



Effectiveness
certified by
leading
institute



UVClean

Powerful UVC Air Cleaners

made
in
germany

The COVID-19 pandemic has led to considerable constraints in people's lives – both at work and at home.

Our personal behaviour is crucial in preventing the spread of the coronavirus disease. The general rules of conduct and hygiene that have been put in place aim to protect oneself and others from infection.

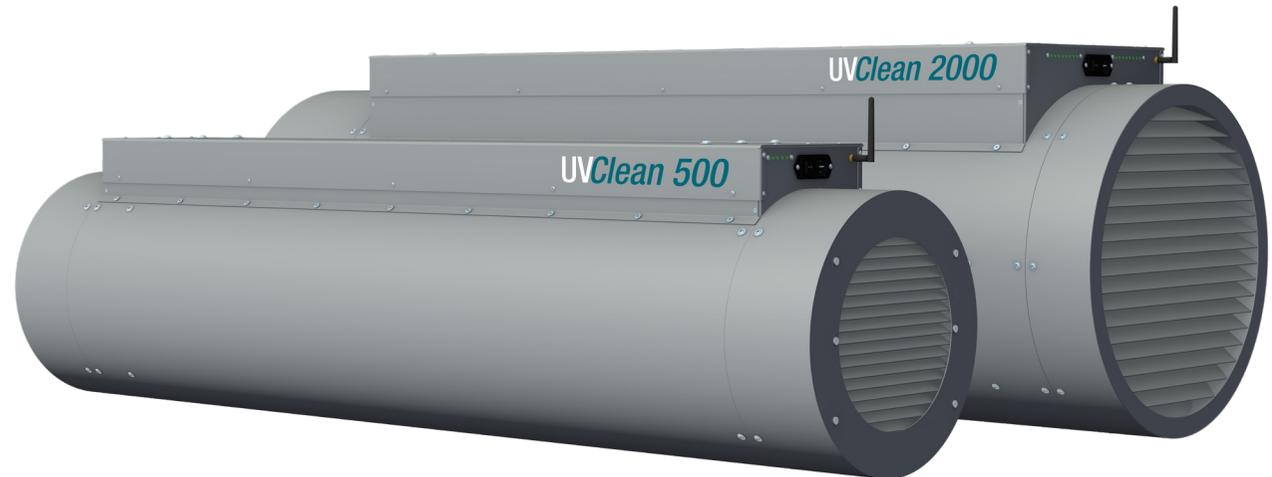
Similarly, technical solutions can help to **prevent infection** and to provide for **more safety** – be it in day-care centres, schools, and elderly homes, in industry or business settings, or in event locations.

Since many years, **UV-light has been used to disinfect** water, surfaces and air. Especially in the food industry and in medical facilities it is a well-established technology.

Next to droplet-transmission, **aerosols** have become known as a possible transmission route. Infectious particles can hover in the air over an extended period of time.

Ventilation or air change can reduce the virus load drastically. **UVC disinfection, however, achieves a 99.9% reduction of viruses, bacteria, mold spores and other pathogens** without affecting room temperature.

