

FAQ – Air Sterilizer

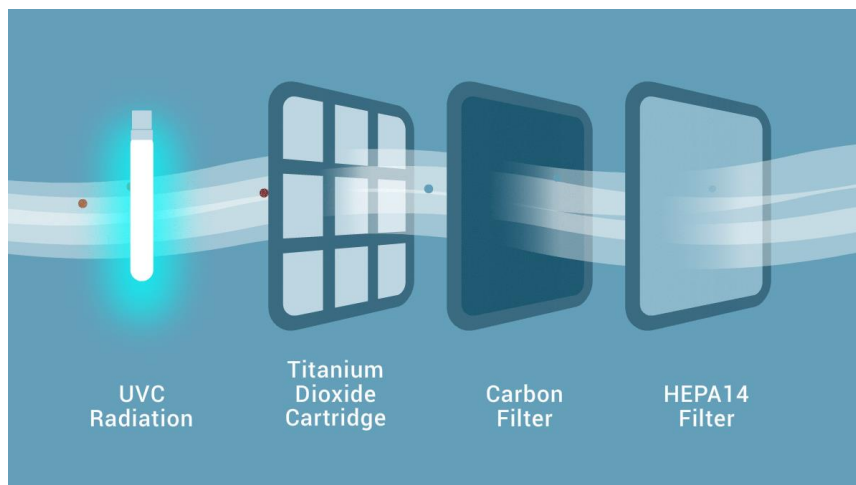
How does the UVC Air Sterilizer work?

The air is sucked in from the bottom. First the air passes through a pre-filter which remove all particles bigger than 200 μm . The air is then moved via a ventilator housing into a cartridge filter.

Inside the filter, the air is irradiated by UVC light with a wavelength of 254 nm and an intensity of $392 \mu\text{W}/\text{cm}^2$ which destroys DNA/RNA of bacteria, viruses, and fungi in the air.

Next the air passes through a titanium dioxide-coated filter which in combination with the UVC light destroys the wall of the cells of the microorganisms.

After that the air passes through an activated carbon filter, that absorbs odors and other particulate pollutants and finally the air passes through a HEPA 14 filter. Lastly, the sterilized air is re-circulated into the room.



What is the volume of the filters in the UVC Air Sterilizer?

Small UVC Air Sterilizer: 0,75 m² TiO₂ coated filter, a 0,8 m² activated carbon filter with 500 gram activated carbon per m² and a 14,5 m² HEPA 14 filter.

Large UVC Air Sterilizer: 1,15 m² TiO₂ coated filter, a 1,2 m² activated carbon filter with 500 gram activated carbon per m² and a 22,5 m² HEPA 14 filter.

The filter volume for the Large Extra High Capacity and the Industrial model is identical with the volume in the Large model.

CONTACT

Why does the UVC Air Sterilizer have much more filter-volume than other products?

This is your guarantee for very high efficacy. The high volume of filter materials secures that the documented efficacy last for at least one year even with the UVC Air Sterilizer running 24/7.

Why use a UVC Air Sterilizer?

The UVC Air Sterilizer has been tested by Copenhagen University Hospital, Rigshospitalet, who has documented an effect up till 80 % reduction of CFUs in the air after usage of the UVC Air Sterilizer

How to use the UVC Air Sterilizer?

Place the UVC Air Sterilizer in a corner or alongside the wall, plug it in and turn it on.

Where to use the UVC Air Sterilizer?

In all places where many people are gathered and in hospital wards where patients have a low immune system.

The advantages and benefits of using the UVC Air Sterilizer?

The advantage is that you have constant sterilization process of the air securing a safer and more pleasant environment.

The effect of using the UVC Air Sterilizer?

Copenhagen University Hospital, Rigshospitalet has tested the product both in laboratories and in a clinical setting and has documented a reduction of CFU up till 80 pct in hospital wards with activities.

Is there any documentation for the efficacy of the UVC Room Disinfectant?

Yes, Copenhagen University Hospital, Rigshospitalet has issued a test report based on their testing in clinical environment and in laboratories.

What is the capacity of the UVC Air Sterilizer?

Small: 400 m³ air/hour

Large: 800 m³ air/hour

Large Extra High Capacity and Industrial model: 1,840 m³ air/hour

What is the UVC irradiation dose?

Small: 3 UVC Lamps giving 254 nm and an intensity of 392 $\mu\text{W}/\text{cm}^2$ each

Other models: 4 UVC Lamps giving 254 nm and an intensity of 392 $\mu\text{W}/\text{cm}^2$ each

How do I know, that the UVC Air Sterilizer is sterilizing the air and reducing the germs efficiently?

The UVC Air Sterilizer will give an alarm, in case one of the lamps are not working efficiently. If the filters and the lamps are changed once a year with identical lamps and filters, the product will have the efficacy as documented by Copenhagen University Hospital, Rigshospitalet.

Is it possible to stay in the room while the UVC Air Sterilizer is on?

Yes, the UVC lamps are placed inside the filter cabinet and the irradiation takes place inside the unit. The sterilizing process is chemical free and does not leave any by-products.

What is the noise-level of the UVC Air Sterilizer?

Small UVC Air Sterilizer: Day mode 28,7 dBA – Night mode 17,9 dBA

Large UVC Air Sterilizer; Day mode 28,2 dBA – Night mode 18,1 dBA

Shall I turn off the ventilator and/or the air-con while the UVC Air Sterilizer is running?

No, your normal systems can continue as usual.

What is the price for a UVC Air Sterilizer?

Please contact Dolphin Care or their local distributor to get a quotation.

What are the running costs for the UVC Room Disinfectant?

The UVC Air Sterilizer has the following power consumption:

Small: 4,5 kW/24hour

Large: 6,5 kW/24 hour

High Capacity/industrial model: 14,3 kW/24hour

You need to change the UVC lamps and the filters once a year to keep the high efficacy of the UVC Air Sterilizer. You can either purchase the service pack and do the installation yourself or sign a service agreement and your local Dolphin Care partner.

Is there a warranty and what does it cover?

The UVC Air Sterilizer comes with a 3-years warranty and covers the electrical parts.

How do I maintain the UVC Air Sterilizer?

Like your vacuum cleaner you need to change the pre-filter regularly. You receive 5 extra pieces of pre-filter on delivery. The frequency of changing depends on the general pollution in the room.

The pre-filter is placed in the bottom and is rather easy to change.

And then you need to change the filter and UVC lamps once a year. You can either order the spare-parts from us or sign up for a service agreement and we will automatically change the parts every 12th month.

What surface area does the Air Sterilizer cover?

The UVC Air Sterilizer does not clean the surfaces. It is only sterilizing the air.