

Air-Fit

Air Purification Sterilizer

**ECO-FRIENDLY COMPANY
CARING ABOUT
HUMAN HEALTH**

EXCELLENT PERFORMANCE
EXCELLENT PRODUCT DESIGN



**WE CARE ABOUT NATURE.
OUR RESEARCH AND
DEVELOPMENT IS FOCUSED
ON ECO-FRIENDLY PRODUCTS.
YOUR PARTNER IN
AN ECO-FRIENDLY LIFE.**



The necessities of eco friendly life | 주크린바이오



E

ENVIROMENTAL
COMPANY



C

CLEAN
TECHNOLOGY



B

BIO
TECHNOLOGY



H

HUMAN
COMPANY

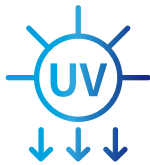
Clean Bio Co., Ltd. is an environmentally conscious company. Since its establishment in 2005, it has focused on researching eco-friendly materials and developing environmental products.

We operate a corporate research institute with excellent manpower and are making great efforts to develop air purification sterilization devices to research and improve the medical environment with natural materials.

As a result, termite repellent made of natural antibacterial materials and innovative air purification sterilizer technology have led to many domestic and foreign applications. We have secured intellectual property rights and certification.

CLEANBIO AIR-FIT FEATURES

Always, everywhere,
in a modern way



Powerful sterilizing
UV-LEDs



24/7
Air sterilization



Ozone-free stability



Ultraviolet
Safety



Low Electricity Cost



Airborne Infection Prevention

- ✓ Sterilization using **UV-C-LED** and **general visible light LED**
- ✓ **Nano coating technology and heat treatment technology** to increase photocatalyst sterilization effect
- ✓ Sterilization module lasts up to **30,000 to 50,000 hours!** Introducing the **latest primer technology** to achieve stable sterilization effect
- ✓ **High-performance sterilizing and deodorizing filter**
- ✓ By introducing new technology , maintenance costs are reduced by **more than 75% compared to existing ones** (excellent price and quality competitiveness)

AIR-FIT UV MORE SPECIAL REASON

Selective wavelength



General UV-C lamp

Wavelength characteristics	Emit a wavelength of 254nm (mixed wavelength). It has a sterilizing effect but also emits a wavelength of 185 nm which generates ozone.
Light source characteristics	Large area, radial
Product life	5,000 ~ 8,000 hours
Harmful substance	Contains mercury
Environmental impact	Ozone generation
Power Consumption	130~350W

Cleanbio UV-C LED

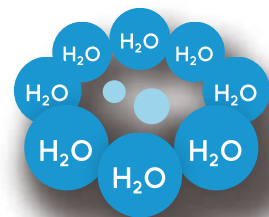
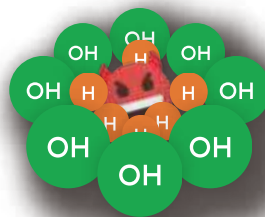
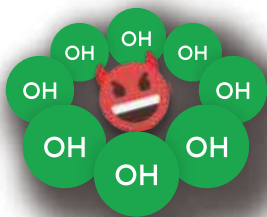
Wavelength characteristics	Designed with a single wavelength of 275nm to maximize sterilization efficiency
Light source characteristics	Cleanbio's unique modular design enables large-area sterilization
Product life	30,000 ~ 50,000 hours
Harmful substance	Doesn't exist
Environmental impact	Harmless
Power Consumption	50 W or less (based on Air-Fit 50 sterilization module)

AIR-FIT PHOTOCATALYST

Titanium Dioxide Photocatalyst,
Nano Coating Heat Treatment Technology

The Ag TiO₂ Photocatalyst technology applied by the Korea Photonics Technology Institute, along with UV C LED, generates powerful oxidative -OH radicals, exhibiting significantly higher oxidation capacity than chlorine or ozone.

Through a zigzag flow structure, it completely decomposes pollutants in indoor air.



Stimulated by light energy, titanium dioxide surpasses the energy band, leading to the ionization of electrons (e⁻) and holes (h⁺). The ionized electrons (e⁻) stimulate water molecules (H₂O) in the air, generating abundant hydroxyl radicals (-OH).

These hydroxyl radicals, possessing an oxidation potential of 2.80, act as hydroxyl radicals with a strong sterilizing effect, decomposing harmful chemicals such as formaldehyde and volatile organic compounds (benzene, toluene, xylene) effectively.

AIR-FIT UV-C & VISIBLE LIGHT LED

Maximize Sterilization Power



We received technology transfer from the Korea Photonics Technology Institute which **applied the Ag TiO₂ core cell nanoparticle manufacturing technology** using the unique localized plasmon effect to the mesh network. By semi-permanently using UV C LED manufactured in Korea , we have improved the localization of foreign products and dramatically reduced costs.

