

AIR PURO₃



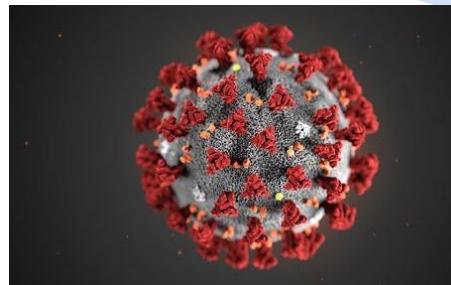
PROFESSIONAL PRODUCT

SEVEN FILTERING STAGES

ACTIVATED OXYGEN

UVC STERILISATION

99.99% OF AIRBORNE PARTICLES REMOVED



INACTIVATES VIRUSES and BACTERIA

It inactivates any type of viruses or bacteria thanks to the double germicidal UV-C sanitising action and activated oxygen/Ozone O3



SANITISES WORK ENVIRONMENTS

Particularly suitable for work environments where a high level of sanitisation of all surfaces in every work area is required, which is impossible to achieve with traditional cleaning products.



SANITISES THE HOME

It kills any pathogens and viruses, and eliminates unpleasant odours and moulds from the home. Protection for the whole family

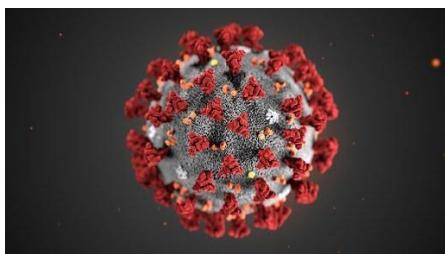


MAKES PUBLIC SPACES HEALTHIER

Particularly suitable for hotels, gyms, restaurants and accommodation facilities and any places frequently visited by the public in general.

Indoor pollution, viruses and

PM 2.5 and PM 10 particulates are a serious threat to our health



Viruses and CORONAVIRUS COVID19

COVID-19 was first reported in late 2019 in Wuhan, China and has since spread extensively throughout China and around the world. Even though many people infected with COVID-19 may have few symptoms, some become seriously ill and die. Symptoms can include fever, cough and wheezing. Those seriously affected by the virus may have lymphopenia and chest imaging findings consistent with pneumonia. **COVID-19 is treated with supportive care. There are no vaccines, antiviral drugs or other specific treatments.**



Risks associated with PM 2.5 and PM 10 particulates

Once again connected to **global warming** and climate change dramatically witnessed by the general emergency, comes an ongoing study published in *The Lancet* stating that Italy **has achieved another unwelcome European record**, in the wake of some alarming reports already released in recent years: we are the number one country in Europe, and eleventh in the world, for **premature deaths due to the exposure to PM 2.5 particulates**. Last March the World Health Organisation explained that air pollution **kills 80,000 people every year** in Italy alone, thereby actually placing us a little higher in the depressing ranking, around ninth place, perhaps because it took into account other types of harmful gases such as Pm 10, nitrogen dioxide and ozone.

