

# Simply more secure with UVC air disinfection

Reliably inactivates **INFLUENZA & CORONA VIRUSES**  
(for example SARS-CoV-2 and its mutations), bacteria  
and many other germs

Free from  
chemicals &  
ozone

Super silent 35 - 39 db(A)  
at compact design

Low follow-up costs:  
no filter replacement!



**SteriWhite Air**  
**Q115 / Q330 / Q600 / Q900**



reddot winner 2021  
Category Product Design

# SteriWhite Air Q – reliable air disinfection



## Quality in accordance with industry standards – Dr. Höhle AG

Dr. Höhle AG has been developing and producing UV systems since 1976 and is one of the world's most successful suppliers of UV technology.

- over 40 years UV technology
- over 30 years UVC disinfection
- over 20 years air disinfection



## Why is it so important to disinfect room air?

SARS-CoV-2 viruses are primarily transmitted via **aerosols** emitted into the surrounding air when we breathe. UVC ambient air disinfection systems are an effective method of reducing the germ load in the environment – and not only during the Corona pandemic!



## How does UVC disinfection work?

When aerosols are exposed to UVC radiation with a wavelength of 254 nm, the viruses they contain (coronaviruses and influenza viruses, to name but a few), bacteria and mould spores are inactivated and rendered harmless.

The high disinfection power of UV radiation has been scientifically proven for decades, and its effect on coronaviruses has also been amply confirmed. The disinfection of the air and surfaces with UVC radiation safely and efficiently minimises the risk of infection with SARS-CoV-2 and other pathogens.

**Chemical-free UVC disinfection has been used successfully for many years in food production, water treatment and health care (e.g. in hospitals and laboratories).**



## How does SteriWhite Air Q work?

SteriWhite Air Q is a highly efficient UVC system for air disinfection. Extremely low-noise fans actively route the germ-laden air into the interior of the unit, where it flows past UV lamps. Air volume, flow speed and UVC dosage are coordinated perfectly to achieve excellent inactivation rates.



## What are the advantages of UVC air disinfection over HEPA filters?

UVC air disinfection units do not require filter systems. **No regular replacement of expensive filters is necessary.** It is strongly recommended to wear protective clothing (gloves, full-face mask and possibly eye protection) when changing contaminated filters as polluted filters may e.g. cause allergic reactions.

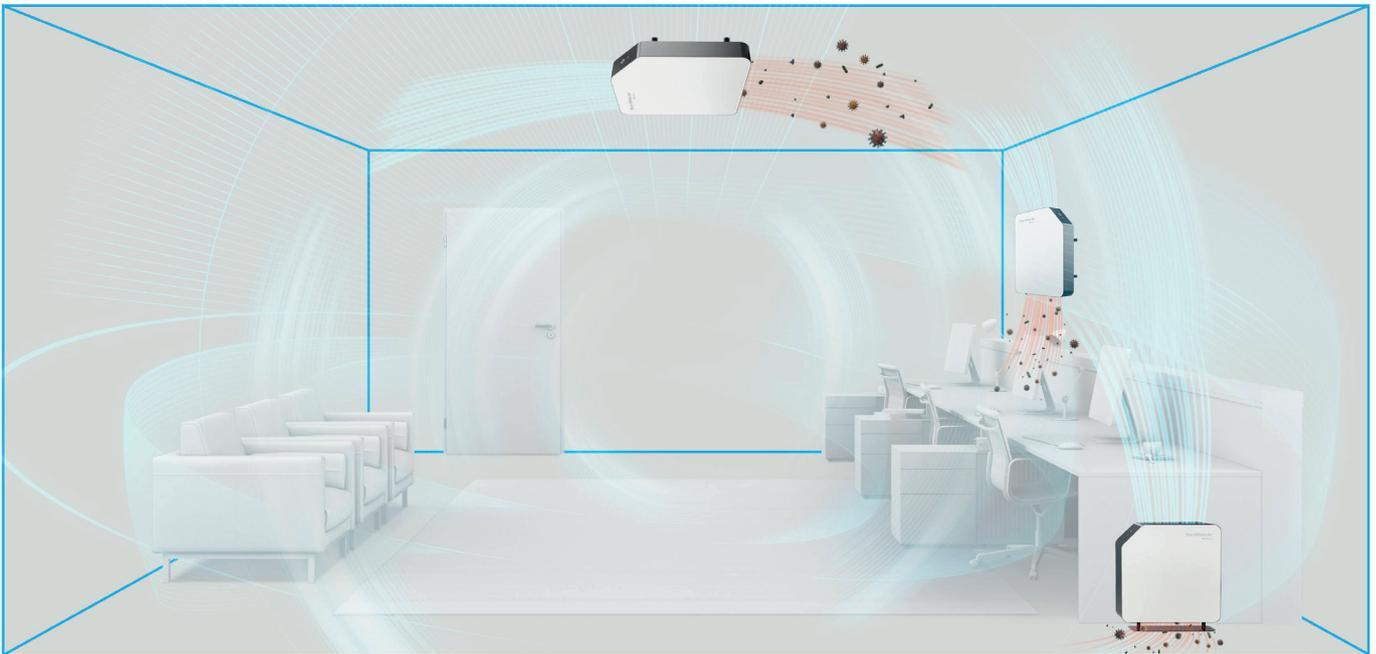
**Replacing the UVC lamp is easy and only becomes necessary after approx. 16,000 operating hours.** Depending on operation times, the lamps have to be changed only after a period of two to ten years.

