



PHILIPS
UV-C Air Disinfection Unit

GCGM | 8 Sept 2021

What are bacteria and virus and why are they harmful?

Bacteria are microscopic, single-celled organisms that exist in their millions, in every environment, both inside and outside other organisms. Bacteria can cause illness that also can lead to death.

A virus is a sub-microscopic infectious agent that replicates only inside the living cells of an organism. Viruses can infect all types of life forms, from animals and plants to microorganisms, including bacteria and archaea.



Virus transmission occurs through:

1. Direct air-borne transmission between people
2. Indirect air-borne transmission through air flows
3. Indirect surface-borne transmission via contaminated surfaces

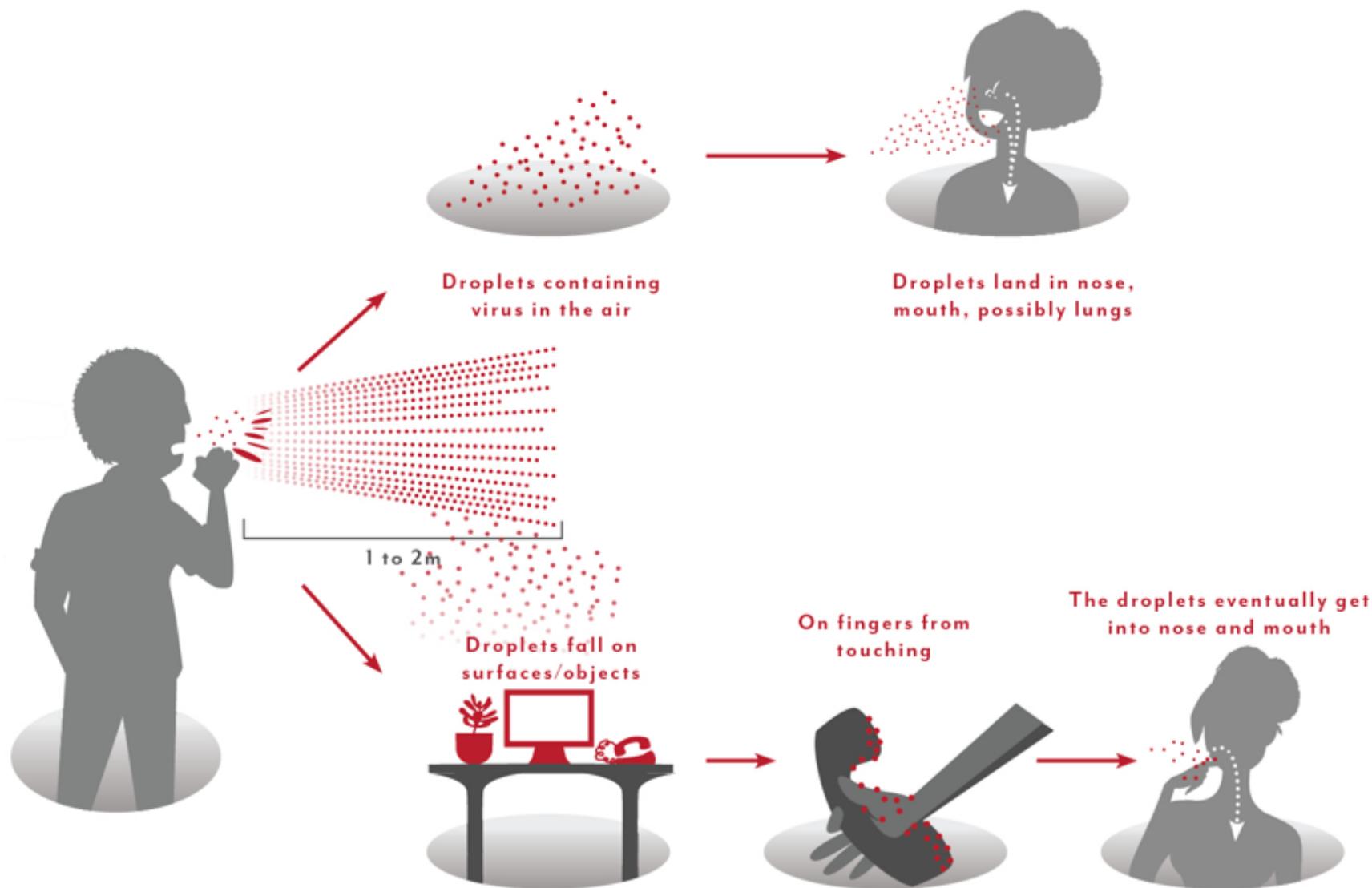


Image credit:



Why Signify?

