#### Introducing the

## The Omni Compact™ Universal

The new Air Revolution Technologies Gen 2.0 OmniCompact Universal provides a uniquely flexible and adaptable design that covers a broad range of use applications. A choice of power modes, either an 18w or a 36w version, further enhances the range of applications that the OmniCompact Universal can manage. A range of optional battery packs and stand mounts further amplifies the application settings capable of being addressed. These include meeting rooms, board rooms, customer service counters, retail till points, passenger elevators, public restrooms, and restaurant tables to mention a few examples.





## OmniCompact Universal





#### Overview

The OmniCompact Universal offers an exceptional and assured improvement in both Air Hygiene and Indoor Air Quality quotients. It is the ideal unit for in situ applications where people need to interact in close proximity to one another, ensuring a substantial reduction of airborne cross-infection, and additionally, if the general Indoor Air Quality (IAQ) requires to be improved and enhanced due to the presence of exogenous air contaminants and airborne particulate matter.





# Application and Use Case Scenarios

Homes and Hospitality: Aged Care Facilities and Retirement Homes, Hotels and Residential Homes.

Public Spaces: Restaurants, Retail Stores, Schools and Supermarkets.

**Shared Environments:** Meeting Rooms, Boardrooms, Client Service Desks, Retail Till Points, School Desks, Doctors & Dentist Waiting & Consulting Rooms, Elevators, Open Plan Offices, Personal Services Providers, Public Restrooms and many others.



















## The Technology

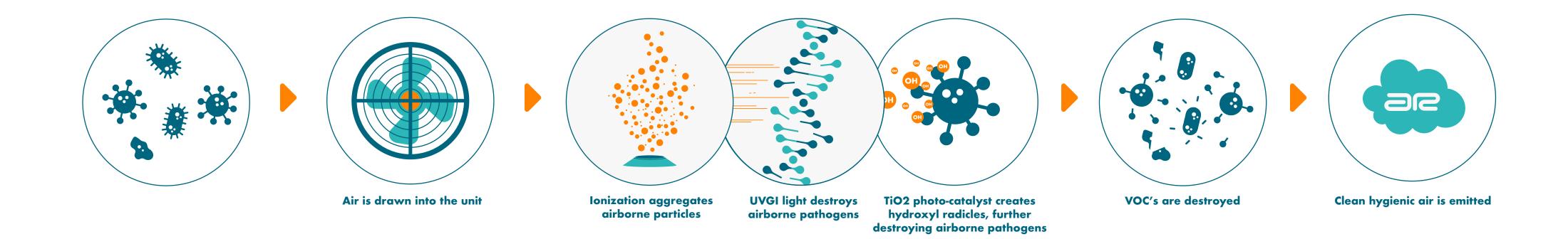
All of Air Revolution Technologies™ Air Hygiene Systems make use a number of proven and trusted technologies which are intelligently deployed in a novel trivalent implementation that serves to eradicate >99% of all airborne pathogens. Additionally, all airborne contaminants, such as volatile organic compounds, chemically activated compounds and ambient particulate matter are also eviscerated and destroyed.

The core technologies harnessed in the Air Revolution technology suite include; Ultraviolet Germicidal Light (UVGI) at the 253.7 nm wavelength amplified by means of a Photocatalytic Oxidation (PCO) reaction – that uses a patented titanium dioxide (TiO2) coated substrate layer, and activated by UV-C light to produce large numbers of hydroxyl radical molecules that aggressively mobilize, and on contact, then oxidizes and fatally damage the organic structure of all airborne pathogens, including all viruses, bacteria and fungal spores.

The principle of Ultraviolet Activated Photocatalytic Oxidation, as described above, and operating in conjunction with the principle of Ionization, achieve a powerful and highly effective approach towards achieving superior Air Hygiene and Indoor Air Quality metrics as encompassed within the notion of an Air Safety Index (ASI) quotient.



