

Global Clean Tech Solutions Provider



# Anti-Microbial Air Purifier

## D-Guard 5

with Argenzil Silver-Ions

[www.mayair.com.my](http://www.mayair.com.my)



# About MayAir

With more than 20 years' experience in the air purification industry, MayAir clean air technology stands proven. We have been continuously providing total clean air solutions and services for biomedical industries, semiconductor electronics industries, LCD industries, automotive industries, pharmaceutical industries, food industries, petrochemical industries, as well as the commercial and residential buildings.

MayAir has established a full-coverage of services network around Malaysia, China, Singapore, Japan, Thailand, Vietnam, India, Philippines, Indonesia, Bangladesh, Middle East, Germany, England, France, Australia and Egypt etc. With over 30 sales offices and 5 manufacturing factories globally, we strive to supply the best and respond on time.

MayAir's medical grade anti-microbial air purifier D-Guard 5 is specially designed and developed to cater for the indoor air quality assurance in medical field. It is our ultimate mission to provide the best products and solutions for the sake of your health and quality of life.



MayAir production base, floor area: 40000sqm

## Certificate and Test Report

**检测报告**

检测方法:

1. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM2.5 浓度。
2. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM10 浓度。
3. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM10 浓度。
4. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM10 浓度。

检测项目	检测结果	标准值
PM2.5 (µg/m³)	0.01	0.075
PM10 (µg/m³)	0.01	0.15

PM2.5 removal efficiency test report

**检测报告**

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检测项目	检测结果	标准值
PM2.5 (µg/m³)	0.01	0.075
PM10 (µg/m³)	0.01	0.15

Formaldehyde removal efficiency test report

**国家环境检测中心 检测报告**

检测项目	检测结果	标准值
PM2.5 (µg/m³)	0.01	0.075
PM10 (µg/m³)	0.01	0.15

CADR report

**广东省微生物分析检测中心 检测报告**

检测方法:

1. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM2.5 浓度。
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检测项目	检测结果	标准值
Escherichia Coli ATCC 8739	1.8 × 10 <sup>1</sup>	3.6 × 10 <sup>1</sup>

Escherichia Coli ATCC 8739 removal efficiency test report

**广东省微生物分析检测中心 检测报告**

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检测项目	检测结果	标准值
Staphylococcus Albus 8032	1.8 × 10 <sup>1</sup>	3.6 × 10 <sup>1</sup>

Staphylococcus Albus 8032 removal efficiency test report

**CERTIFICATE OF CONFORMITY**

CE mark

CE certificate

**广东省微生物分析检测中心 检测报告**

检测方法:

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检测项目	检测结果	标准值
Staphylococcus Albus 8032	1.8 × 10 <sup>1</sup>	3.6 × 10 <sup>1</sup>

**99.89% removal efficiency for Staphylococcus Albus 8032**

**广东省微生物分析检测中心 检测报告**

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检测项目	检测结果	标准值
Escherichia Coli ATCC 8739	1.8 × 10 <sup>1</sup>	3.6 × 10 <sup>1</sup>

**99.99% removal efficiency for Escherichia Coli ATCC 8739**

**江苏省疾病预防控制中心 检测报告**

检测方法:

1. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM2.5 浓度。
2. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM10 浓度。
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4. 采用标准方法为 2014 版《环境空气质量标准》, 检测空气颗粒物 PM10 浓度。

检测项目	检测结果	标准值
Escherichia Coli ATCC 8739	1.8 × 10 <sup>1</sup>	3.6 × 10 <sup>1</sup>

**Jiangsu Provincial Center for Disease Control and Prevention Report**

# Medical Grade Anti-Microbial Air Purifier D-Guard 5

Specially designed for medical and health center

Fever test station, transfusion room, office,  
nurse station, public area, emergency ward,  
neonatal room, pediatric ward, chemotherapy ward,  
burns unit, etc.



