# UV-C Disinfection Devices

## UV-C Air Disinfection & Air Purification Unit

Signify HK | Aug 2021

PHILIPS

UV-C air disinfection unit

# Make closed spaces safe from airborne infections

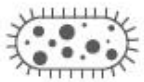

# UV-C air disinfection unit

# It's time to breathe healthy

Safe air is a necessity for a healthy life . However, indoor air pollutants like microscopic viruses and bacteria that have been known to cause a wide variety of adverse health effects, including several diseases, headaches and respiratory disorders. Hence it becomes all the more important to have a safe haven where you can actively disinfects air and address airborne transmission of pathogens.

**Introducing Air Disinfector with UV-C technology**

## Dangers in the air we breathe:



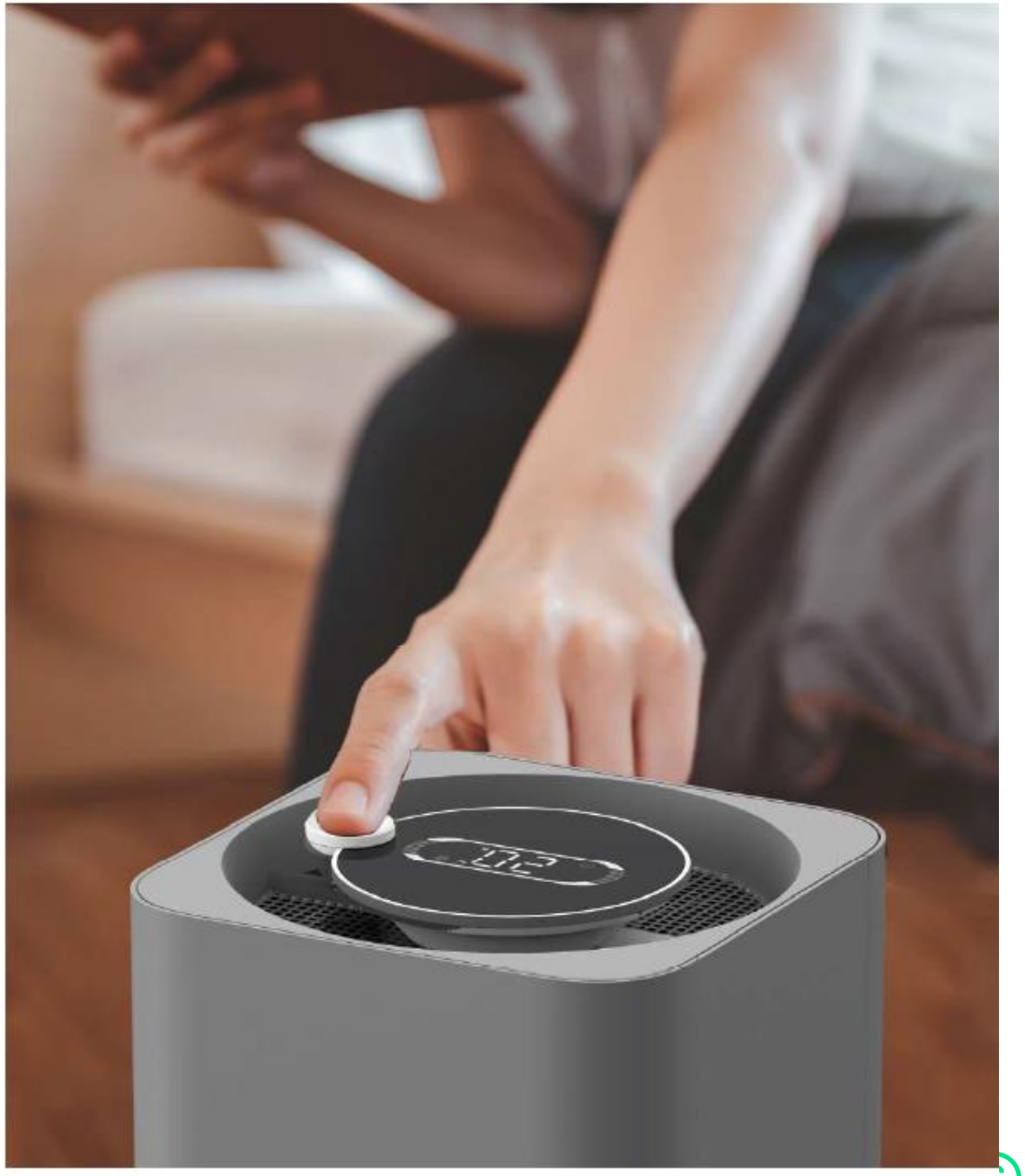
Microscopic bacteria & viruses

Children and elderly are more susceptible to respiratory disorders caused by poor air quality