#### How It Works

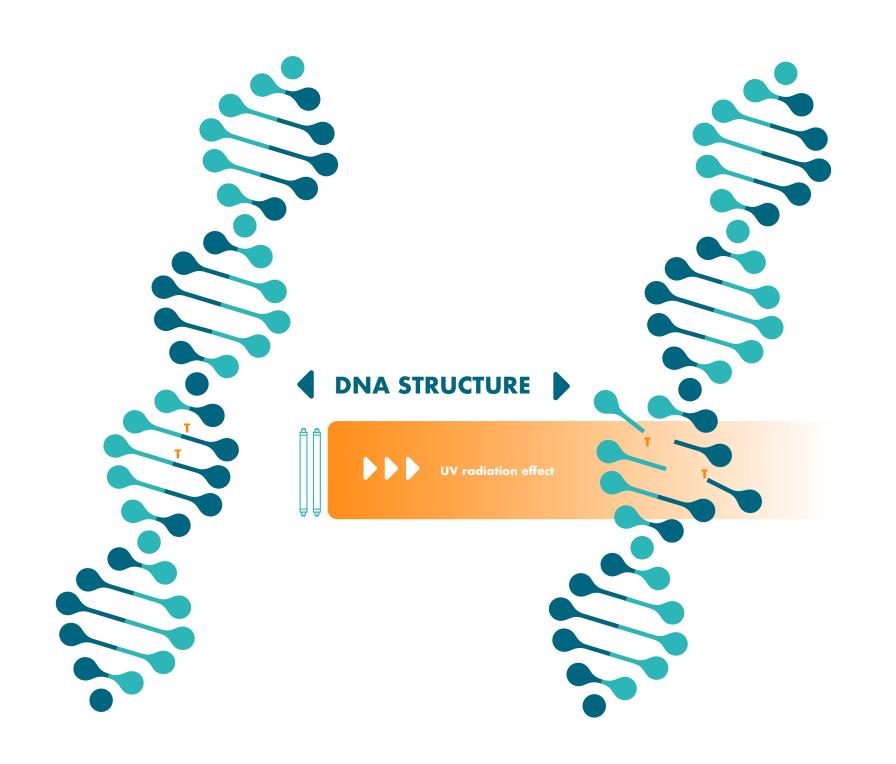


The following section describes each element of the Air Revolution Technology Suite in detail. These technology elements function in a seamless, trivalent and symbiotic manner in order to create a fully optimised approach towards achieving sustainable and reliable Air Safety for the people located within their operational sphere.



### Ultraviolet Germicidal Irradiation (UVGI)

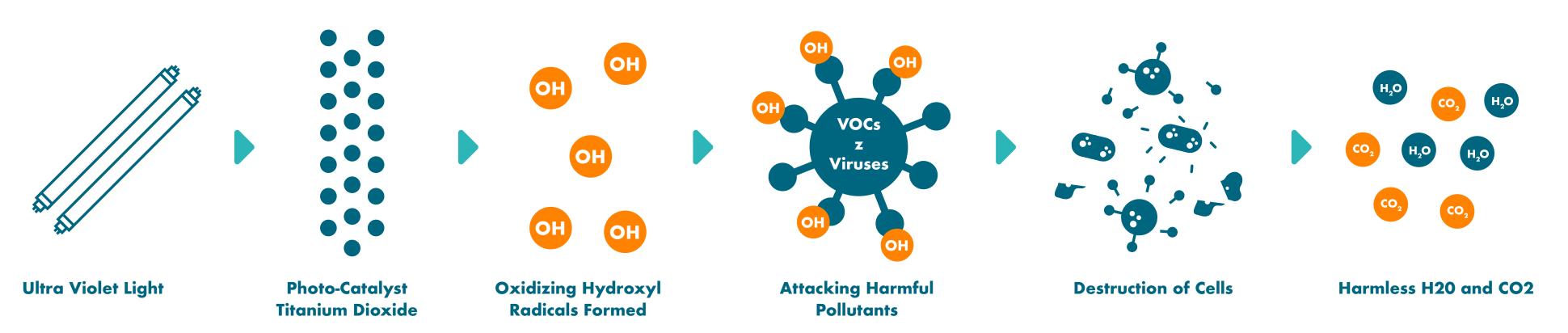
Ultraviolet light within a specific wavelength range, defined as UV-C, is highly germicidal i.e. destructive to pathogenic microorganisms. When viruses, bacteria or mould spores are exposed to UV-C irradiation then the DNA and the cellular wall structures of these microorganisms are irrevocably damaged, thereby preventing the cells from further replicating and rendering them harmless. As such, UV-C has been used inter alia for the sterilization of medical instrumentation, bacterial control, air purification and general sanitation in hospitals and clinics for many years.





## Photocatalytic Oxidation (PCO)

Photocatalysis is the acceleration of a photoreaction in the presence of a catalyst. In the case of Air Revolution's Air Hygiene units, this is achieved by using UV-C light in at a wavelength of 253.7 nm to irradiate a coated substrate material that incorporates titanium dioxide (TiO2) together with various proprietary additives which function as accelerants and amplifiers, collectively comprising the catalyst. The emulsion used in this proprietary coating process is regarded as one of Air Revolution Technologies<sup>TM</sup> core technological elements and is trademarked as Tsi-Brid<sup>TM</sup> photocatalytic emulsion. Tsi-Brid<sup>TM</sup> is formulated and produced in a patented process that significantly increases the ability of our devices to reliably and comprehensively destroy all airborne pathogens and to neutralise volatile organic compounds (VOC's), chemically activated compounds (CAC's) and other various bio-pollutants, airborne bioburden and airborne particulate matter.





#### Ionisation

Air Revolution Technologies<sup>TM</sup> Air Hygiene devices incorporate a powerful anion (negative ion) generator or 'ionizer' that produces an anion density of approximately 3 million anions per cubic centimetre.

Ionization effectively removes larger airborne contaminants such as cigarette smoke, animal dander and odorous organic compounds, by means of ionic-bonded aggregation and a consequent extraction out of the air by means of gravitational forces.

Large scale airborne contaminants are factors that are listed amongst the most common causes that contribute towards chronic health problems associated with deteriorating Indoor Air Quality.

lonization revitalises the ambient environment and removes the feeling of 'stale air' often found with indoor environments. This same effect is experienced in nature near a waterfall, at the seaside or directly after a thunderstorm.

The ionization mechanism on its own has also been shown to reduce Seasonal Affected Disorder and to effectively combat Sick Building Syndrome. When used adjunctively with the other two core technologies, in a trivalent application of use, it provides a powerful agent in the delivery of superior Air Hygiene and Indoor Air Quality (IAQ) resulting in a high score in respect of the Air Safety Index (ASI).



## Thank You





