V 300 Air Recirculating Disinfection

A system without compromise.
Hang, Connect, Disinfect.

The moisture-resistant unit disinfects up to 300 m^3 of air per hour with an average dose of more than 12 m/cm^2. Thanks to its simple yet highly efficient design, the V300 is the ideal recirculating air disinfection unit for commercial applications in the mid-price segment. Two thermolamps ensure high UVC doses even in very cold environments and help maintain a low-germ environment.

For cleaning or maintenance purposes, the V300 can be quickly and easily disassembled without tools. Apart from the plastic reflector and the wiring, the unit is entirely made of stainless steel. Occupational safety is ensured by special glare-protection honeycomb grids.

Key features:

- Designed for temperature ranges from –10 to +50°C
- High UVC dose per air pass thanks to optimized vorte technology
- Capacity: 300 m^3/h with 12 mJ /cm^2
- Equipped with a non-corrosive reflector
- Inactivates 99% of bacteria and viruses in a single pass
- Very high UV-C doses due to optimised whirling technique
- Hygienic design prevents germ deposits
- Made of stainless steel, equipped with non-corrosive PTFE reflector
- Modular and compact for easy maintenance

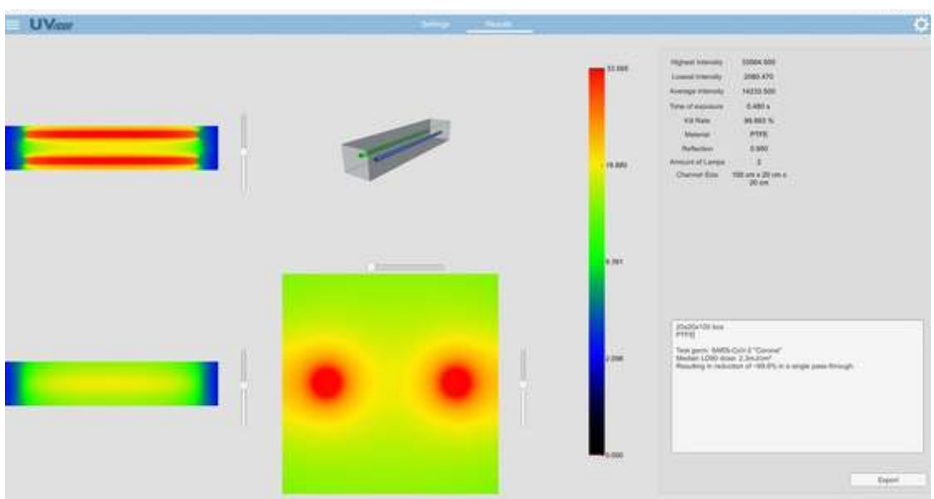
Product Applications

- Laboratories
- Hospitals
- Medical cabinets

Effective against all microorganisms

For air volumes up to 800m3/h

Suitable for rooms without air supply



Measurements & Calculations

Flow rate [m³/h]	Volume [m³]	[m/s]	Seconds	Air flow [m³/h]	[mJ/cm²]
300	0,0408	0,083	0,4899	300	15,41
250	0,0408	0,069	0,5879	250	18,49
200	0,0408	0,056	0,7349	200	23,11
150	0,0408	0,042	0,9799	150	30,81
100	0,0408	0,028	1,4698	100	46,22

Summary of Measurement and Calculation Results

Calculation of the Airflow Rate

- Average air velocity w = 0.8 m/s
- Airflow rate V = 300 m^3/h

Dose Calculation

- Minimum air residence time in the system t = 1.13 s
- Average irradiance Ē = 13.5 mW/cm^2
- Resulting dose D = 12 $mW \cdot s/cm^2$

Self-sufficient air disinfection units, for reducing the airborne germ count during ongoing production.

Remarks on the Calculations:

- The dose was calculated using the minimum air residence time in the system, representing a “worst-case” calculation.
- The average irradiance Ē was determined based on a simulation. It can be assumed that the actual average irradiance of the system is higher.

Specifications:

- Material: stainless steel, PTFE
- Operating temperature: -10 to +50°C
- Requirements: CE, EMC
- Total UV-C output: 8, 28, 56 or 84 W 253,7 nm
- Assembly: 2 fixing points for ceiling installation
- Lamp interval: 12.000 h