"SARS-CoV-2* may also spread through aerosols in the absence of aerosol-generating procedures, particularly in indoor settings with poor ventilation."

— **World Health Organisation***

*https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions



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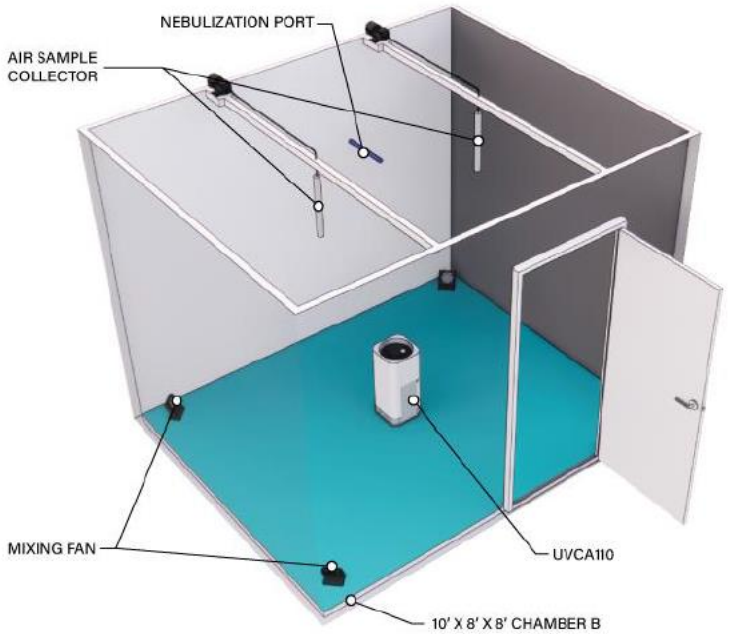
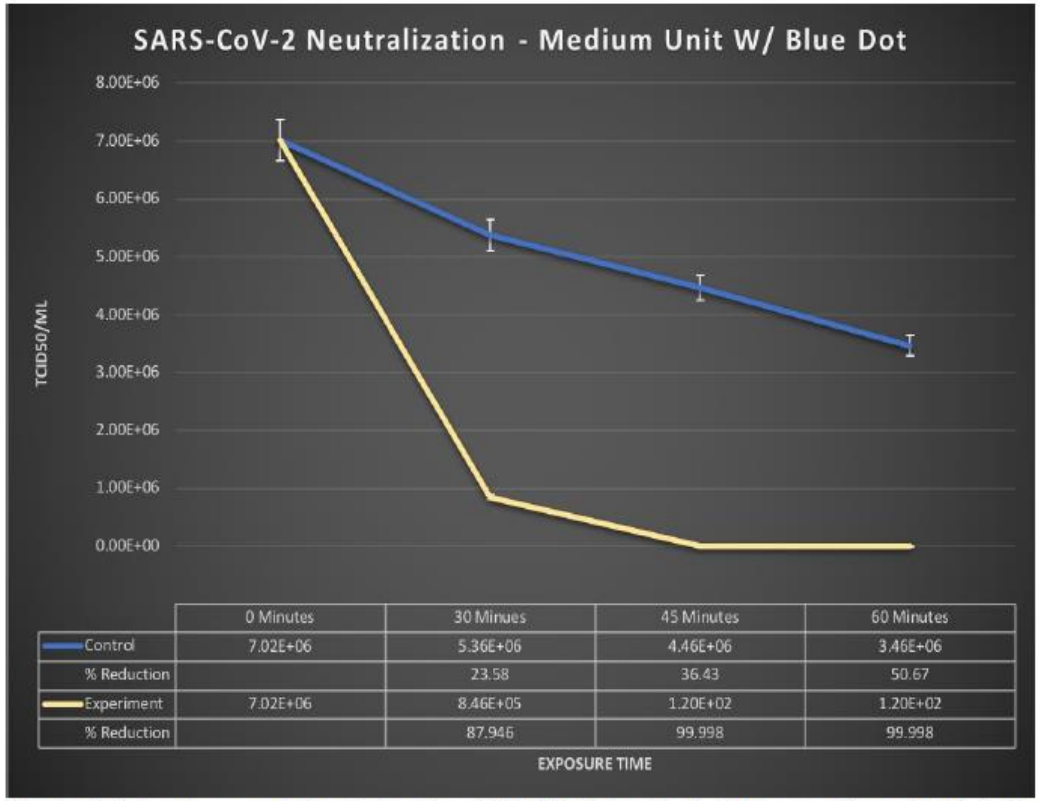
# Performance test on SARS-CoV-2

