

The Purist

Photocatalytic
air purifier



ZILFOR

Made in Italy



The Purist

Change is in the air.

Photocatalytic air purifier.

Improving indoor air quality while preventing the proliferation of moulds, viruses, bacteria and pollutants.

The Purist is silent and suitable for use in high-traffic areas where people meet for work or to relax. It employs a CERTIFIED class H high-efficiency filtration system which is effective at removing up to 99.995% of all particulate matter (PM10, PM2.5 and PM1) as well as viruses, bacteria and pollen present in the air. The Purist provides one of the highest levels of filtration available today, as certified by European standard EN 1822: 2019.

The purifier is also used for treating air in settings requiring a high level of sterility, such as in operating theatres, for the pharmaceutical and electronic industries, and in laboratory and hospital settings.

Benefits for people

- Improves respiratory function
- Reduces the spread of airborne bacterial and viral diseases
- Reduces the risk of migraines caused by enclosed environments
- Decreases the risk of cardiovascular and respiratory diseases

Benefits for the indoor environment

- Eliminates microorganisms and reduces their spread
- Eliminates odours without the use of chemicals
- Eliminates mould spores from the air
- Eliminates chemical contaminants (VOCs) present and produced in the environment
- Eliminates polluting microparticles
- Reduces the rate at which dust collects on floors and furnishings
- Provides an immediate perception of cleanliness and enhanced wellbeing
- Zero environmental impact

ZILFOR
PRECISION FURNITURE

Having none of the limitations associated with the older generation of products and technologies, The Purist's dual purification system is exceptionally effective, ensuring air is kept purer and surfaces cleaner.

The Purist quickly eliminates harmful agents and odours without releasing toxic or polluting substances into the environment, meaning guests, customers and visitors have an immediate perception of cleanliness and enhanced wellbeing.



A MAJOR INNOVATION... AS IMPORTANT AS THE AIR WE BREATHE

ZILFOR specialises in the design and production of furniture and equipment for dental surgeries and dental laboratories. We team high-quality materials, cutting-edge innovation and extremely functional technical solutions with world-beating design and the assurance of legendary Italian craftsmanship. This has elevated us to a position of excellence within the sector. Excellence that naturally also includes the air quality and hygiene within rooms. Now more than ever, we recognise that airborne contamination is a major problem in our society. This is compounded by the fact that individuals spend long periods of time in enclosed spaces shared with others, which fosters the growth of many airborne pathologies. In addition to simple colds, these include meningitis, diphtheria, tuberculosis, measles, rubella, mumps, as well as the new forms of flu that we've been witnessing in recent years.

ZILFOR presents a new air purification system which reduces the risk of chemical and biological infection. The device works 24 hours a day, 365 days a year, guaranteeing improved indoor air quality.