Additionally, the patented **ZIGZAG flow path method** allows air to flow along the wall. Unlike existing barrel structures, the sterilization time is maximized by allowing air to stay for a long time.

[Technology transfer]

Korea Photonics Technology Institute

[Certificate]

Air deodorizing sterilizer with improved photocatalyst contact efficiency using zigzag flow path (10-2163950)



AIR-FIT 4-STAGE FILTERING

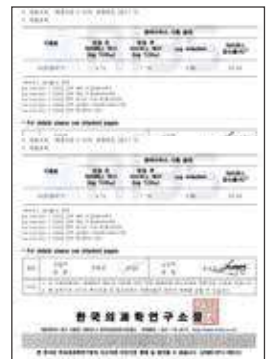
Air purification sterilizer that effectively filters out bacteria, harmful gases and even viruses.

Copper antibacterial filter

Removes large dust, copper component sterilizes 99% of Escherichia coli, salmonella typhimurium and staphylococcus aureus.

Antiviral filter

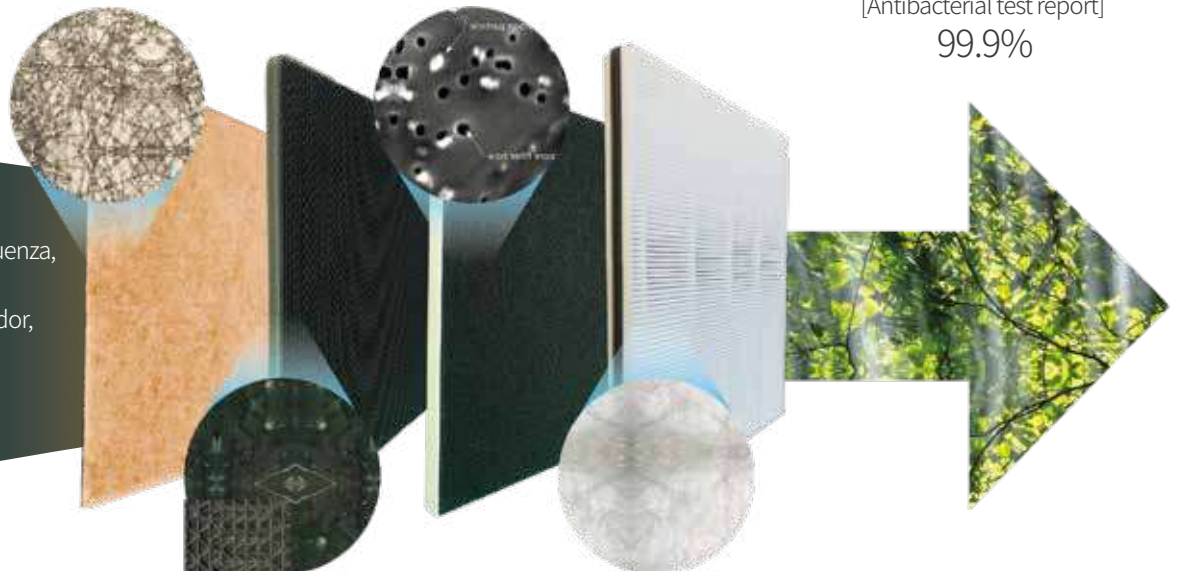
Sterilizes influenza, bacteria, virus (COVID-19, swine flu 99.9% sterilized)



항균제명	항균제 농도	시험 온도	시험 시간	항균율 (%)
구리 이온	100 ppm	25°C	24시간	99.9
구리 이온	100 ppm	37°C	24시간	99.9
구리 이온	100 ppm	4°C	24시간	99.9

[Antibacterial test report]
99.9%

Staphylococcus aureus, influenza, E. coli, fine dust, bacteria, harmful gases, household odor, ultrafine dust, virus, salmonella typhimurium



Activated carbon filter

Removal of harmful gases and household odors

HEPA Filter (H13)

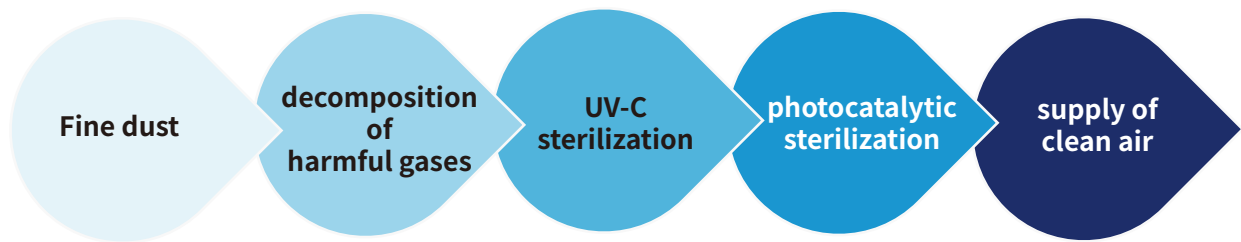
Removal of fine dust and ultrafine dust (0.3μm dust blocking rate 99.98%)

In spaces where various people live together, ventilation, air purification and prevention of group infections are essential.

