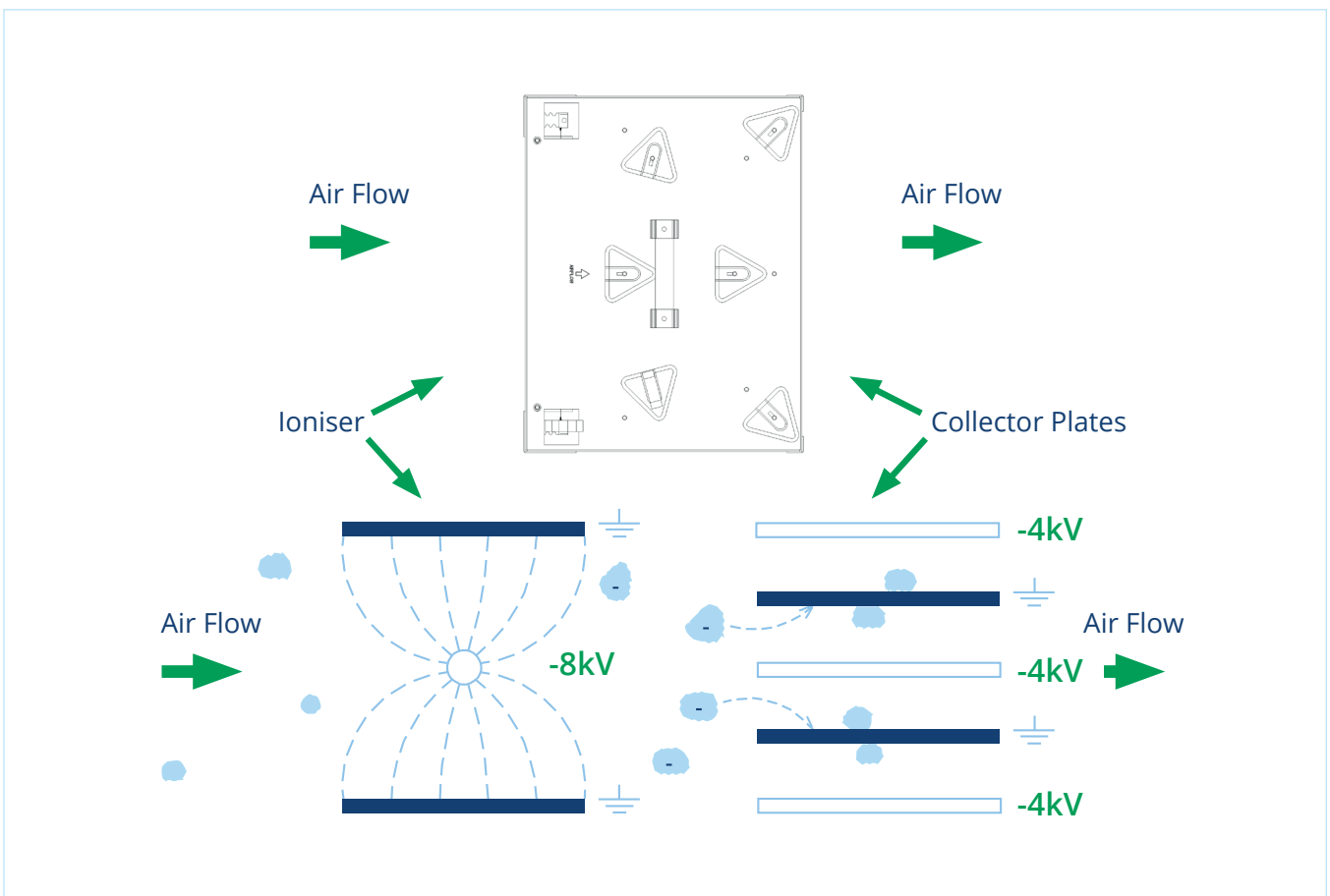
VIU1000

Air Purifier & Virus Irradiation Unit

ELECTROSTATIC TECHNOLOGY

The benefits:

- Eliminates up to 99% of particles
- Filters particles down to sub-micron levels
- Modular in design
- Energy efficient