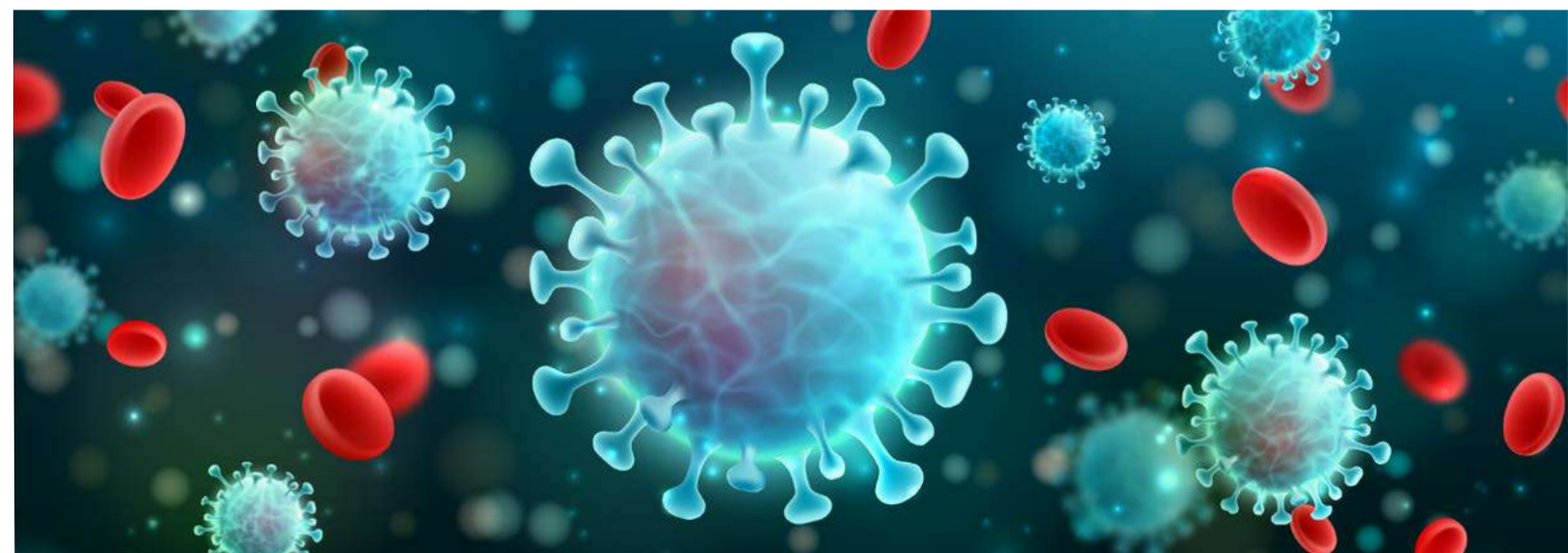
The Purist offers numerous advantages: it's silent, simple and cheap to maintain. What's more, spaces can be used even while the device is operating.

WHAT HAPPENS IN ENCLOSED SPACES

where most people spend up to 90% of their time

It's important to understand what the health risks really are that we're exposed to on a daily basis when in enclosed spaces, where allergens and microscopic pollutants can cause coughing, sneezing, itching or, worse still, promote the spread of viruses.

According to the studies, levels of air pollutants indoors can be 2-5 times higher than levels encountered outdoors. According to the OMS, 40% of all buildings pose a serious risk to health due to the level of air pollution within them. Without us realising it, many pollutants are brought from outside or generated within the home, work or similar places where people gather.



A SILENT KILLER

Researchers from the University of Tokyo used cameras and laser beams to show how just a simple sneeze or cough can emit 100,000 droplets, each of them a thousandth of a millimetre in size. The risk rises in enclosed spaces that lack ventilation. The larger droplets precipitate out of the air, while smaller and lighter ones may remain airborne for up to 20 minutes.

Air, the source of life for every living creature, can therefore turn into a silent killer. The average adult breathes around 15,000 litres of air every day, so it's paramount that the air we breathe is good for us.

HEALTHY, CLEAN AND PURIFIED AIR

EXTREMELY RELIABLE AND LONG-LASTING

The catalytic reactor is maintenance-free because it's protected within a housing situated above the high-efficiency filter. The high-power UV LEDs have a life expectancy of over 10 years, ensuring the purifier works effectively for many years.



TECHNOLOGY

The Purist: two purification systems

Dual technology combined to provide guaranteed results.

1. HIGH-EFFICIENCY FILTRATION

The Purist employs a CERTIFIED class H high-efficiency filtration system, which is effective at removing up to 99.995% of particulate matter (PM10, PM2.5 and PM1), viruses, bacteria, and pollen from the air. This is one of the highest levels of filtration available today, and certified compliant with European standard EN 1822: 2019. The device is ideal for those suffering from allergies and is also used for air treatment in settings where high sterility is required, such as in operating theatres, for the pharmaceutical and electronic industries, and in laboratory and hospital settings. Thanks to its high-efficiency filter, The Purist ensures more hygienic and cleaner surfaces 24 hours a day, 365 days a year.

