# Haier Biomedical Intelligent Protection of Life Science

# **COVID-19 Air** Purification Sterilizer

# YKJX-Y500 Upgraded

Brand-new upgraded certified functional group MAR filter material that can inactivate the coronavirus (Covid-19). with the ability to reach a virus and bacteria inactivation rate of over 99.9% and provide fresh air (class 100.000 cleanliness) after 1 hour of operation.

## **Ouadruple Disinfection**

Modified macromolecular adsorption resin disinfection + plasma disinfection, ultraviolet + titanium dioxide photocatalyst disinfection, and nano-silver ion filtration layer disinfection together ensures bacterial and viruses purification rate > 99.9%.

## **Updated Filters**

Professional efficient filtration module plus functional group MAR filtration system helps to remove PM2.5, methanol, and VOCs with the efficiency of >99.9%, >97%, and >99% respectively.

# Fresh Air

ions so that users can enjoy clean air like immersing oneself in a forest.

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**Effectively Kills COVID-19** 

The Purification Rate > 99.9% Data from authoritative source

Haier









# **Quad-Ultra-Strong Air Purification System**



### **Plasma Purification**

When ionized by high positive and negative voltage, the air can produce a large number of positive and negative ions which will then neutralize with each other, releasing a burst of energy and killing the surrounding bacteria and viruses in an instant.



#### Ultraviolet + Titanium Dioxide Photocatalyst Purification

The titanium dioxide photocatalyst will have photo-catalytic reaction under the bactericidal ultraviolet light emitted by the 254nm-wavelength dual UV lamps, producing highly oxidizing free hydroxyl groups and active oxygen to ensure the bacteria, germs, viruses and mold oxidized are decomposed.

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Nano-silver ions have broad-spectrum strong bactericidal and antibacterial properties as well as strong permeability that can kill the bacteria and viruses on the filter surface within a few minutes.

Nano-Silver ion Filtration Layer Purification

### New Updated Dunctional Group MAR Filter System

Haler



The micro mesoporous adsorption filter system, which is rich in -COOH and -OH strong oxidizing functional group, cooperates with the mesoporous adsorption effect to make the captured protein, peptide and RNA macromole-cules undergo oxidation reaction, which makes the virus lose its activity. The modified micro-surface has a particle size of 20-30nm.

### Two kinds of filters can reach class 100,000 cleanliness after operating for 1 hour





Prefilter



High-efficiency HEPA filter screen

**Professional efficient filtration module:** Composed of front filter, pre-filter and high-efficiency HEPA filter screen; can realize a PM2.5 removal rate of > 99.9% after operating for 1 hour.



**Newly upgraded MAR filter system:** using special surface-treated polymer materials and implanted with a large number of functional groups, the specific surface area of micro meso- pores is 1000 times that of activated carbon. The sterilizer can also efficiently remove formaldehyde and VOC organic pollutants; however, it also removes RNA, peptides and has the ability of directional adsorption of protein macromolecule organic matter, under the strong oxidizing effect of functional group materials, working for one hour, the adsorption and inactivation efficiency of coronavirus is greater than 99.9%.

# Fresh Air

Negative-ion generator can release negative ions with concentration of over 3 million pcs/cm<sup>3</sup> so that the user can enjoy clean air like immersing oneself in a forest.



# **Ergonomic Design**



### Automatic monitoring of air quality:

Professional air quality monitoring module to display the air quality with light



### Filter/UV light replacement reminder:

Giving sound and light warning to remind the operators when service life of the filter module and UV light becomes no more than 10%; after replacement, the service life can be reset



### Timed shutdown function:

Timed shutdown can be set to guarantee user security and extend the service life



#### Optional intelligent air speed control and manual control:

Unique intelligent air speed function; can make adjustment automatically according to the air quality in position 1-5; also enables manual mode for position selection



### Automatic quiet mode switch function:

Professional photosensitive probe; can automatically switch to quiet mode when the light becomes dark, caring for the users' sleep quality



Fault warning function: Gives sound and light alarm when the fan or the UV lamp has a fault

Model	Voltage (V)	Power (W)	External Dimensions (W * D * H mm)	Net weight (Kg)	Noise level dB (A)	Applicable volume (m <sup>3</sup> )	Negative ion concentration	Clean class	Ultraviolet lamp life (h)
YKJX-Y500	220/50	100	439*229*735	13	≤55	≤60	3*10 <sup>6</sup>	100,000	6000
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Disinfection effects After starting disinfection for 90 minutes, the killing rate of Covid-19 virus is> 99.9%, the inactivation rate of staphylococcus albicans is> 99.9%, and the inactivation rate of H1N1 and H3N2 influenza viruses is> 99.7%.