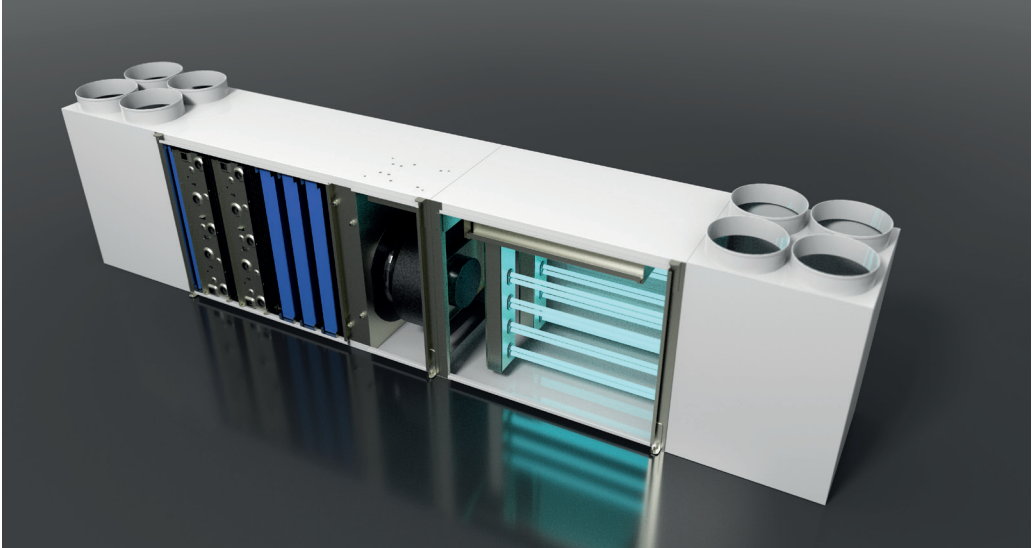


The above diagram shows, in a basic visual, how an electrostatic precipitator works. As air passes into the combined ioniser / collector cell, the particulates in the air stream are polarised. As they continue through the ioniser and between the collector cell plates, the polarised particulates are repelled away from the positively charged plates and attracted to the earthed plates where they stick and so are filtered out of the air flow.