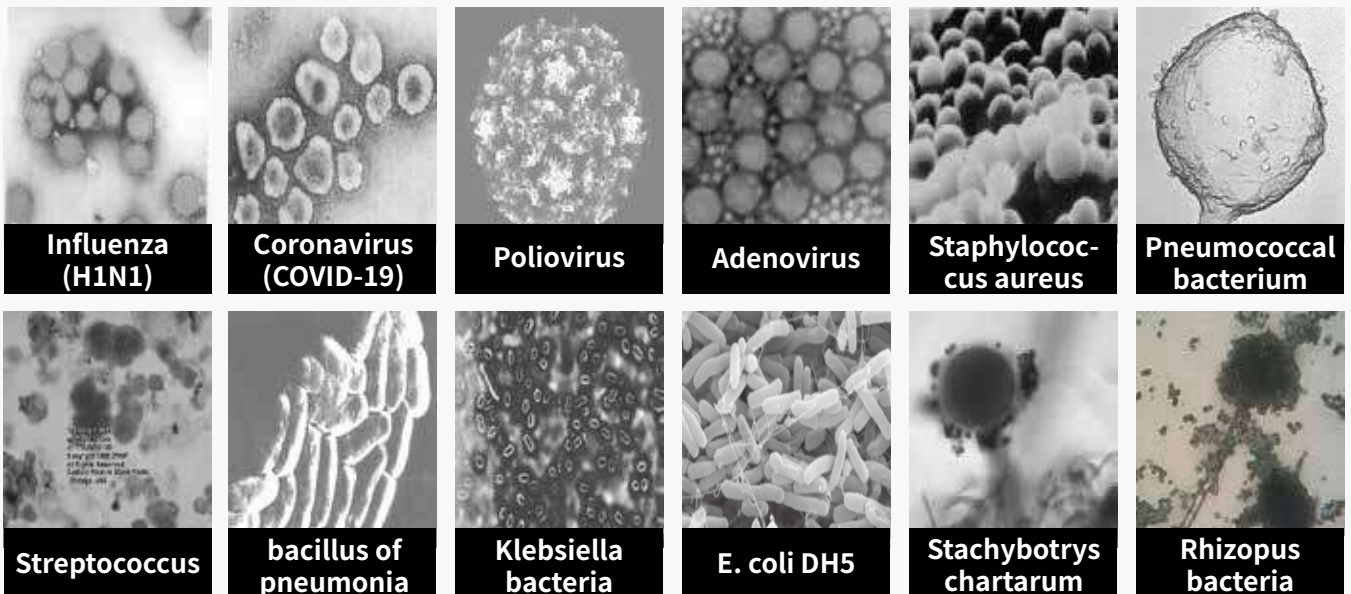
In addition to the existing air purifiers (H13 HEPA filter, activated carbon filter and copper antibacterial filter) Cleanbio has a special four-layer structure filter. By co-developing an unprecedented antiviral filters with another filter company, **we have developed a filter with 99.9% sterilizing power against COVID-19 and swine flu** from the Korea Research Institute of Bio medical Science and we are sterilizing it with a dual structure along with the module.

AIR-FIT STRUCTURE

Differentiated structure



IT CAN BE STERILIZED WITH AIR-FIT



CLEANBIO AIR-FIT 50

165m²



Premium
Sirocco Fan



Stand Type





Size : 300 x 315 x 1550 mm

Weight : 32kg

Voltage : 220v, 50/60Hz, 130W

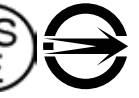
※ Convertible depending on country

Air Sterilization:

UV-C LED / Normal visible light LED /
Titanium Dioxide (TiO₂)

4 Types of Filter Set:

Copper filter, Activated carbon filter,
Antiviral filter, HEPA filter (H13)



[KIP] Korean Innovative Products

[GA] Good Air Certification

[CE] Comunaute Europeenne Certification

[PSE] Product Safety Electrical Law of Japan Certification

[BSMI] Bureau of Standards, Metrology & Inspection Certification

There are so many harmful substances around us!