**The products in the SteriWhite Air Q series are particularly maintenance-friendly, energy-efficient and quiet.**



## How easy is operation and handling?

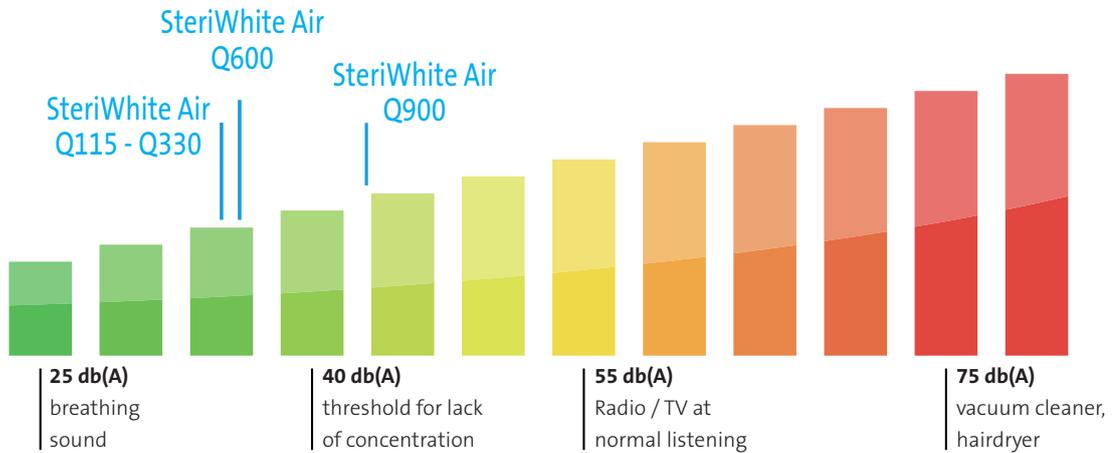
- Plug & Play
- Base stand or simple installation on the ceiling or wall;  
**we would be happy to advise you on the ideal positioning of the units**



The graphic shows three possible installation locations as an example. SteriWhite Air Q ensures continuous air circulation in closed rooms in order to achieve maximum inactivation of aerosol-bound viruses, bacteria and mould spores.

# SteriWhite Air Q – reliable air disinfection

With its elegant design and extremely **quiet operation**, the SteriWhite Air Q fits unobtrusively yet highly effectively into your rooms.



