

**MayAir**<sup>®</sup>

**D-Guard 5**



Anti-Microbial Air Purifier  
**D-Guard 5**  
with Argenzil Silver-Ions

# D-Guard 5

## Medical Grade Anti-Microbial Air Purifier

### 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

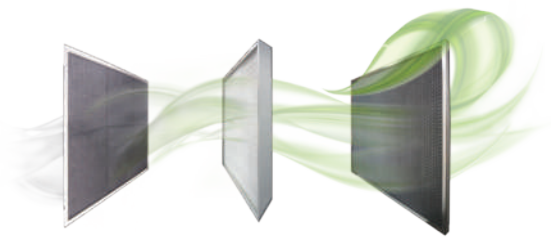
D-Guard 5 (CADR) : 1159.92m<sup>3</sup>/h  
Suggested coverage area: 100m<sup>2</sup>



### 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 0.3µm.



### MULTIPLE operating speed:

User friendly touch screen panel for operating speed controlling.



Model	D-Guard 5
Dimensions (WxHxD)/ Net weight	1010x1585x170mm/85kg
Power supply	1PH/220V/50Hz   1PH/220V/60Hz
Control method	Touch screen panel
Gear	High/Medium/Low
Power consumption	15-206W
Air flow	1.196/0.56/0.318m/s   1.292/0.614/0.396m/s
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
Microbes removal efficiency	
Staphylococcus Albus 8032 removal efficiency 20m <sup>3</sup> ,2h	99.98%
Natural bacteria 45m <sup>3</sup> ,2h	99.53%

# 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.



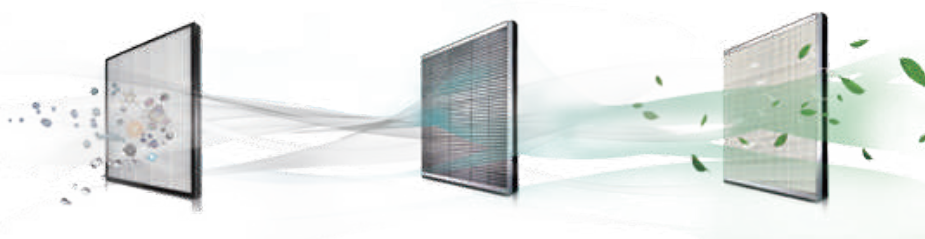
## AIR DISINFECTION AND PURIFICATION SOLUTIONS FOR MEDICAL AND HEALTH CENTER

### 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**

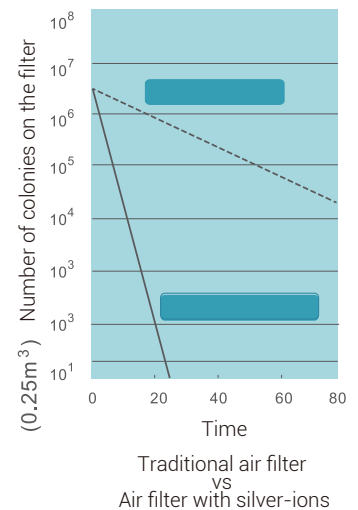
Bigger particles, fibers and fur are filtered through the prefilter, ensuring the effectiveness and lengthening the life span of the HEPA filter.

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

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

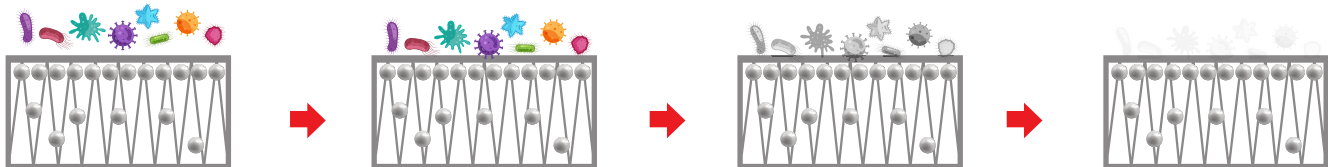
**Third layer: HEPA filter with advanced Argenzil silver-ions sterilizing system- Air sterilization and filtration of PM2.5, PM0.3**

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.



# 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

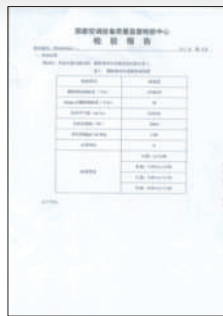
# CERTIFICATE AND TEST REPORT



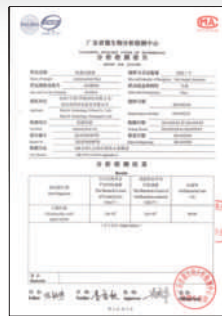
PM2.5 removal efficiency test report



Formaldehyde removal efficiency test report



CADR report



Escherichia Coli ATCC 873 removal efficiency test report



Staphylococcus Albus 8032 removal efficiency test report



CE certificate



99.89% removal efficiency for Staphylococcus Albus 8032



99.99% removal efficiency for Escherichia Coli ATCC 873



Jiangsu Provincial Center for Disease Control and Prevention Report

## 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  
Guangzhou Clifford Hospital  
General Hospital of Chinese People's Armed Polic  
Nanjing Agriculture University of Immunology

Sir Run Run Hospital Nanjing  
Shanghai Ninth People's Hospital  
The Fifth People's Hospital of Datong  
Chinese Academy of Science  
Weifang People's Hospital  
Zibo Gaoxin Hospital  
Puyang Hospital  
Harbin Vets  
Nanfang Hospital

Anhui Chest Hospital  
The 7th People's Hospital of Zhengzhou  
Shanghai Delta Health  
Shanghai Chuansha Hospital  
Guangzhou Zhujiang Hospital  
Lanzhou Institute of Biological Products  
Children's Hospital of Soochow University  
Wuhan Jinyintan Hospital  
Wuhan Union Hospital



Affiliated Stomatological Hospital of Nanjing Medical University  
Center of Systems Medicine Chinese Academy of Medical Sciences  
The First Affiliated Hospital of Soochow University  
The First Affiliated Pingjiang Hospital of Soochow University  
The First Affiliated Hospital of Sun Yat-Sen University  
Biomedicine R&D Lifescience Park Zhongguanchun  
Center for Excellence in Molecular Cell Science Shanghai  
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







**MayAir Manufacturing (M) Sdn Bhd**

No.35, Jalan P4/6, Seksyen 4, Bandar  
Teknologi Kajang, 43500 Semenyih,  
Selangor, Malaysia.

Tel: +603-8210-7373 / 7376  
Fax: +603-8210-7337

Email: [info@mayair.com.my](mailto:info@mayair.com.my)  
Website: [www.mayair.com.my](http://www.mayair.com.my)