2. PHOTOCATALYSIS - GREEN TECHNOLOGY ALREADY PRESENT IN NATURE

The Purist air purifier technology uses the same processes that plants use to transform carbon dioxide into oxygen through chlorophyll photosynthesis. The photocatalytic process was discovered by in Japan by Akira Fujishima in 1972. It was then developed by NASA to use in places where maintaining a sterile environment was paramount and was subsequently further developed by hundreds of universities and public and private research centres. It is a safe system to combat the pollution found in enclosed environments. The technology used by The Purist is the culmination of all these research and development studies.

How it works - the details:

We cannot see the natural oxidation process with naked eye but The Purist purifier is busy working 24/7, exactly as happens in nature. Electrons are released from the surface of the titanium dioxide (TiO₂) catalyst when it is exposed to UV light. These electrons interact with water molecules in the air, breaking them down into highly reactive hydroxyl radicals (OH[•]), that is neutral (uncharged) forms of hydroxide ions (OH⁻). These hydroxyl radicals attack the largest polluting organic (carbon-based) molecules, breaking their chemical bonds and turning them into harmless substances such as carbon dioxide and water (CO₂ + H₂O). The Purist air purifier technology uses the same processes that plants use to transform carbon dioxide into oxygen through chlorophyll photosynthesis. The photocatalytic process was discovered by in Japan by Akira Fujishima in 1972. It was then developed by NASA to use in places where maintaining a sterile environment was paramount and was subsequently further developed by hundreds of universities and public and private research centres. It is a safe system to combat the pollution found in enclosed environments. The technology used by The Purist is the culmination of all these research and development studies.

Contaminated air is sucked in at the base of the device and purified air is released from the top.

The electronic filter situated within the internal chamber produces hydroxyls, which in turn remove the following from the air flow:

- Viruses
- Bacteria and bad smells
- Moulds
- Chemical solvents
- Formaldehyde
- Carbon monoxide
- Pollens and allergens
- Other polluting particles

HIGH-EFFICIENCY FILTERS
CLASS H13

Effective up to 99.95%.

HIGH-EFFICIENCY FILTERS
CLASS H14

(On request) effective up to 99.995%.