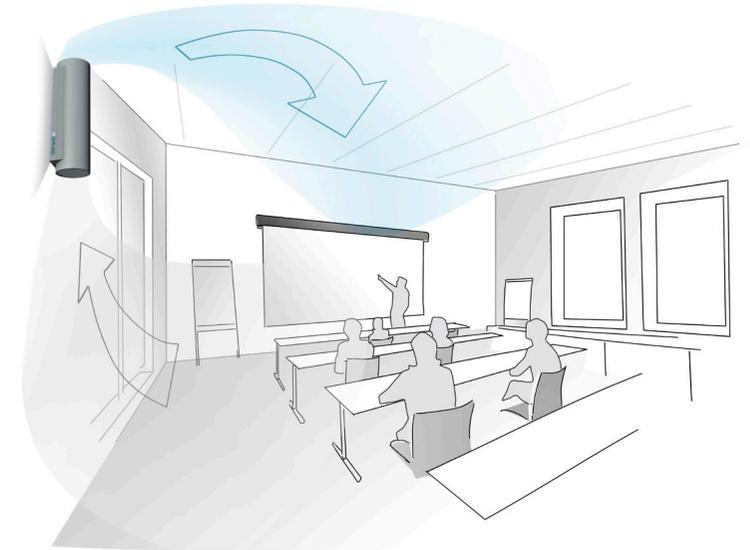
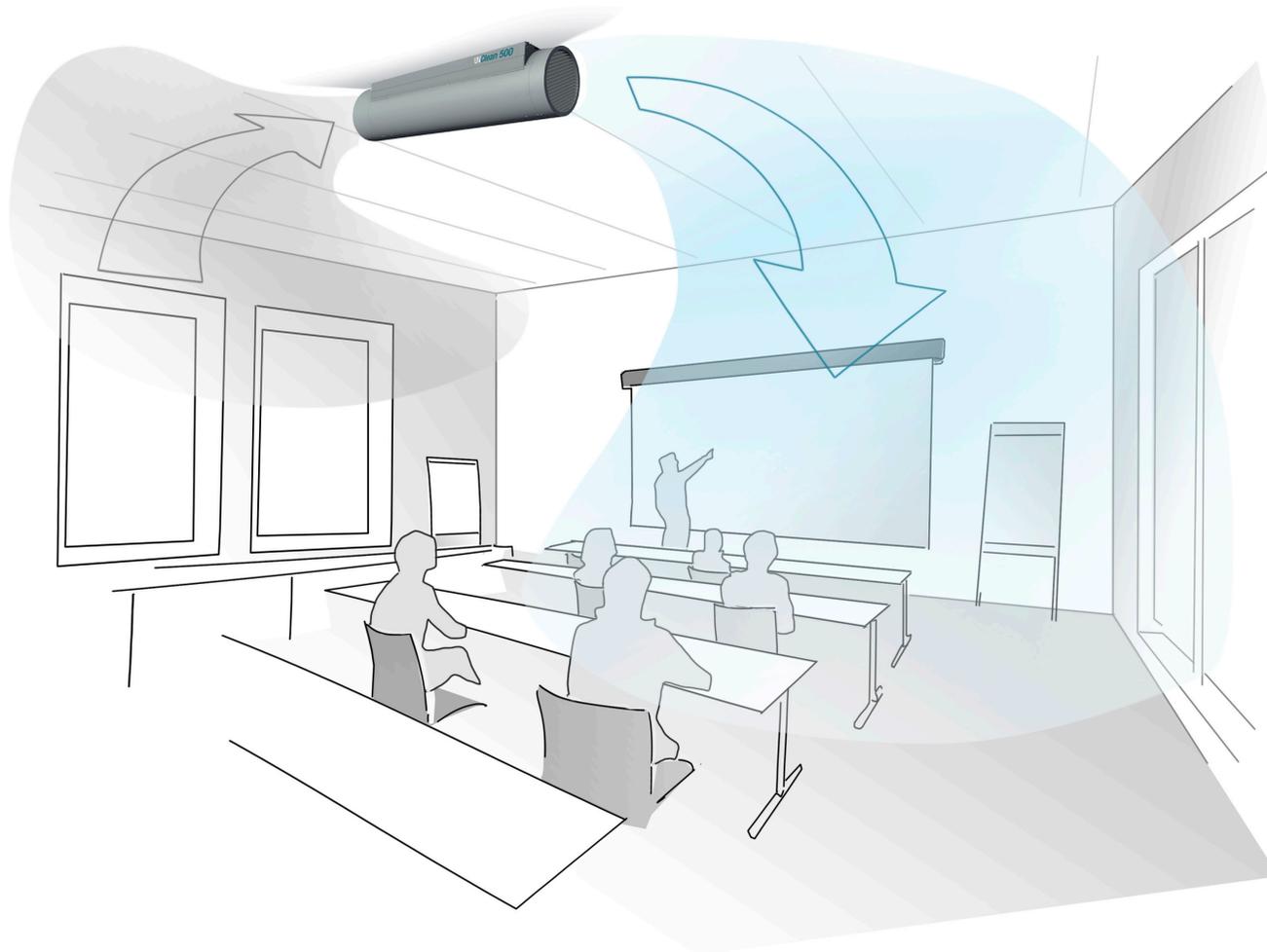
To this end, we have developed our UVClean devices.