We have more than **35 years of experience** and expertise in developing and manufacturing UV-C products.

Our Philips UV-C disinfection luminaires portfolio with UV-C lamps deliver on all the promises of UV technology.

Why is addressing airborne transmission a need of the hour?



WHO acknowledges air-borne transmission of COVID in Jul '20

THE LANCET

Lancet publishes detailed study on air being the pre-dominant medium of transmission in Apr '21

>40%

Silent Transmission accounts for >40% of transmission.

Long Range transmission between people who were never in each others presence

Airborne pathogens

SARS COV-2, Influenza, Tuberculosis, Chickenpox, Measles, SARS, MERS etc

PHILIPS

UVC Air Disinfection Unit

PHILIPS



Actively disinfects air in closed spaces

Philips UV-C air disinfection unit actively disinfects it using our state-of-the-art UV-C technology.

It is a comprehensive solution to address airborne transmission of pathogens.

It comes in three disinfecting capacities, ideal for all the Indoor professional applications.

Three disinfecting capacity



Big

700x280x280mm



Medium

560x235x235mm



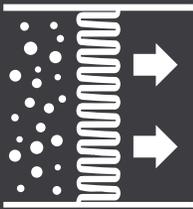
Small

300x170x170mm



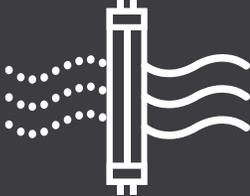
Strong air disinfection performance with UV-C technology

Multi layer filtration



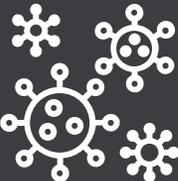
Carbon Filter

+

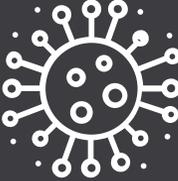


Air Disinfection By UV-C Lights

UV-C disinfection chamber effective against:

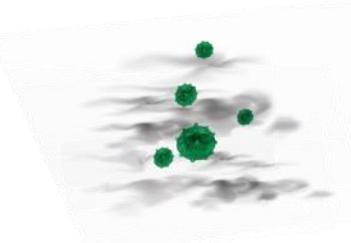


SARS-CoV-2*

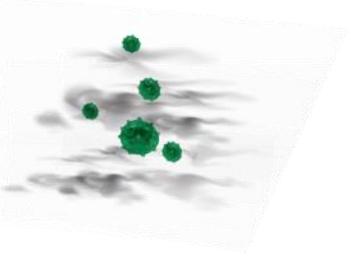


Virus & Bacteria

Disinfected air output



Air input



UV-C Disinfection

UV-C Air Disinfection reducing airborne pathogens by >99.99% **

Effective Against



SARS-CoV-2*



Virus & Bacteria**

*Proven to be effective against SARS-CoV-2. (Ongoing- expected in October)



Air filters

Pre-Filter

Removes Dust and condensed fumes, Human Hair And Animal Fur, Paper, wood and other tiny particles, plant fibers 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 adsorption material (remove benzene, TVOCs and other harmful gases), filter the peculiar smell (Bad Odors)

Air disinfection with UV-C technology



Suits all your Indoor spaces

Effective air disinfection for closed spaces of various sizes.

- Office
- Hospitality
- Retail
- Schools
- Banking
- Industry
- Vaccination centers