## Air Disinfection and Purification Solutions for Medical and Health Center

### Advanced Argenzil Silver-Ions Sterilizing System

Throughout the global medical and health sector, in North America and European countries particularly, silver ion sterilization technology has been well developed and implemented. Application of silver ion is proven stable with no side effects. It has been recognized as the safest sterilization agent by NASA and is widely applied in biotechnology, medical health, aerospace warships and other fields.

For years, MayAir has been introducing its advanced Argenzil Silver-ions sterilizing technology for various application and industries. Integrated with ultrafine fiberglass filter material, the technology can inhibit the growth and reproduction of bacteria and microorganisms in the air by interfering the synthesis of their microbial cell wall and protein. In the meantime, air can be well purified. The removal rate of particles size above 0.3  $\mu\text{m}$  is as high as 99.99%.

### Technical Principle



**First layer:**  
Prefilter- Filtration of big particles

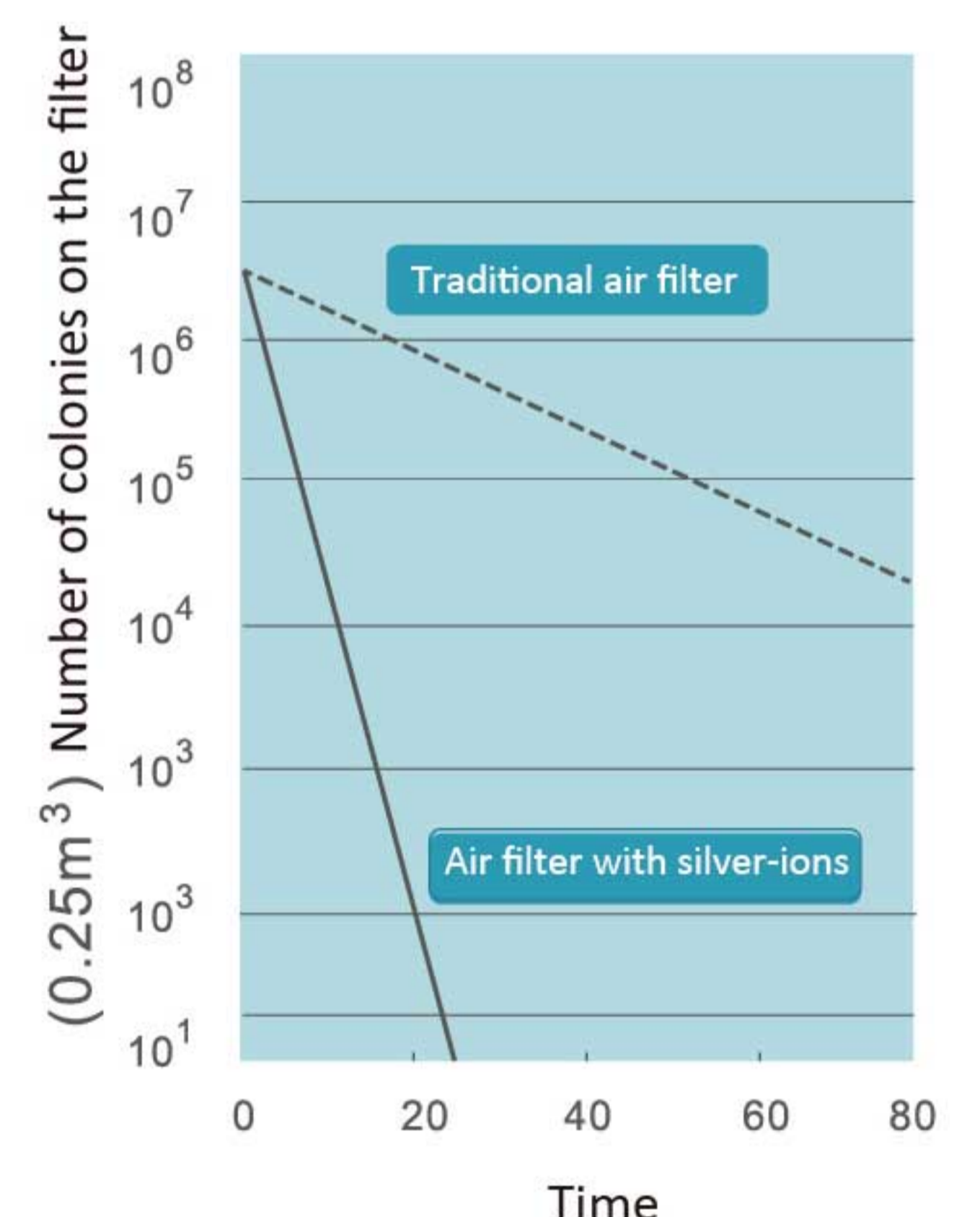
Bigger particles, fibers and fur are filtered through the prefilter, ensuring the effectiveness and lengthening the life span of the HEPA filter.