UVClean | series 2000

air-disinfection with UV-light up to 2000m³/h

TE [®]
trusted elements



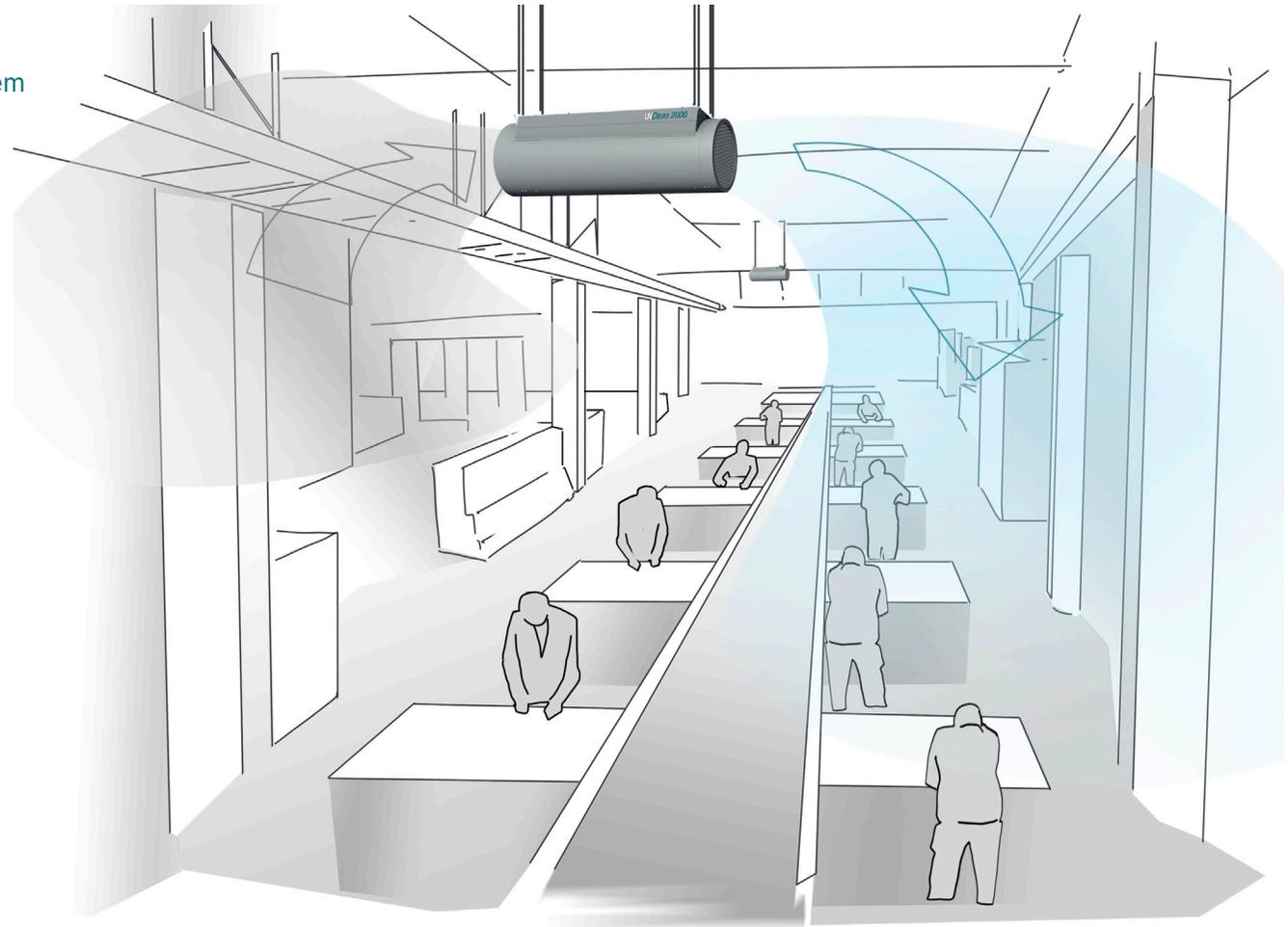
- disinfection of up to 2000m³ of air per hour
- zero ozone emissions
- improved performance through highly effective reflector
- no harmful danger of UV-radiation outside the device