## Isn't it enough to open the windows regularly to ventilate rooms?

Opening windows and doors produces an exchange of air in the short term, but after this brief period, the germ or virus load increases again. In contrast, SteriWhite Air Q ensures continuous circulation and disinfection of the air, thus reducing the germ concentration sustainably. A combination of the two measures is ideal (see table **Air cleansing concept on page 7**).



## Do I have to vacate the room while the air is being disinfected?

Not necessary, because SteriWhite Air Q was developed specifically for use **in occupied** rooms. According to the values measured by an external lighting laboratory, the units fall within the category free of risk as defined by DIN EN 62471 and thus pose no photobiological hazard.

- Produces neither ozone nor other harmful substances
- Safe housing
- Free of chemicals



## Do I still need to comply with the hygiene regulations?

Yes, please continue to follow the current hygiene rules. However, UVC air disinfection does reduce the risk of infection considerably!



## Where is SteriWhite Air Q used?

Due to their easy handling and high safety standard, the units can be used anywhere, in particular in places where increased safety and low noise emissions are important, such as:

- Doctor's surgeries, hospitals
- Offices, meeting rooms and welfare areas
- Health care facilities such as retirement and nursing homes
- Day nurseries, schools and educational institutions
- Reception and waiting areas
- The catering and hotel industry
- Stores and the retail trade

We also offer other units, which are used, for example, in production halls. Ask for details!

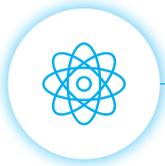


# SteriWhite Air Q – reliable air disinfection



## What about when the Corona pandemic is over?

The SteriWhite Air Q will continue to reduce the risk of infection with viruses (for example flu viruses), bacteria or other germs.



## Scientific studies on UVC disinfection

Various studies confirm the high effectiveness of UVC disinfection – here are a few:

### Study of inactivation on SURFACES

2020, Goethe-Universität Frankfurt, Dr. Hönle AG, Test series on the inactivation of SARS-CoV-2 by UVC radiation.

**Result: Inactivation rate achieved in the laboratory: 99.99 %.**

### Study of inactivation in AEROSOLS

2012, Harvard School of Public Health Boston, Mcdevitt, James & Rudnick, Stephen & Radonovich, Lewis. Aerosol Susceptibility of Influenza Virus to UV-C Light.

**Result: Inactivation rate achieved in the laboratory: 98.2 %**

2021, University of Bochum, Study on room air disinfection with SteriWhite Air Q. Inactivation performance under real conditions on typical microbial loads

**Result: Inactivation proof of germ reduction in the room**

2022, University Hospital Tübingen, Institute for Flow Research at the Heilbronn University, High Security Test Bench for Aerosols

**Result: Inactivity rate: 99,9% (achieved in the laboratory)**

### Conclusion:

**The disinfection power of UV radiation is scientifically proven, also with regard to its effectiveness against coronaviruses.**

Current scientific studies indicate that **mutations of coronaviruses** are also reliably inactivated by UVC radiation.

2020, Technische Hochschule Ulm, Hessling, Martin & Hönes, Katharina & Vatter, Petra & Lingenfelder, Christian. Ultraviolet irradiation doses for coronavirus inactivation.

## Technical data

Model	Q115	Q330	Q600	Q900
Air flow* m <sup>3</sup> /h	approx. 115	approx. 330	approx. 600	approx. 900
Dimensions** (HxWxD) in mm	600 x 600 x 100	860 x 860 x 210	860 x 860 x 315	860 x 860 x 315
UVC lamp operating hours in h	up to 16,000	up to 16,000	up to 16,000	up to 16,000
Supply voltage	230 V / 50 Hz			
Power consumption in watts	approx. 60	approx. 200	approx. 300	approx. 450
Emission sound pressure level LpA in dB(A) in 1 meter distance at maximum flow rate <b>Super Silent Mode***</b>	≤ 35	≤ 35	≤ 36	≤ 43 at 900 m <sup>3</sup> /h ≤ 40 at 750 m <sup>3</sup> /h
Weight in kg	approx. 15	approx. 38	approx. 44	approx. 46

\* with standard room air: 20 °C, 50 % air humidity

\*\* housing size without base stand or wall bracket; dimensions and weight vary according to unit version

\*\*\* air flow rate and volume level can be controlled in two stages at the touch of a button

## Hönle air cleansing concepts

Which SteriWhite Air Q units and how many units you require for your rooms depends on various factors. The table below provides an initial overview as an example.