**Second layer:**  
Chemical filter- Adsorption of TVOC and formaldehyde

Gaseous contaminants like HCHO, benzene and TVOC will be adsorbed by the activated carbon filter.

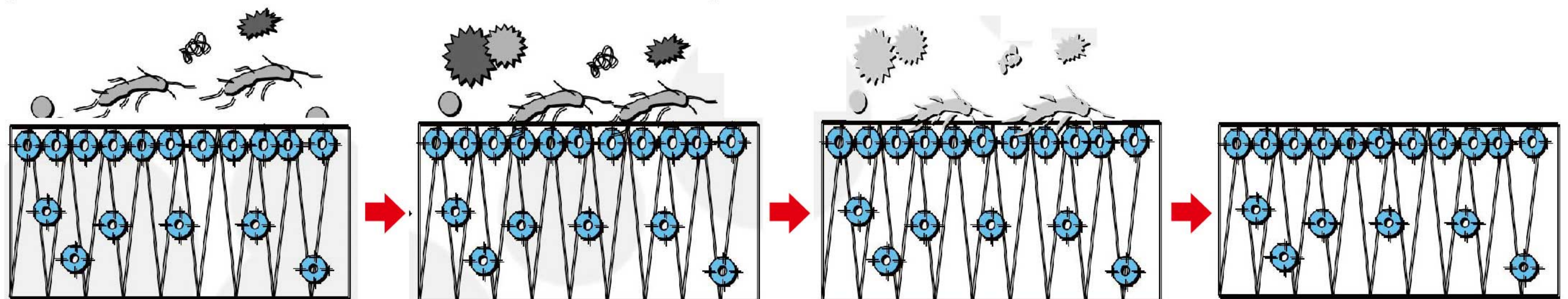
**Third layer:** HEPA filter with advanced Argenzil silver-ions sterilizing system- Air sterilization and filtration of PM2.5, PM0.3

The antimicrobial high-efficiency filter adopts MayAir's advanced Argenzil silver ion sterilizing technology to effectively eliminate all kinds of bacteria, viruses and microorganisms, Secondary pollution is eliminated at the same time. The removal rate of particle size above 0.3 $\mu\text{m}$  can reach as high as 99.99%.



### Antimicrobial Mechanism

The filter is composed of advanced antimicrobial active substances and special designed fiber media. When bacteria, viruses and other microorganisms come into contact with the surface of the filter material, the active substances will inhibit and kill them.



1. A layer of antimicrobial active substance is attached to the surface of the filter media.

2. When all kinds of microorganisms come into contact with the surface of filter media, they will be killed by the antimicrobial active substances.

3. Broad spectrum. Highly efficient towards the inhibition of microbial reproduction.

4. Advanced sustained-release technology for long-term antimicrobial effect.

# Client List

MayAir is committed to improve the air quality of medical and health center as to reduce the risk of cross infection and postoperative infection in hospitals. At the same time, MayAir strives to establish a scientific and GMP compliant sterile pharmaceutical production environment. As a fact, MayAir's clean air solutions have been implemented in more than 5000 pharmaceutical enterprises and 6000 hospitals globally.