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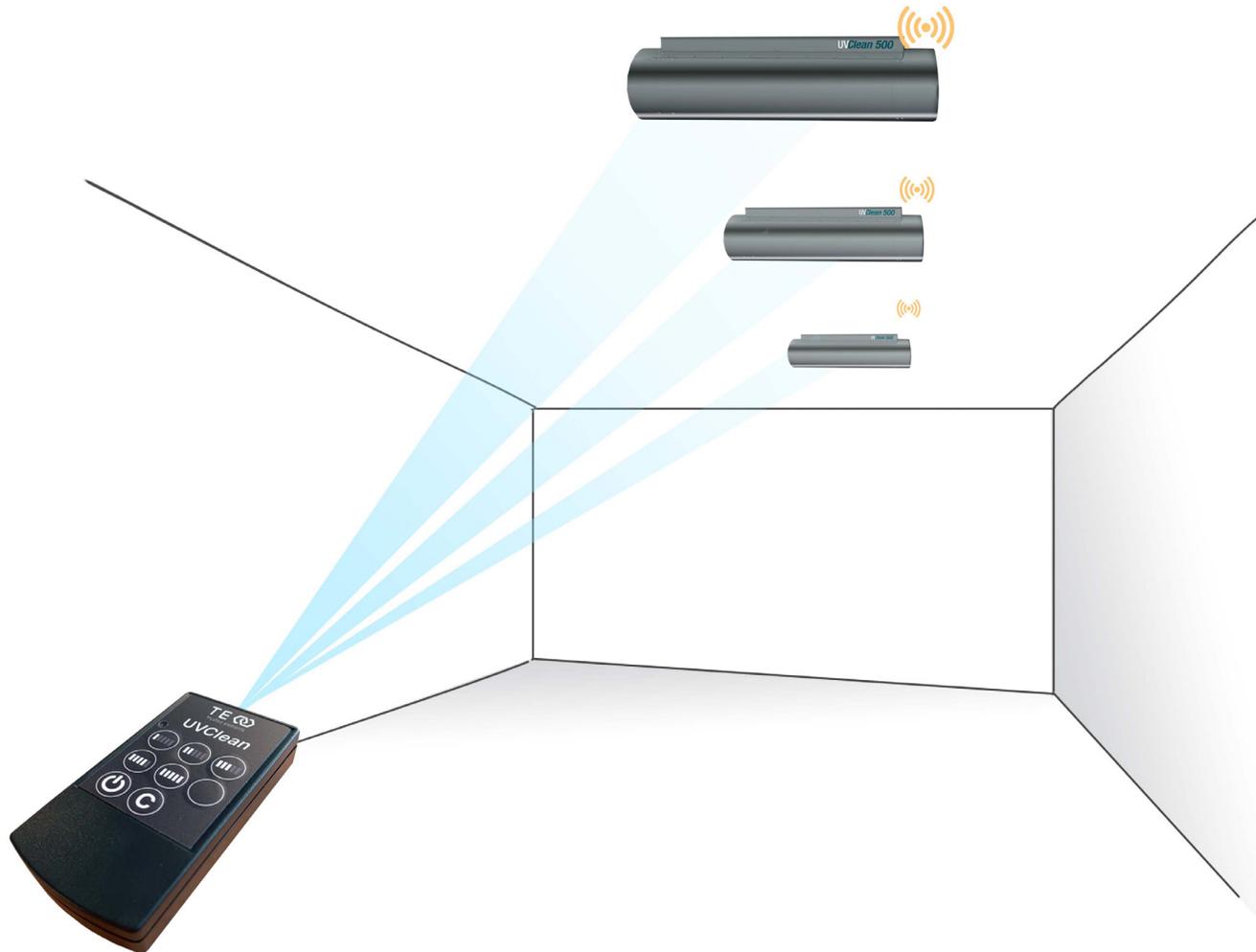
- ceiling suspension or wall-fastening
- stand-alone mode for buildings without ventilation system
- easy installation in existing and new buildings