INNOVATIVE BIOANALYSIS
*creating solutions | getting results*




| | 0 Minutes | 30 Minues | 45 Minutes | 60 Minutes |
|---|---|---|---|---|
| Control | 7.02E+06 | 5.36E+06 | 4.46E+06 | 3.46E+06 |
| % Reduction | | 23.58 | 36.43 | 50.67 |
| Experiment | 7.02E+06 | 8.46E+05 | 1.20E+02 | 1.20E+02 |
| % Reduction | | 87.946 | 99.998 | 99.998 |

**As it pertains to data represented herein, the value of 1.2E+02 indicates a titer that is lower than the specified limit of quantitation. The limit of quantitation for this assay is 1.2E+02.

***As it pertains to data represented herein; the percentage error equates to an average of ±5% of the final concentration.



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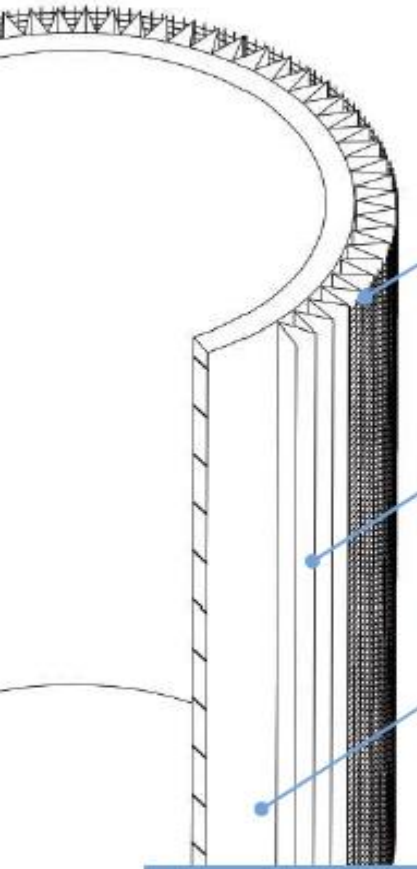
# Air disinfection unit with UV-C technology



### Pre-Filter

Removes dust and condensed fumes, Human Hair and Animal Fur, Paper, Wood and other tiny particles, plant fibres like Pollen and Cotton.

### Standard Filter

Filter large particles like dust, hair, chips and other big suspended substances in the air