Removes the smallest microparticles down to 1 thousandth of a millimetre

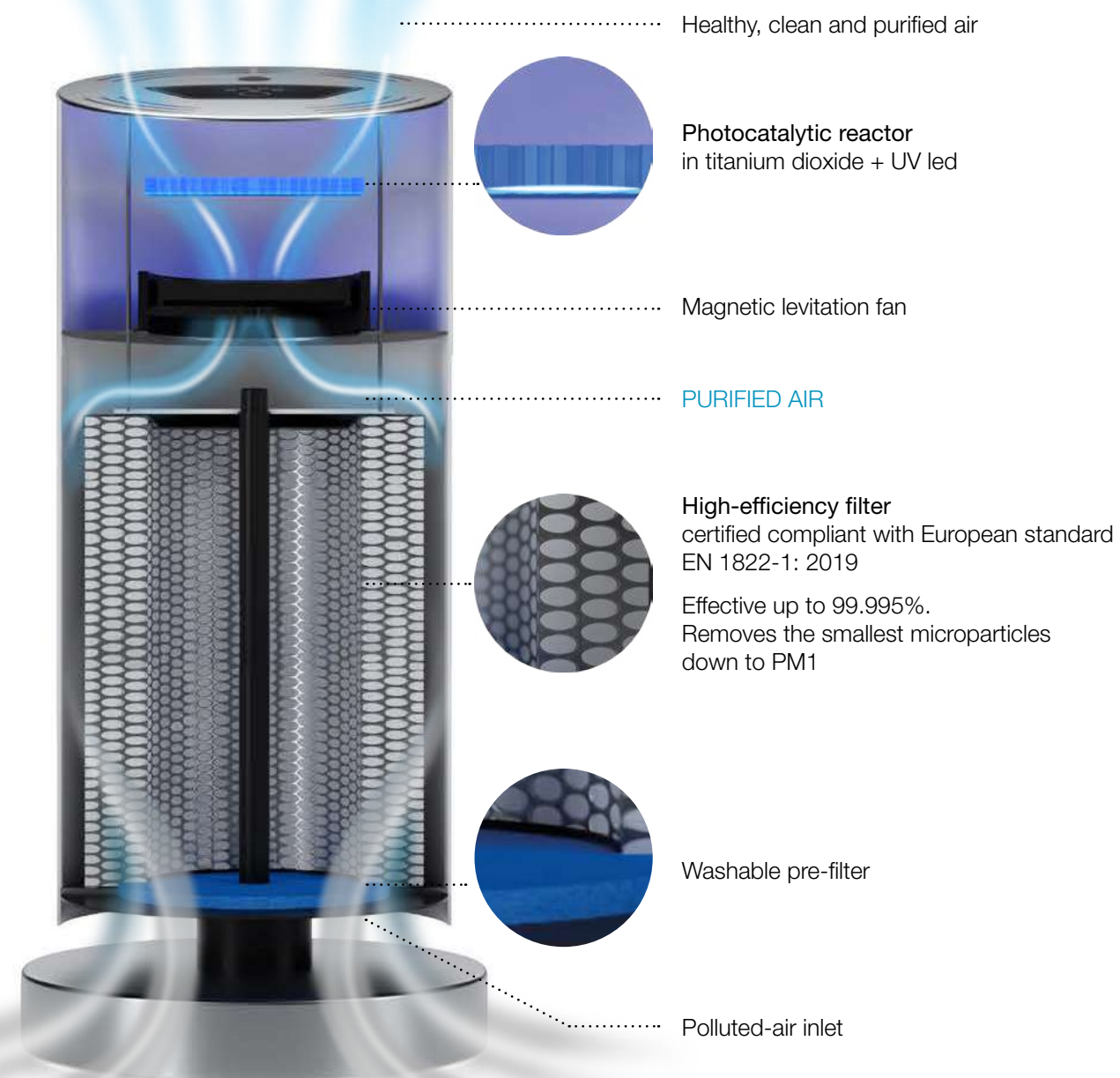


Available with base column in black, steel or white.



INTERNAL COMPONENTS

The Purist uses two purification systems. Dual-action technology which, when combined, provides guaranteed results



TECHNICAL FEATURES

The Purist Dimensions:	Base: Ø 240 mm Structure: Ø 204 mm Height: h 470 mm
Dimensions with column:	Base: Ø 300 mm Structure: Ø 204 mm Height: h 890 mm
Weight:	7,4 kg without column - 15,7 Kg with column
Materials:	Stainless steel
Power supply:	12 Vdc - 2,5 A
Power supply:	100-240 Vac
Fan:	4 Speeds
Filter:	H13 series (H14 on request)
Supplementary sanitising technology:	Photocatalytic reactor (UV LED + TiO2)
Filter:	Washable
Energy consumption:	30 Watts
Fan power:	320 m³/h
Filtered air volume:	+/- 100 m³/h

CERTIFICATIONS:

CE-certified product

Tested for harmful ozone emissions according to European regulations

Certified filters PM10 - PM2.5 - PM1 according to European standard EN-1822-1: 2019

LABORATORY TESTED

Virus Sars-CoV-2 (Inactivated strain)
Bacteria (Escherichia coli)
Bacterial charge Yeasts and Molds
SYNTHETIC RNA



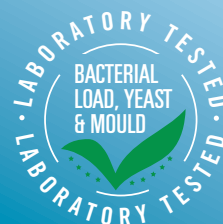
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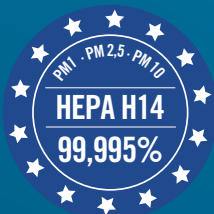
Bacteria
(Escherichia coli)



Bacterial charge
Yeasts and Moulds



CE Electromagnetic Safety and
Stability compliant



Filters certified to EU Standard
EN-1822-1:2019



Filters certified to EU
Standard EN-1822-1:2019



Tested for Harmful Ozone
Emissions in accordance
with EU norms

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