



UVC SterilVentilation

Decontamination of recirculated air for highly occupied space



The LTG UVC *SterilVentilation* helps to reduce the risk of contracting airborne (aerosol) viruses (e.g. Covid-19 and influenza). Ideal for retrofitting in any room irrespective of any existing HVAC system.

steril
ventilation



self-sterilizing
no filters to
change



UV-C
Protection



low noise &
24 hr. operation



room
recirculation



trusted German
know how &
engineering

- The high-efficiency low pressure UV-C emitter and airflow recirculation rate within the LTG unit has been specifically engineered to work in a matter of seconds against the Covid-19 pathogen SARS-CoV-2 to achieve a **disinfection rate of 99,99 % (log 4)** (as tested in accredited S3-laboratory, Goethe University Frankfurt)
- **Fast & reliable, ozone and chemical free disinfection** of the recirculated ambient room air (patent pending)
- **Silent and effective room diffusion** with proven LTG tangential airflow technology for up to 140 cfm per unit
- **Simple protection of people** through verified filterless recirculation of room air past the lamp emitter which is shielded to prevent UV-C light spill into the room.
- **Independent of existing HVAC system**, just need a power supply and an on/off switch, **simple installation** into T-bar ceilings with suspension brackets

LTG Aktiengesellschaft, a pioneer in air and climate technology, is always one step ahead with trend-setting innovations for more than 95 years and has won the Innovation Award of the State of Baden-Wuerttemberg in 2017.

It is well known that the risk of infection by viruses, bacteria and mold spores increases if the spaces are inadequately ventilated with fresh (outside) air. The problem increases exponentially in highly occupied areas (e.g. office and meeting rooms, waiting rooms, K thru 12 classroom, restaurants, and fitness / sports facilities etc.) where there is poor or inadequate ventilation. The LTG UVC SterilVentilation was developed for these commonly used spaces, an innovative, patent pending device that reliably sterilizes airborne pathogens such as COVID-19, which might otherwise remain contained in the room air and passed from person to person.

Operating mode

The UVC SterilVentilation is a maintenance free and ready to plug in sterilization unit for recirculated air. A quiet 2-speed LTG tangential fan pulls air from the room into the shielded housing. Inside the housing a high-performance UV-C low pressure emitter will sterilize up to 99.99 % of germs such as SARS-CoV-2, influenza etc. .

Each UV-C-tight enclosure is tested and measured in certified laboratory, ensuring a hazard-free operation. The filterless design minimizes maintenance and could allow for 16,000 hours of non-stop operation (this also removes the potential risk of having to periodically replace potentially COVID laden filters).

In contrast to comparable solutions, the proven LTG air flow technology provides effective room distribution and as a result, the entire room recirculated air is reliably disinfected.



Effective room perfusion guarantees max. decontamination of aerosol attached viruses

Technical Data

	UVC SterilVentilation
Length x width x height	22 x 22 x 8 inches (to suit 24"x24" T-bar ceilings)
Air volume (max.)	140 cfm
Noise level NR *	NR 36 max mode (140 cfm)
Power consumption	50 W
Voltage	115 V (277 V fitted transformer available)
IP protection class	20
Weight	25 lb
Durability lamp	16 000 hours

*at 10 dB room absorption

Features

- Ozone and chemical free – invisible, natural, odorless radiation from high powered UV-C low pressure emitters (wavelength 254 nm)
- Germany engineering – proven high quality comfort air and UV-C components & measured recirculation volume based on disinfectant rates measure within S3 laboratory
- Low maintenance non-stop operation, unit is 'filterless' as this avoids the risk of having to swap out, and dispose of, potentially COVID laden contaminated filters
- Simple installation, no special knowledge required (plug and play)
- Power isolation of lamp ensured by design for maintenance replacement
- Certified shielding of the UV-C emitter according to DIN EN ISO 15858 ensures hazard-free operation in the presence of humans
- 2-speed operating mode (Silent-/Max-Mode), selectable depending on the application
- LED display for optical function monitoring

Suggested number of UVC units (high flow) *

Room Type	Office (open Plan)	Meeting Room	Waiting Room
Space per person	100 SF	50 SF	36 SF
Residence time	6 hours	90 mins	30 mins

Room Area [SF]	Number of Units								
100	1	1	1	1	1	1	1	1	1
150	1	1	1	1	1	1	1	1	1
250	1	1	1	1	1	1	1	1	1
350	1	1	1	1	1	2	1	1	1
450	1	1	2	2	2	2	1	1	2
550	1	2	2	2	2	2	1	1	2
650	2	2	2	2	2	3	1	2	2
750	2	2	3	2	3	3	2	2	2
850	2	3	3	3	3	3	2	2	2

HVAC with fresh air supply
Ventilation by Windows
Recirculation Heating /cooling only, No ventilation

* based on model by RWTH Aachen University, Germany, 2020