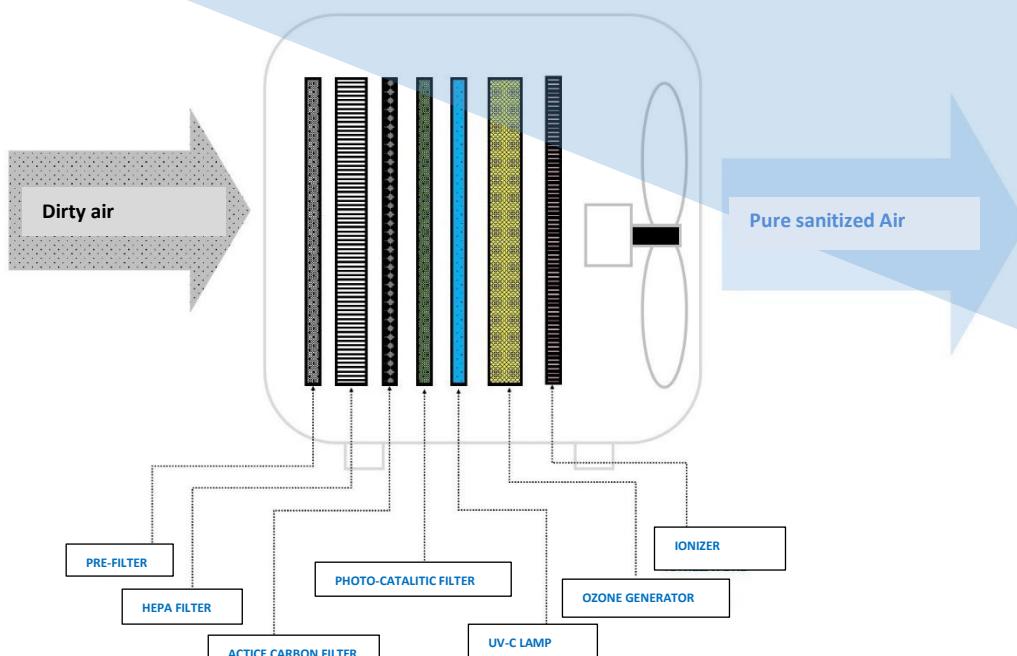


Indoor pollution, invisible but real

Substances capable of altering indoor air quality can be classified as **chemical, physical and biological agents**; some come from outside (outdoor air pollution, pollen), but many are produced by indoor sources.

The **main indoor sources** of pollution include occupants (humans, animals), dust (excellent receptacle for microorganisms), structures, building materials, furnishings, equipment (air conditioners, humidifiers, plumbing systems) and air from outside.

Type of indoor air pollutant	Sources	Health impacts
PM	Cooking stoves; fireplaces; smoking; outdoor air	Respiratory and cardiovascular illnesses
SO ₂	Cooking stoves; fireplaces; outdoor air	Impairment of respiratory function
NO ₂	Cooking stoves; fireplaces; outdoor air	Irritate the lungs and lower resistance to respiratory infection
CO	Cooking stoves; fireplaces; water heater; outdoor air	Highly toxic and fatal at a conc. 700ppm
Ozone	Air cleaning device with high voltage; outdoor air	Asthma and allergic triggers
VOCs (such as formaldehyde, turpenes)	Building materials including carpet, plywood (emit formaldehyde); Paint and solvents; Clothing (after dry cleaning) (emits tetrachloroethylene, or other dry cleaning fluids); air fresheners, incense, other scented items; certain plants (emit turpenes)	Some are carcinogenic; can also trigger the formation of photochemical oxidants, such as peroxyacetyl nitrates (PAN) and aldehydes, which cause eye irritation
Radon	Exuded from earth and rocks such as granite and gneiss in certain locations with low ventilated air and trapped inside houses	Radioactive; leading cause of lung cancer in non-smokers
Biological air pollutants (gasses and airborne particulates)	Pets (dander), human (dust from minute skin flakes and decomposed hair), dust mites (enzymes and μm -sized fecal droppings), inhabitants (methane), wall and air-duct (mold)	Increase risk for people with breathing problems, such as asthma sufferers, and with compromised or underdeveloped immune systems



PRE-FILTER Used to filter coarse particles that could clog and reduce the efficiency of the subsequent stages, this filter is washable

HEPA FILTER The **HEPA** (High Efficiency Particulate Air) filter is a filtration system with high fluid efficiency (liquids or gases)....The term "absolute filter" is justified by the fact that **HEPA filters** have a high filtration efficiency. The HEPA standard requires that filters effectively remove 99.7% of particles down to the size of 0.3 microns. That is to say only 3 out of 10,000 particles are able to pass through .It has excellent filtering power for PM 2.5 and PM 10 particulates. This filter must be replaced from time to time as it is not washable.

