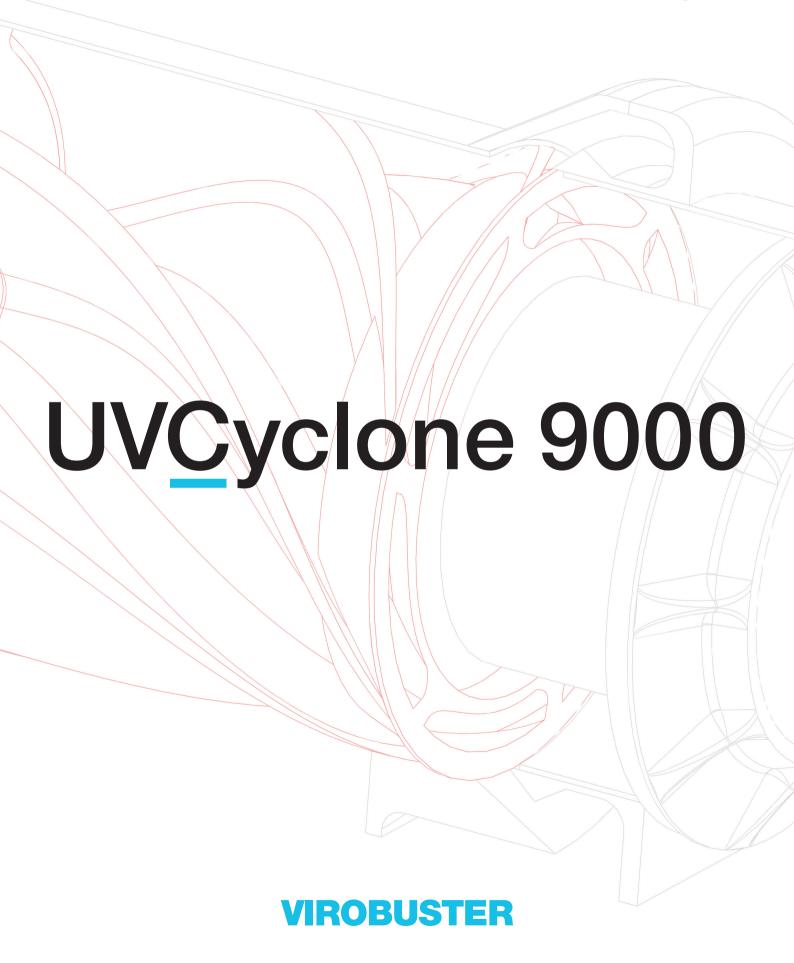
The filterless revolution for Air Handling Units



Ventilation systems are present everywhere – but not very innovative. The HVAC* market has not seen a real revolution since Willis Haviland Carrier invented air conditioning in 1902. Time to begin a new era.



Why is state of the art not enough?

For decades, the design of an air handling unit (AHU) has followed the same principle: the basic elements are combined in an 'air handling unit' (AHU) – a box with a fan, several mechanical filters and sections for heating, cooling, heat exchange and sometimes a humidification section.

The problem:

In practice, the filter sections prove to be the bottleneck,

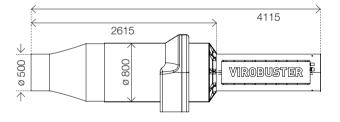
they require most of the maintenance and, due to their size and technical requirements such as minimum pressure drop and leakage-free installation, they have so far hindered any further innovations. This is comparable to vacuum cleaner concepts. Only when highly efficient and compact fans became available, some manufacturers did succeed in replacing the mechanical filters with so-called cyclone filtration. A step that would be even more complex for

AHUs, because next to dust, also microorganisms should be removed.

This is where our innovation steps in – the UVCvclone 9000.

Patented and world first solution that combines particle separation and VIROBUSTER's proven UVPE air disinfection in one compact unit. For the first time, an AHU can be offered that does not require mechanical filters.

- AHUs become more energy-efficient & technically compact
- No need for filter exchange and biohazardous disposal
- Microorganisms are eliminated up to 99.99% – on demand
- Modules are 600 times more powerful than conventional UV-C systems



Electrical power

UV-C output per module

Efficiency

Nominal flow rate

Pressure drop (Pa)

Dimensions L x W x D (mm)

Weight (kg)



CYCLONE MODUL

3.75 kW

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PM 2.5/10 3,000 m³/h: >99 % 6,000 m³/h: >95 % 9,000 m³/h: >89 %

3,000 - 9,000 m³/h

3,000 m³/h: 78 6,000 m³/h: 125 9,000 m³/h: 298

2,615 x 800 x 1,125

178



STERITUBE UVPE XL

2 kW

800 W

j/m² (CFU/PFU) 3,000 m³/h: 840 (>99%) 6,000 m³/h: 419 (>99%) 9,000 m³/h: 279 (99%)

3.000 - 9.000 m³/h

3,000 m³/h: 15 6,000 m³/h: 35 9.000 m³/h: 55

1.500 x 516 x 576.50

55