Air Force General Hospital, China



Navy General Hospital, China



Beijing Tongren Hospital



Peking Union Medical College Hospital



The Military General Hospital of Beijing



The Shanghai Children's Hospital



International Peace Maternity and Child Health Hospital



The First Affiliated Hospital of Zhengzhou University



St. Marie Hospital



China-Japan Friendship Hospital



Huashan Hospital



Jiangsu People's Hospital



Chongqing Southwest Hospital



Changhai Hospital of Shanghai



The First Affiliated Hospital of University of South China



The First Affiliated Hospital of Chongqing Medical University



XuanWu Hospital Beijing



Zhongda Hospital Southeast University (Jiangbei)



Fudan University Shanghai Cancer Center



Chinese People's Liberation Army Hospital



PKU Healthcare

Yanbian University Hospital

Jiangsu Province Hospital of TCM

Wuxi People's Hospital

Wuhan Tongji Hospital

Guangzhou Nanfang Hospital

Zhejiang Cancer Hospital

Affiliated Stomatological Hospital of Nanjing Medical University

Guangzhou Clifford Hospital

The First Affiliated Hospital of Soochow University

Sir Run Run Hospital Nanjing

Shanghai Ninth People's Hospital

The Fifth People's Hospital of Datong

The First Affiliated Pingjiang Hospital of Soochow University

The 7th People's Hospital of Zhengzhou

Shanghai Delta Health

Shanghai Chuansha Hospital

Guangzhou Zhujiang Hospital

The First Affiliated Hospital of Sun Yat-Sen University

Weifang People's Hospital

Zibo Gaoxin Hospital

Puyang Hospital

Harbin Vets

Nanfang Hospital

Anhui Chest Hospital

Children's Hospital of Soochow University

Wuhan Jinyintan Hospital

Wuhan Union Hospital

General Hospital of Chinese People's Armed Police Forces



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 Biomedicine R&D Lifescience Park Zhongguanchun  
 Nanjing Agriculture University of Immunology  
 Center for Excellence in Molecular Cell Science Shanghai  
 Chinese Academy of Science  
 Lanzhou Institute of Biological Products  
 Hefei Tianyi Biology Technology Research Institute  
 Lanzhou Veterinary Research Institute  
 Beijing Fiveplus Molecular Medicine Institute  
 National Institute of Biological Science Beijing  
 Chengdu Institute of Biological Products  
 Hainan Institute of Biological Products