ACTIVATED CARBON FILTER Activated **carbon** filtration is an air purification technology where a gaseous current is deprived of the polluting elements by passing it through a filter that contains **activated carbon**. People who suffer from allergies, asthma or respiratory ailments can benefit from these filters. The use of activated carbon in our home air purification system can provide unmatchable benefits for healthy breathing. Activated carbon filters also help eliminate unpleasant odours, so that the air in the home is always fresh and clean. These filters also need to be replaced from time to time to maintain their full efficiency.

PHOTOCATALYTIC FILTER The patented photocatalytic membranes are coupled with UVC ultraviolet lamps with a certain wavelength; irradiating the surface of the membranes favours the formation of particles called free radicals, which catalyse oxidation and reduction reactions which are harmless to humans. These reactions transform pollutants into new chemicals with reduced environmental impact. The catalytic reaction produces residues from its oxidising action, generally the compounds from the transformation of pollutants are mineral salts and limescale, which are produced in minimal quantities/parts per billion in addition to being both invisible and harmless. The **CHEMICAL SUBSTANCES DESTROYED BY** the photocatalytic filter TVOC, volatile organic compounds VOCs, bisphenol, benzene, xylene, methanol, acetone, trichlorethylene, nitrogen dioxide, sulphur dioxide, and carbon monoxide. Even though the filter is able to self-regenerate, it is recommended to replace it from time to time together with the activated carbon.



UVC LAMP In addition to activating the photocatalytic filter function, the **UVC** lamp, also known as a germicidal lamp, is a special type of **lamp** that produces **ultraviolet (UV-C)** light. This short wave ultraviolet light disrupts DNA creating thymine dimers, leading to cell death. It is effective against a very large number of viruses, **bacteria** and other microorganisms and is also highly effective against **COVID19**

OZONE GENERATOR **Ozone** (O₃) is an unstable gas composed of three oxygen atoms. It is formed by subjecting the air containing molecular oxygen (O₂) to a supply of energy, in the form of an electrical discharge. The main characteristics of Ozone, also called activated oxygen, are as follows:

- It has a great oxidising power as it is a highly unstable molecule;
- It has the ability to degrade non-biodegradable complex organic compounds;
- It has a powerful disinfectant action with a broad spectrum of action;
- It can be used for sanitising the air and rooms;
- Unlike other disinfectants, it leaves no residue;
- After 20 minutes, O₃ turns into oxygen and doesn't need any processes to remove it.

IONISER It is used to restore the optimal level of negative ions in the air. You may have already experienced the power of negative ions when going to the beach or while walking under a waterfall. Negative ions are odourless, tasteless, and invisible molecules that we inhale in abundance. Once they reach our bloodstream they produce biochemical reactions that increase levels of chemical serotonin; thus helping to alleviate depression, stress and to increase our energy during the day .It also appears that the right amount of negative ions in the air makes it crisper and more energised. Negative ions, therefore, have a relaxing effect on our nervous system and also help our lungs absorb more oxygen from the air; they improve the body's functions, improve the body's immune defences and perform a beneficial action on the whole cardiovascular, endocrine and nervous systems.

TECHNICAL DATA AIR PURO₃ (For surface 279 m²)

Technical data	UM	
Tension	V / Hz	220-240 / 50Hz
Input Power (MIN - MAX)	Watt	17-50
Current	Ampere	0,08-0,23
Max Input power in stand-by	Watt	0,5
Room suggested	m ²	from 15 to 200 m ²
Pre-filter		yes
Hepa Filter		Yes efficiency 99,7 %
Carbon Filter		yes
Photo- Catalitic filter		yes
UV-C germicidal lamp		yes n° 2
Ozone generator		500 mg/h
Ionizer		yes
Remote control		yes
Comand panel back light		yes
Timer		yes
Durty filter icon		yes
Fan speed	number	5
Air flow MIN e MAX	m ³ /h	55-90
Noise level MIN-MAX SPL (2 meter)	db(A)	36-42
Non slip Rubber feet		yes
Product dimension A x B x H	mm	309 x 255 x 305
Net weight	kg	505
Single box dimension	mm	334 x 270 x 370
Gross weight	kg	7
Certification CE - LVD - EMC		yes
Perfomance certification		yes

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