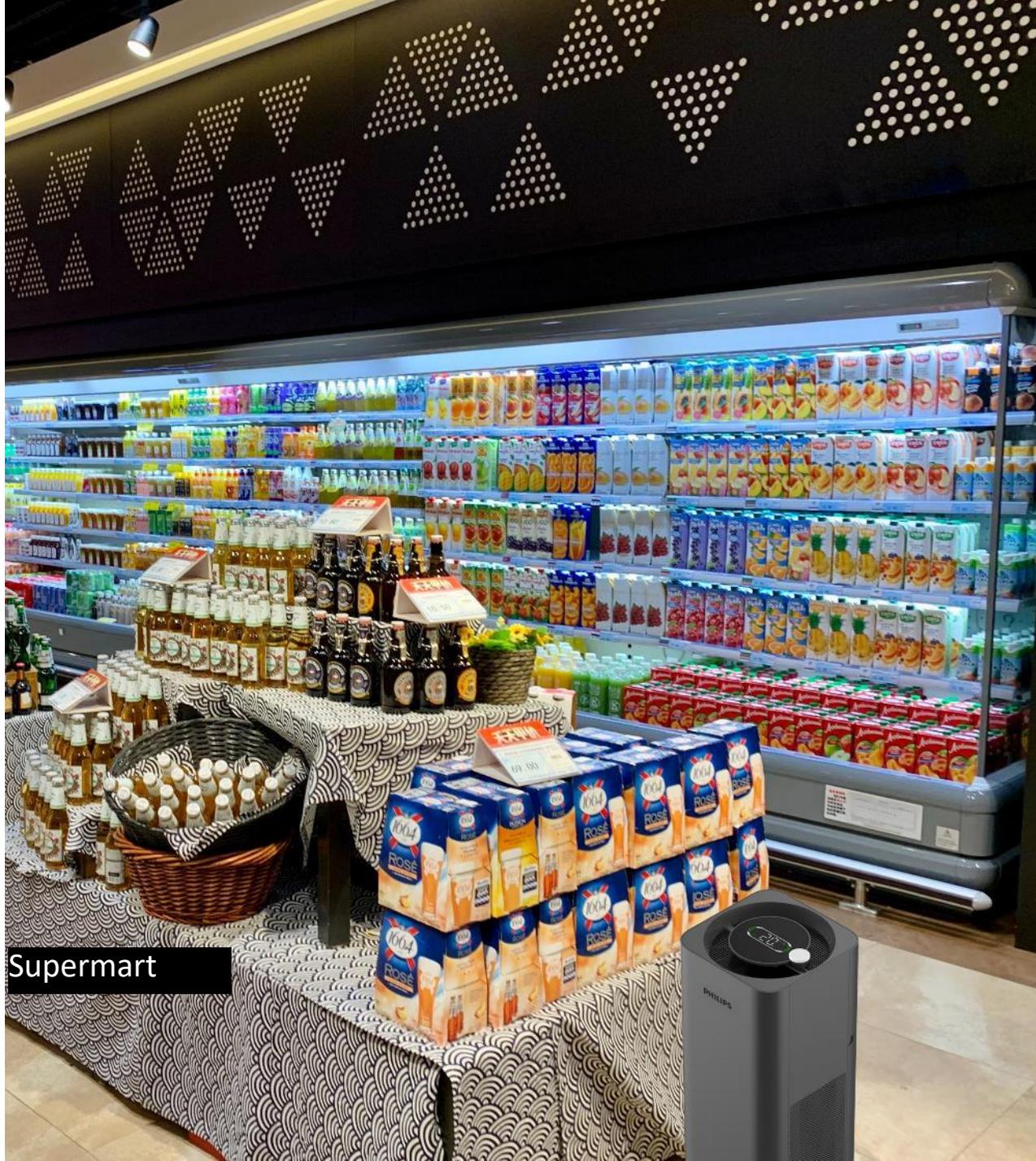
Gyms



Vaccination centers



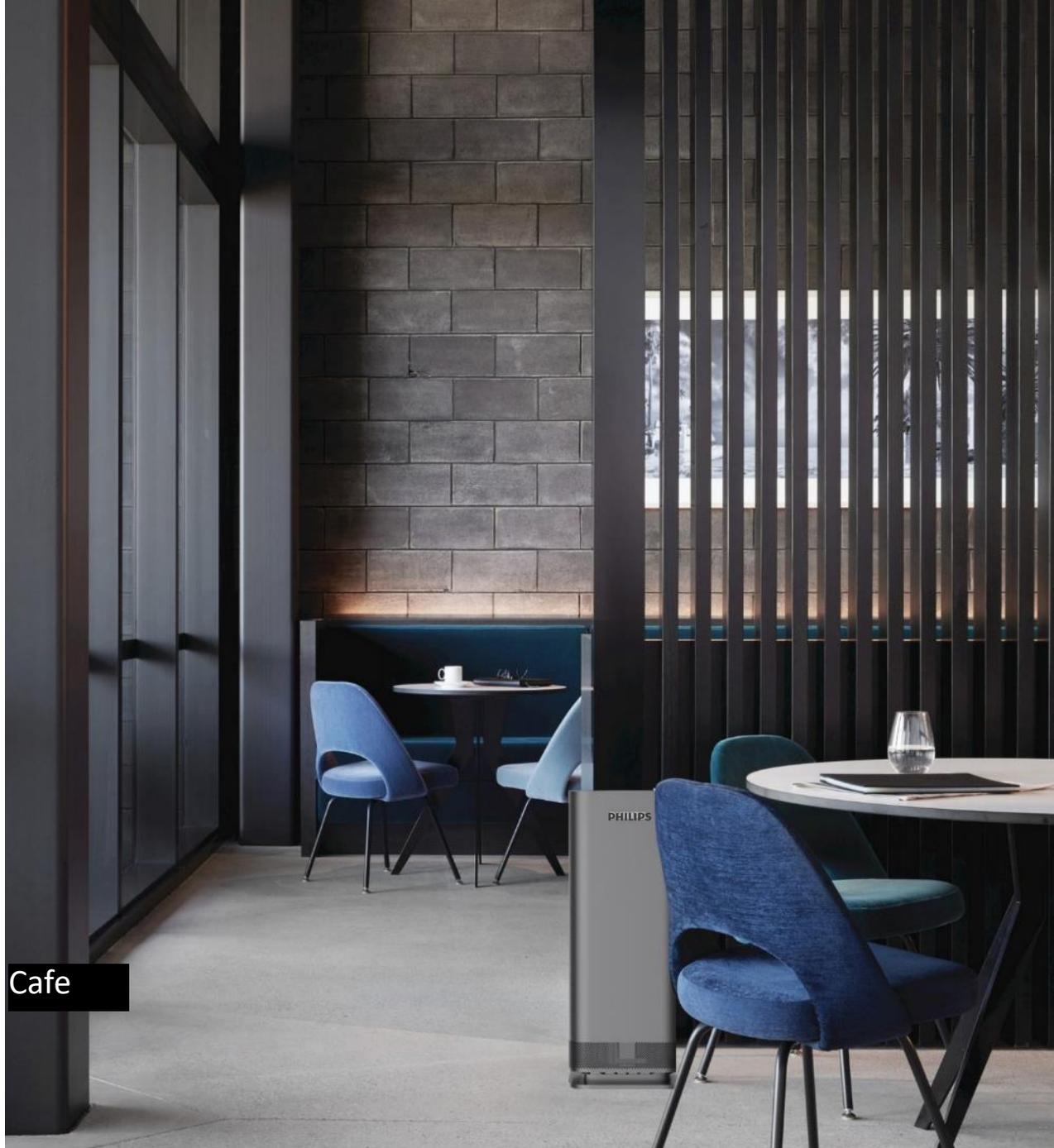
Factory



Supermart



Office



Cafe

Air exchange volume in three different sizes

- Disinfects a standard room^[2] in just **10 minutes**.

Air exchange volume

Big

- Silent mode: 130 m³ per hour | Normal mode: 280 m³ per hour
- Ludicrous mode: 400 m³ per hour
- Max speed mode

Medium : 33m³ of room space

Ludicrous mode: 260 m³ per hour

Max speed mode

Small : 10m³ of room space

80 m³ per hour

2. Standard room size 215 sq.ft.



User-friendly interface

One-button control

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



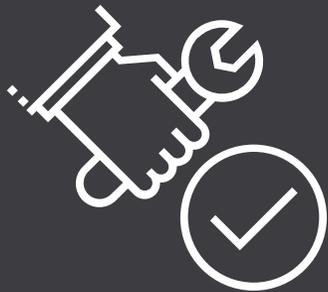
Ease of maintenance

- Indicator for UV-C lamp failure
- UV-C lamp Lifetime ending warning
- Filter replacement prompt function.
- Spare parts available
- Simple process for maintenance and replacement of filters and UV lights at home.