- service-friendly construction
- low maintenance without filters
- UV-tubes lifetime: 9000h
- permanent single-monitoring of all UV-tubes
- standard shatter-protection for all UV-tubes

UVClean | series 2000

air-disinfection with UV-light up to 2000m³/h



- equipped with wireless remote control
- remote control of device-groups
- model 2000T with LAN integration and app-control

continuous airflow adjustment and transfer of status announcements to a main computer.
connection via timecode, MIDI, DMX, ACN, artnet etc.
for integration in livenesshows and control engineering of your building.

UVClean | series 2000

air-disinfection with UV-light up to 2000m³/h



- available in 3 colors (white, grey, black)
color customization on request
- foil lettering or full wrapping possible
- processing and assembly in Germany

UVClean | series 2000

air-disinfection with UV-light up to 2000m³/h

technical data

UVC power	288 W (253,7nm)
volume flow rate	600-2000m ³ /h variable in 5 steps
UVC dose	>17mJ/m ² at any volume flow rate
remote control	wireless 868 MHz, multi device control
UV-tube monitoring	single with signalisation
tube failure signalisation	visible and acoustic signal, confirmable T-models with app-signalisation
mounting	ceiling-suspension or wall-fastening
power consumption	1300W
lifetime of tubes	9000h (10% efficiency loss)
weight	63kg
measurements (L x B x H)	1800mm x 520mm x 578mm
voltage	230V
operating temperature	5-40°C

UVC dose and noise emissions

volume flow rate	uvc dose	dist. 1m	dist. 2m	dist. 4m	dist. 8m
300m³/h	57mJ/cm ²	47dBA	41dBA	35dBA	29dBA
500m³/h	17mJ/cm ²	68dBA	62dBA	56dBA	50dBA

measurement of UVC output with Opsytec RMD. (min. dose for 90% virus inactivation: 3,7mJ/cm²)*