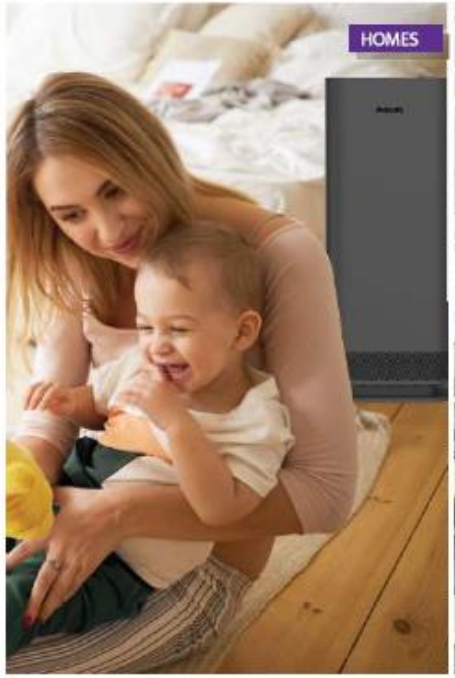
### Carbon Foam

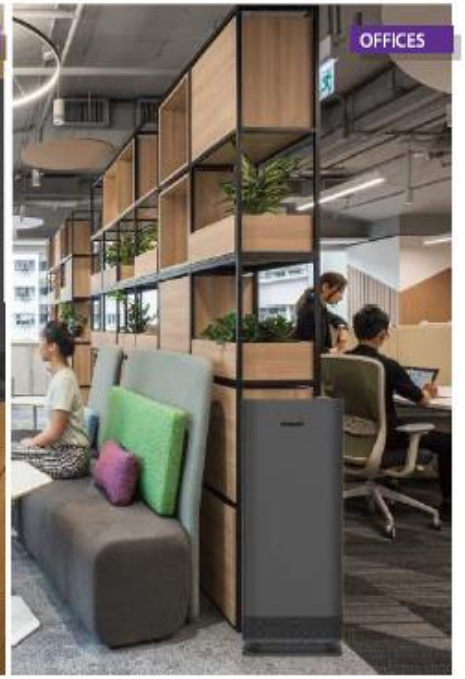
Sponge base material + activated carbon absorption material (removes Benzene, TVOCs and other harmful gases), filters the peculiar smells (bad odours).

## Disinfects air by >99.95% in 30 mins and >99.99% in 2 hours[1]

[1] Based on tests conducted at Intertek India Pvt. Ltd. , a global assurance, testing, inspection and certification agency, the Philips Air disinfection Unit With UV-C Technology, in a test chamber of 12ftx12ftx9ft demonstrated a killing rate of >99.95% in 30 mins and >99.99% in 2 hours for the tested organisms like Staphylococcus Aureus, Escherichia Coli, Aspergillus Niger and Coliphage (MS2) Bacteriophage


# Applications of Air disinfection unit with UV-C technology







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# UV-C Air Disinfection Unit G2 Medium


| | |
|---|---|
| Product model | UVCA110 |
| Colour | White |
| Input voltage | 220V |
| Wattage | 53W ±10% |
| UVC lamp power | 4 x 11W PHILIPS TL-mini |
| UVC lamp peak wavelength | 254nm |
| UVC Leakage | <= 0.2uW/cm$^2$ |
| Disinfection for bacteria lab test | >99.9% ( @10m$^3$) |
| Air Volume (min) | 260 m$^3$/h ±10% |
| Recommended coverage space | 33m$^3$ ±10% |
| Ozone free | Yes |
| Control | Button & Control panel |
| Panel functions | On/off, timer, Wind speed level<br>Ambient temperature |
| Time Setting | 1-16Hours, step length 1hour |
| Button lifetime (rotation/press) | 20k /20k times |
| Size (original) (H*L*W) | 560*235*235 |
| Wind Speed | Low/medium/high |
| Lamp Useful life | 9k hrs |
| product Lifetime | 20k hrs |
| Noise (Max) | ≦60dB(A) |
| Housing Material | Plastic |
| Approbations | IEC 60335.1 & -2-65/EMC Cisp 14/IEC62471<br>UL 507:2017 Ed.10+R:27May2020 / FCC 47CFR Part 15 (2019) +ANSI C63.10 (2013) |
| Warranty | 1 year |
| Plug/Cable | EMSD regulation standard |
| RoHS/REACH | Yes |
| Lamp failure indicator | Yes |
| Service parts | Lamps |

# UVCA110 Key features

## Strong air disinfection performance

| | |
|---|---|
| Disinfection for bacteria field test | 99.9% |

❖ Supported by field tested report

## Safe use

| | |
|---|---|
| UV-C Leakage (>200mm) | < 0.2µw/cm2 |
| Ozone free | Yes |
| Safety start | Yes |

## Easy maintenance

| | |
|---|---|
| Indicator for UV-C lamp maintenance | Yes |
| Spare parts available | Yes |


## User friendly interface


Switch button → 20K/20K times press/rotation

- Timer: 1-16Hours, step length 1hour
- Fan: three step fan speed

## UV-C resistant design

- Housing – UV resistant Plastic
- Extra supportive metal structure inside disinfection chamber

## Recommended coverage space

- 32m³ ±10%



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