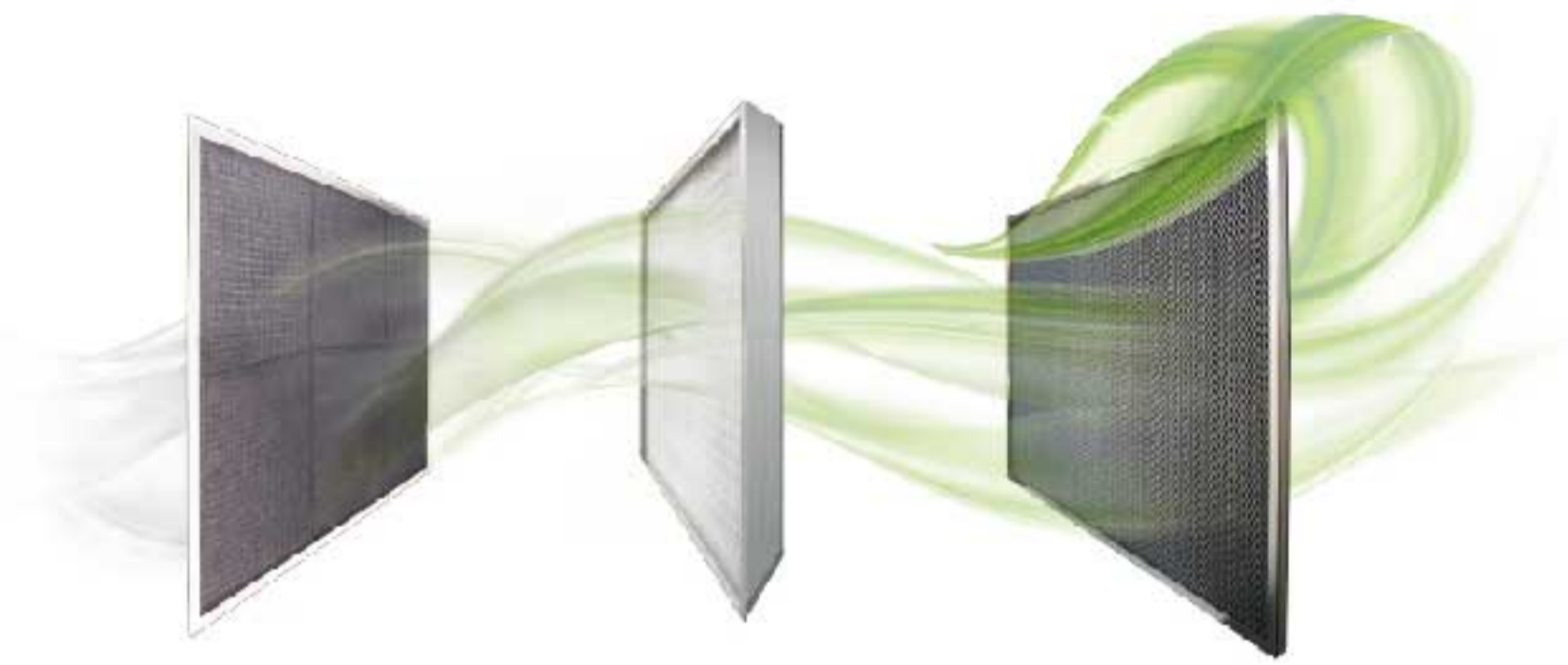


# D-Guard 5

## Medical Grade Anti-Microbial Air Purifier

**MULTIPLE filtration layer:**  
Effectively remove PM0.3, PM2.5, TVOC, HCHO and microbes.

Industrial grade ultrafine fiberglass,  
99.99% removal efficiency for particle size above 0.3 $\mu$ m.



**MULTIPLE operating speed:**  
User friendly touch screen panel for operating speed controlling.



### Clean Air Delivery Rate (CADR)

Tips: CADR stands for clean air delivery rate. It refers to the total amount of clean air output after filtration. The unit is m<sup>3</sup>/h.

CADR { CADR of particulate matter- Dust  
CADR of gaseous contaminants - HCHO, TVOC

D-Guard 5 (CADR) : 1159.92m<sup>3</sup>/h

Suggested coverage area: 100m<sup>2</sup>



### Product Parameter

Model	D-Guard 5
Dimensions (WxHxD)/ Net weight	1010×1585×170mm/85kg
Power supply	1PH/220V/50Hz
Control method	Touch screen panel
Power consumption	15-206W
Noise level (Sound pressure)	32-61dB(A)
CADR of Particulate Matter	1159.92m <sup>3</sup> /h
Energy efficiency of Particulate Matter	5.58m <sup>3</sup> /(h*W)/High efficiency
PM2.5 removal efficiency 30m <sup>3</sup> ,20min	99.90%
Coverage area	100m <sup>2</sup>
Certificate and test report	AHAM / Energy Star / EMC / CE / Jiangsu Provincial Center for Disease Control and Prevention Report
<b>Microbes removal efficiency</b>	
Staphylococcus Albus 8032 removal efficiency 20m <sup>3</sup> ,2h	99.98%
Natural bacteria 45m <sup>3</sup> ,2h	99.53%



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