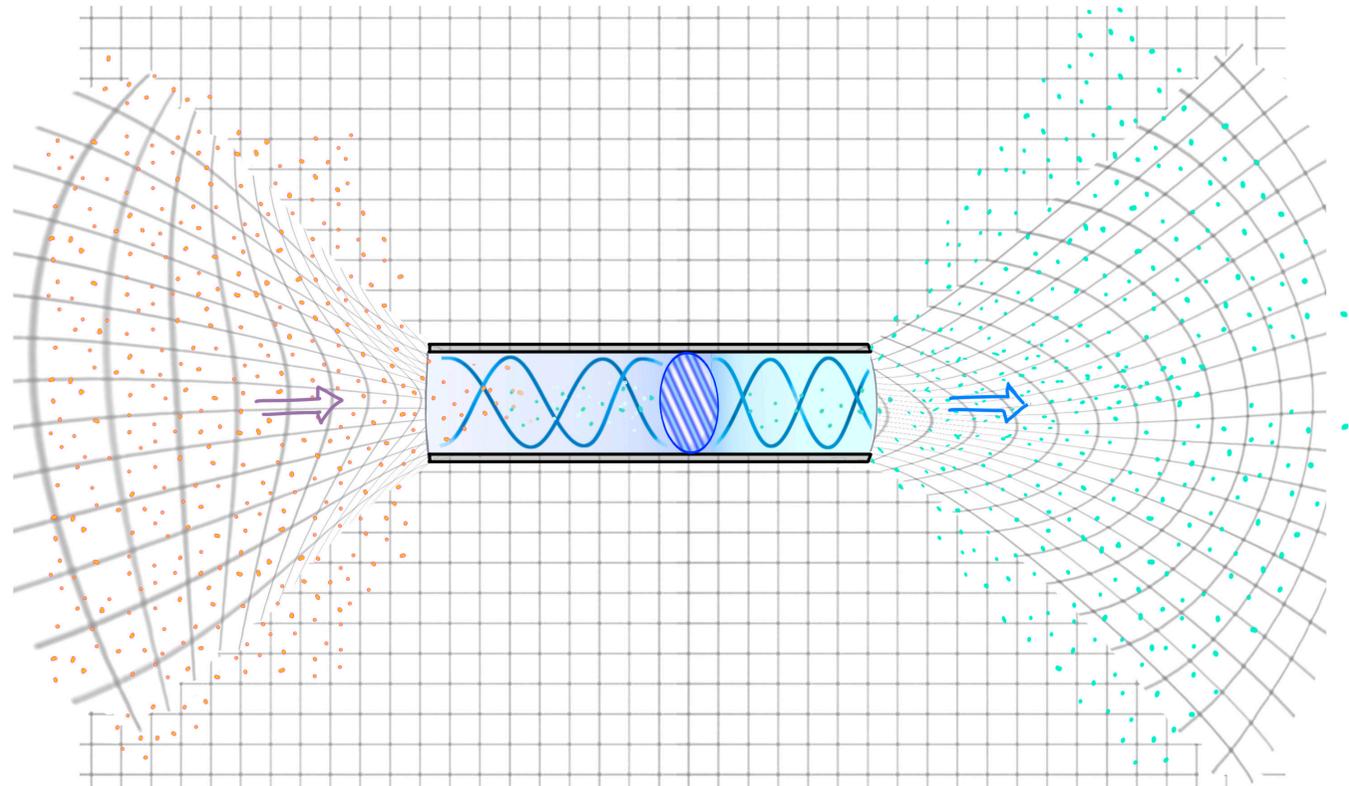
*Heßling, M., Hönes, K., Vatter, P., & Lingenfelder, C. (2020). Ultraviolet irradiation doses for coronavirus inactivation - review and analysis of coronavirus photoinactivation studies.



The science behind virus inactivation by UV-radiation¹

Relevant research results:

- Since the 1930s, lamps emitting UVC light have been used as highly efficient disinfection technology to treat drinking water, waste water, surfaces, pharmaceutical products, and air.
- UVC light offers advantages over liquid disinfectants and heat sterilisation as it can be deployed automatically and is very energy efficient.
- SARS-CoV-2 is inactivated (“killed”) by UVC radiation through a well-understood biochemical reaction whereby the virus’ genetic material (RNA) is irreparably damaged.
- SARS-CoV-2 is known to be transmissible via aerosols with infectious particles remaining traceable indoors for hours.
- UVC radiation can help to mitigate the risk of acquiring an infection, not only from SARS-CoV-2 but from a range of pathogens.



¹sources:

Heßling, M., Hönes, K., Vatter, P., & Lingenfelder, C. (2020). Ultraviolet irradiation doses for coronavirus inactivation - review and analysis of coronavirus photoinactivation studies. *GMS hygiene and infection control*, 15. doi:10.3205/dgkh000343
 International Ultraviolet Association (IUVA). (2020). IUVA Fact Sheet on UV Disinfection for COVID-19. Retrieved from <https://iuva.org/>
 Sabino, C. P., Ball, A. R., Baptista, M. S., Dai, T., Hamblin, M. R., Ribeiro, M. S., . . . Wainwright, M. (in press). Light-based technologies for management of COVID-19 pandemic crisis. *Journal of Photochemistry and Photobiology B: Biology*. doi:10.1016/j.jphotobiol.2020.111999