- ▶ Airborne bacteria: secondary infection, respiratory disease, food poisoning, infectious disease, allergy
- ▶ Viruses: norovirus causes respiratory disease in newborns
- ▶ Noxious gases: formaldehyde, VOC, sick house syndrome, atopic dermatitis, rhinitis, asthma, nervous system immune disorder
- ▶ Fine dust: lung disease, heavy metals, mites
- ▶ Asbestos/radon: carcinogen, cause lung cancer



CLEANBIO AIR-FIT 30



99m²



Premium
Sirocco Fan



Stand Type





Size : 300 x 315 x 1196 mm

Weight : 27kg

Voltage : 220v, 50/60Hz, 100W

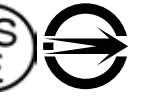
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- ▶ Fine dust: lung disease, heavy metals, mites
- ▶ Asbestos/radon: carcinogen, cause lung cancer



CLEANBIO AIR-FIT 20

66m²



Turbo
Fan



Wall Hanging
Type





Size : 652x 355 x 175 mm

Weight : 15kg

Voltage : 220v, 50/60Hz, 60W

※ Convertible depending on country

Air Sterilization:

UV-C LED / Normal visible light LED /
Titanium Dioxide (TiO₂)

4 Types of Filter Set:

Copper filter, Activated carbon filter,
Antiviral filter, HEPA filter (H13)



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AIR-FIT INSTALLATION CASE

- University library



- Cafe



- National Museum of Korea (Library, Conservation Library)



- Gangnam-gu Office Fine Dust Free Shelter



- School classroom



- Semiconductor factory cleanroom



- School health office



- University museum



- Office of the Patent and Trademark Office



- Hospital



- Dental clinic



- Incheon International Airport (Foreign Investigation Division, Refugee Application Waiting Room, Immigration Re-examination Room, Departure Waiting Room)



- Courts (Civil Service Office, Public Service Office, Court President's Office)



- Museum



- Folk museum



- Provincial government building



- Museum storage



- Korea District Heating Corporation



- Animal sanitation laboratory



- Children's library



- 4.16 Inst. of Democratic Citizenship Education



- Senior Citizens Hall



- Police Department Archives



- Chin-ju University of Education Museum



- Child Rights Protection Agency



Air-Fit20(Wall Type)Specification

Air-Fit30(Stand Type)Specification

Air-Fit50(Stand Type)Specification



Product Name	Air-Fit20	Air-Fit30	Air-Fit50
Product Size	652×355×175(mm)	300×315×1196(mm)	300×315×1550(mm)
Product Weight	15kg	27kg	32kg
Used Area	About 66m ²	About 99m ²	About 165m ²
Voltage	Convertible depending on country 50/ 60Hz, 60W	Convertible depending on country 50/ 60Hz, 100W	Convertible depending on country 50/ 60Hz, 130W
Material	Cold Rolled Steel(CR), Stainless Steel, PC Spead, ABS	Cold Rolled Steel(CR), Stainless Steel, PC Spead, ABS, Acryl	Cold Rolled Steel(CR), Stainless Steel, PC Spead, ABS, Acryl
Air Sterilization	UV-C LED, Normal visible light LED, Titanium Dioxide(TiO ₂)	UV-C LED, Normal visible light LED, Titanium Dioxide(TiO ₂)	UV-C LED, Normal visible light LED, Titanium Dioxide(TiO ₂)
4 Type of Filter	Copper filter, Activated carbon filter, Antiviral filter, HEPA filter(H13)	Copper filter, Activated carbon filter, Antiviral filter, HEPA filter(H13)	Copper filter, Activated carbon filter, Antiviral filter, HEPA filter(H13)
Noise	50db or less	50db or less	50db or less
Sterilization Module	UV-C LED 24EA, General light LED 12EA, Titanium Dioxide 4EA	UV-C LED 36EA, General light LED 12EA, Titanium Dioxide 3EA	UV-C LED 54EA, General light LED 12EA, Titanium Dioxide 4EA
LED Indication	Power Button : One-touch button Action button : 4-step touch button (FAN1, FAN2, FAN3, FAN4) Check indicator light(On/Off, FAN, FILTER)	Power Button : One-touch button Action button : 4-step touch button (FAN1, FAN2, FAN3, FAN4) Check indicator light(On/Off, FAN, FILTER)	Power Button : One-touch button Action button : 4-step touch button (FAN1, FAN2, FAN3, FAN4) Check indicator light(On/Off, FAN, FILTER)
Installation method	Wall-mount Groove, Rear part Hole 2EA	Bottom Fixing Method Adjustment 2EA / Removable caster 2EA	Bottom Fixing Method Adjustment 2EA / Removable caster 2EA



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