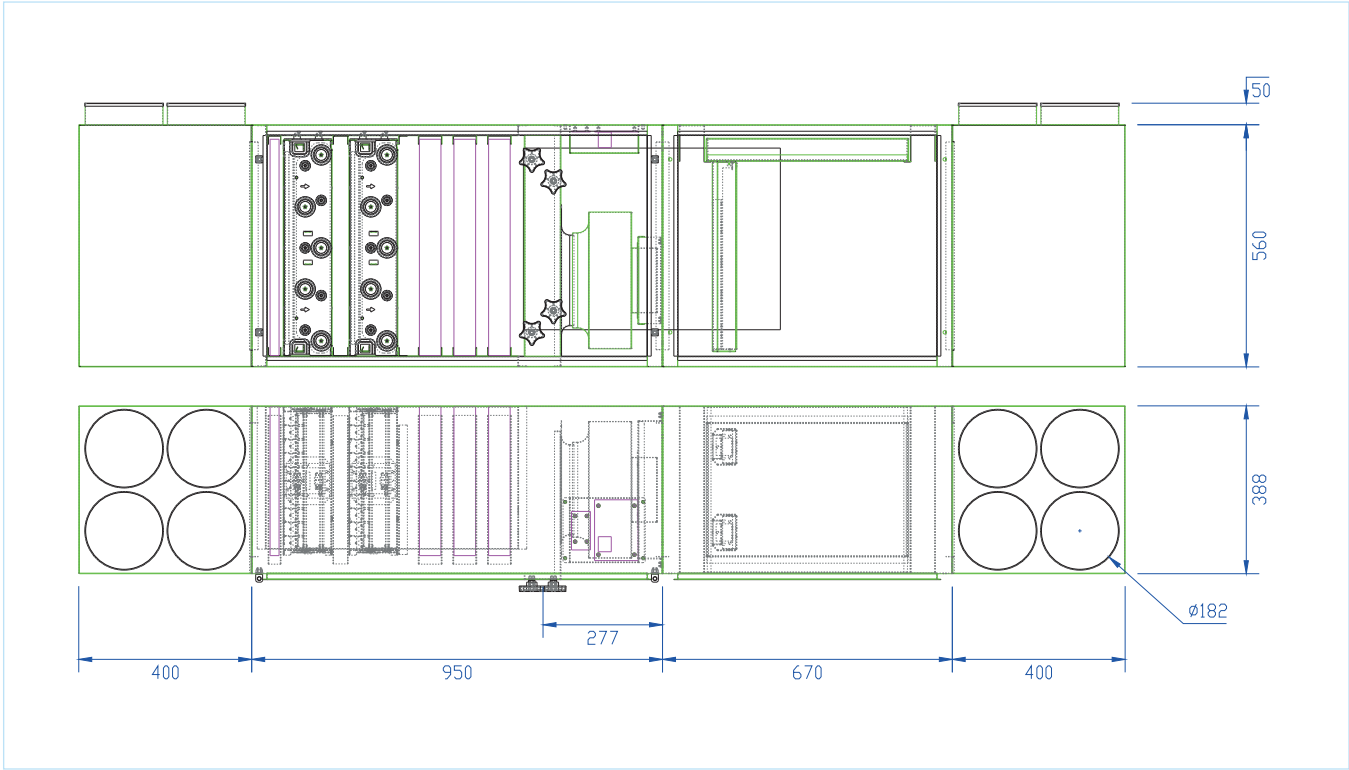
VIU1000

Air Purifier & Virus Irradiation Unit

Inside the unit



Drawings



VIU Mobile Air Purifier & Virus Irradiation Unit

A practical but aesthetic sterilisation unit suitable for both commercial and medical applications to remove airborne particles and help to destroy viruses including Coronavirus.



KEY FEATURES

- Portable
- Dual Technology
- Highly efficient

The system combines ESP and UVGI technology to kill and remove the virus from the air-stream

ESP TECHNOLOGY

Electrostatic filtration is a method of removing tiny particles from the air, the system works by applying a static charge of around 8000v to particles in the airstream. These particles are then attracted to collector plates which have the opposite electrical potential resulting in them being stripped from the air. Filtration capacity is at a very high efficiency (up to 99%) even with sub-micron sized contaminants such as virus and bacteria.

The filter components used are metal and can be cleaned so there is no filter replacement necessary. A further advantage is that using static force to filter the contaminants provides a very low resistance to the airstream which enables better overall performance.

UVGI TECHNOLOGY

UVGI inactivates micro-organisms by attacking their DNA, permanently destroying and altering the molecular structure, leaving them unable to replicate or grow.

Our UVGI technology incorporates:

- **UV-C lamps are shielded by their module to reduce the collection of dirt on their surface thus extending their optimum efficiency.**
- **The ability to provide the units in simple format or fully monitored with each module of lamps able to provide a local alarm or a BMS signal if in fault.**
- **Non Ozone producing lamps**

Ultraviolet (UV) light is measured in wavelengths with the UVC wavelength within the range of 100 nanometer (nm) to 280 nm emitting highly effective sterilization power. UVC germicidal wavelength at around 260nm is the most effective to kill harmful microorganisms in the air and on surfaces.

Germicidal lamps utilize powerful UVC wavelength to destroy disease causing germs including viruses, bacteria, fungi, protozoa and algae, effectively sterilizing and purifying air, water and surfaces.