Product Safety

- **Safe to use**
 - UV-C Leakage : $< 0.2\mu\text{w}/\text{cm}^2$
 - Ozone free
 - Safety start
- **Easy maintenance**
 - Indicator for UV-C lamp maintenance
 - Spare parts available
- **UV-C resistant design**
 - Housing – UV resistant Plastic
 - Extra supportive metal structure inside disinfection chamber



Key parameter

Product	Size (mm)	Operational input voltage (V)	Wattage (W)	UV-C lamp type	Air exchange volume (m ³ /h)	Noise level at highest speed(dbA)	Applicable room for disinfection (m ³)
Big	700x280x280	100-300	90	4x16W	400	≤65	50m ³
Medium	560x235x235	100-300	53	4x11W	260	≤60	32m ³
Small	300x170x170	100-300	25	2x9W	80	≤55	10m ³

	Big	Medium	Small
X=Volume (m ³)	e ACH	e ACH	e ACH
10m ³	20.8	13.5	4.2
15m ³	14	9	2.8
30m ³	7	4.5	1.4
50m ³	4.2	2.7	-
75m ³	2.8	1.8	-

*Typical height 2.4 m



Specification

Product	Large – UVCA210	Medium – UVCA110	Small – UVCA010
Size (HxLxW) Weight (kg)	700x280x280 7.3 Kg	560x235x235 5.4 Kg	300x170x170 3.5 Kg
Operational input voltage	100V-300V	100V-300V	100V-300V
Input frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Wattage (max)	90W ±10%	53W ±10%	25W ±10%
UV-C lamp type	4x16W TL-mini	4x11W TL-mini	2x9W PLS
Air exchange volume	400 m ³ /h ±10%	260m ³ /h ±10%	80m ³ /h ±10%
Control	Button	Button	Touch panel (on/off)
Time setting	1-16 hours, step length 1 hour	1-16 hours, step length 1 hour	No
Wind speed	3 steps	3 steps	1 step
Lamp - useful life Ballast switch times	9000 hrs 6000	9000 hrs 6000	9000 hrs 1500
Noise level at highest speed	≤65dB(A)	≤60dB(A)	≤55dB(A)
Housing material	UV stabilized plastic	UV stabilized plastic	UV stabilized plastic
Anti cleaning panel - lifetime	20K hrs	20K hrs	20K hrs
Surge (L/N)	1kV	1kV	1kV
UV-C lamp maintenance	Yes	Yes	Yes
Ozone free	Yes	Yes	Yes
Indicator for lamp maintenance	Yes	Yes	Yes
Lamp failure indicator	Yes	Yes	Yes
RoHS/reach	Yes	Yes	Yes
Filter replacement indicator	Yes	Yes	Yes
UVC exposure protection (Lamp function only when door is closed)	Yes	Yes	Yes
Ambient temperature monitoring	Yes	Yes	No

Our promise

Move free

No UV-C hazards for human & living beings .

Our product design strictly follows signify RGO guideline, which is much stricter than international IEC 62471: 2006 standard.

Breathe Clean

UV-C Air Disinfection reducing airborne pathogens by >99.9%

Easy Maintenance

Easy for maintenance and replacement at home



Application considerations

- Our UV-C Products are not meant to be used in applications or activities which may cause and/or lead to death, personal injury and/or damage to the environment.
- This UV-C product is intended to be used for the disinfection of Indoor air.
- This UV-C product is not approved and / or certified as a medical device.
- The back cover must be closed properly before disinfection, otherwise the UVC lamp won't work. There should be no light leakage at the air inlet on the side of the body. If there is, please check whether the filter is installed correctly. Signify will not be responsible for any accidents/injuries caused by exposure to UV-C light.
- Please contact manufacture or its maintenance department and other similar professionals for repair. When the product is working normally, the UV-C radiation at 200mm from the product is $<1\text{mW/m}^2$. If the power cord is damaged, it must be replaced with a dedicated cord or with a dedicated component purchased from its manufacturer or maintenance department.
- UVC Exposed luminaire parts (other than metal parts), like Lamp holder, end cap etc. might change color after a certain period of usage due to the UV-C light property.
- UV-C light emitted from UVC lamp is much "stronger" than normal sunlight and can cause a severe sunburn-like reaction to your skin, and similarly, could damage the retina of your eye, if exposed.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- In case of accidental breakage of the lamp tube, it should be ventilated for 30 minutes first.
- Please remove the debris with gloves, put it in a sealed plastic bag and take it to a local waste disposal site for safe disposal.

Signify