We would be happy to provide personal support in defining your exact requirements.

Example room	Meeting room		Office for 2 persons		Doctor's waiting room		Office for 4 persons		Classroom		Restaurant	
Room area [m <sup>2</sup> ]	25 m <sup>2</sup>		25 m <sup>2</sup>		25 m <sup>2</sup>		45 m <sup>2</sup>		70 m <sup>2</sup>		100 m <sup>2</sup>	
Room volume [m <sup>3</sup> ]	63 m <sup>3</sup>		63 m <sup>3</sup>		63 m <sup>3</sup>		113 m <sup>3</sup>		175 m <sup>3</sup>		250 m <sup>3</sup>	
No. of persons [#]	6		2		3		4		25		35	
Duration of occupancy [h]	2 h		7 h		1 h		7 h		2 h		2 h	
Unit selection	1x Q115	1x Q330	1x Q115	1x Q330	1x Q115	1x Q330	1x Q330	1x Q600	1x Q600	2x Q600	1x Q900	1x Q900 1x Q600
Air cleaners reduce the risk of infection by [%]	> 70 %	> 80 %	> 70 %	> 80 %	> 70 %	> 80 %	> 70 %	> 80 %	> 70 %	> 80 %	> 70 %	> 80 %
Air cleaners + 1x periodic ventilation reduce the risk of infection by [%]	> 80 %	> 90 %	> 80 %	> 90 %	> 80 %	> 90 %	> 80 %	> 90 %	> 80 %	> 90 %	> 80 %	> 90 %
	STERIWHITE AIR Q115		STERIWHITE AIR Q330		STERIWHITE AIR Q600		STERIWHITE AIR Q900					

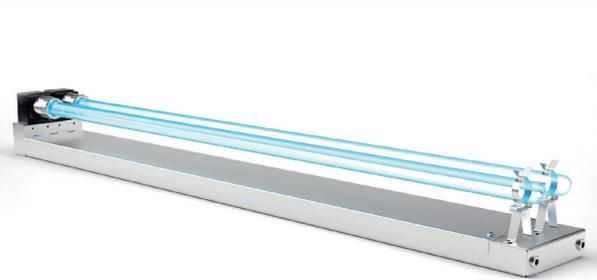
Based on "COVID 19 Aerosol Transmission Risk Calculator" of the Max-Planck-Institute for Chemistry: <https://www.mpic.de/4747361/risk-calculator>

Assumptions: Room height= 2.5 m; persons performing sedentary work; persons not wearing face masks; percentage of time talking 20 %; example calculation office for 4 persons: Risk of at least one further person being infected if one person present is highly infectious; without air cleaner 50 %, with Q600 air cleaner 6.6 %, which means a reduction in the risk of infection of >80 %

For details of further units, also for retrofitting existing room air technology, see: [www.hoenle.com/air-disinfection](http://www.hoenle.com/air-disinfection)



KB units are used to reliably sterilize air flow in smaller air conditioning and ventilation systems.



The KB299 offers high-quality finishing that provides efficient UVC disinfection of air flows in central air conditioning and ventilation systems.



The KLR Rack is used to sterilize the air flow in large or very large central air conditioning- and ventilation systems.



The KLM module was specifically developed for UVC disinfection of the air flow in central air conditioning and ventilation systems.

## SteriWhite Air Q115 / Q330 / Q600 / Q900

- Extremely quiet, no annoying air currents
- Energy-efficient
- Low-maintenance
- Easy operation
- Modern design
- Made in Germany