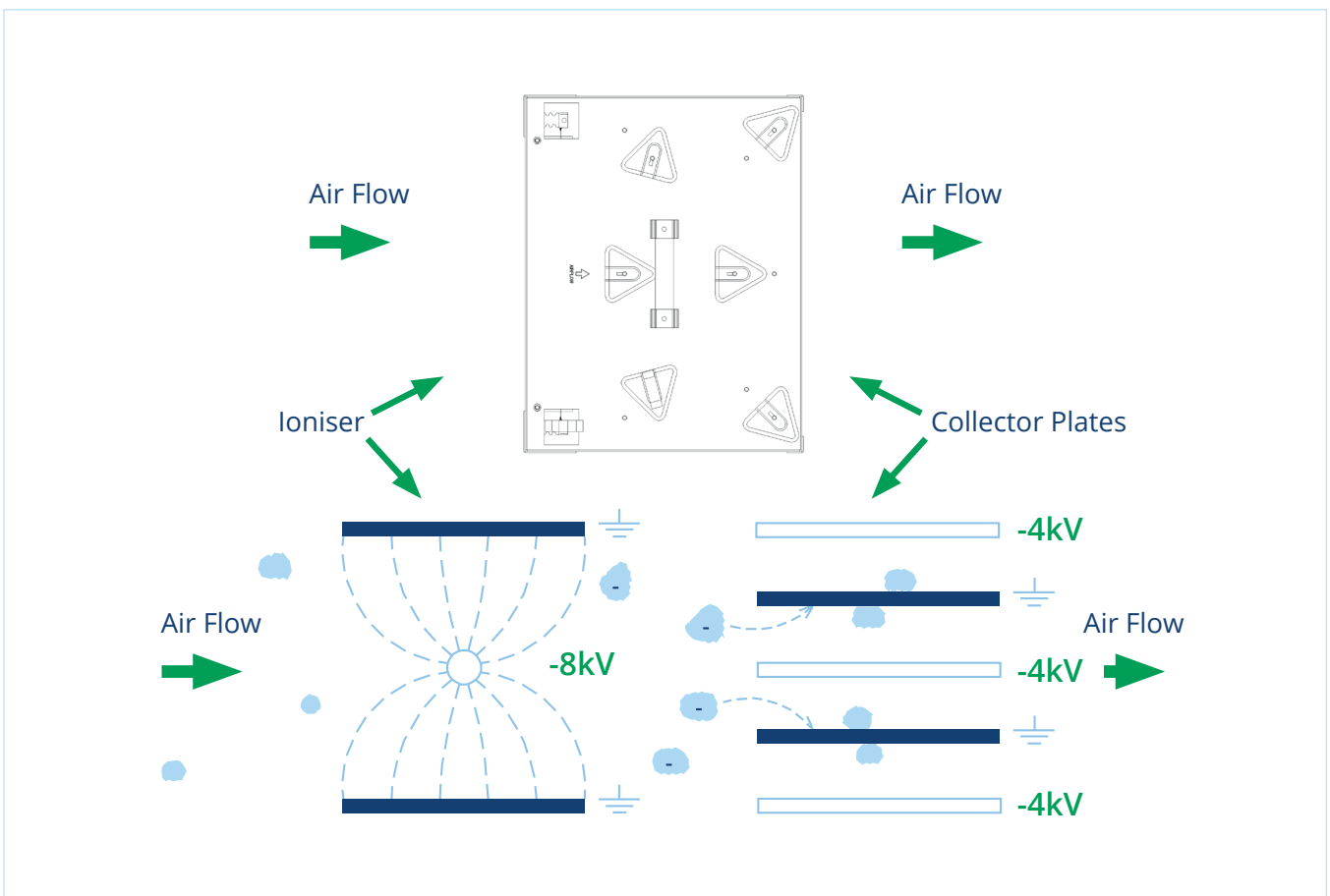
VIU Mobile

Air Purifier & Virus Irradiation Unit

ELECTROSTATIC TECHNOLOGY

The benefits:

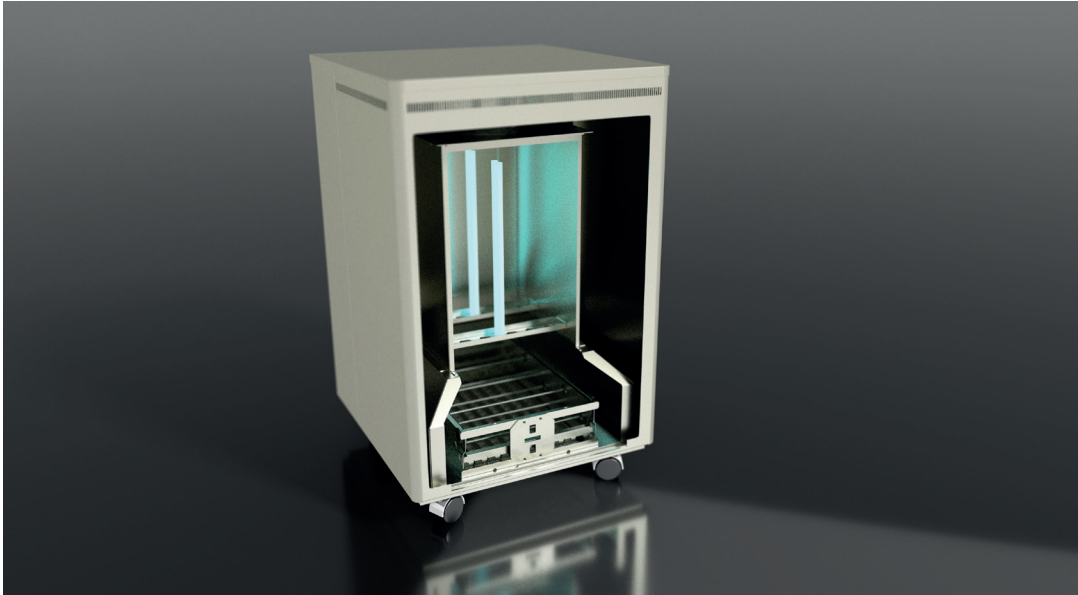
- Eliminates up to 99% of particles
- Filters particles down to sub-micron levels
- Modular in design
- Energy efficient



The above diagram shows, in a basic visual, how an electrostatic precipitator works. As air passes into the combined ioniser / collector cell, the particulates in the air stream are polarised. As they continue through the ioniser and between the collector cell plates, the polarised particulates are repelled away from the positively charged plates and attracted to the earthed plates where they stick and so are filtered out of the air flow.

VIU Mobile Air Purifier & Virus Irradiation Unit

Inside the unit



Technical Specification

VIU Mobile

Electrical Supply	220-240V single phase
Power Consumption	200 Watts maximum
Dimensions	W 600mm H 900mm D 600mm
Weight	25kg (APPROX)
Area Capacity	80sq metres
Maximum Airflow	850m ³ /h