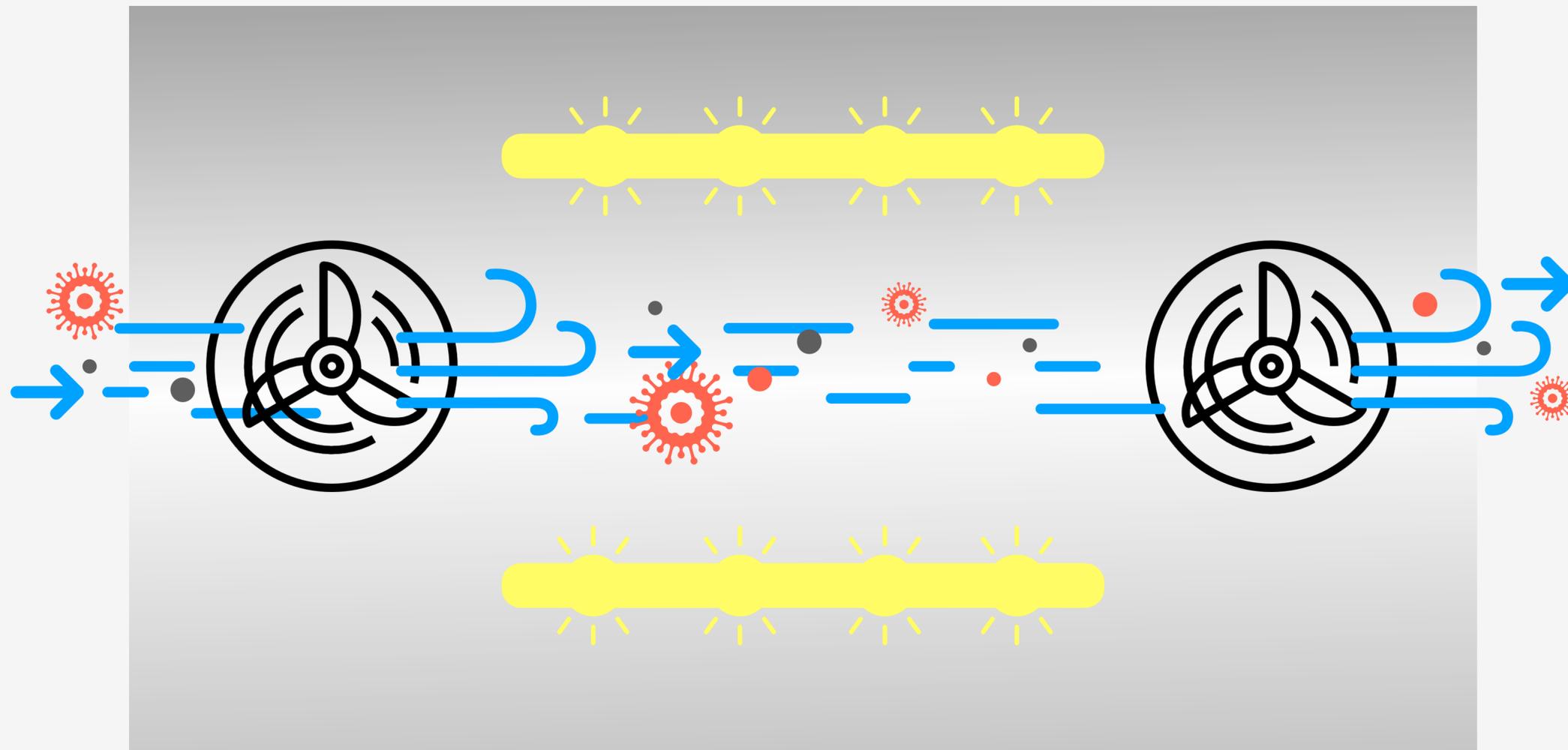


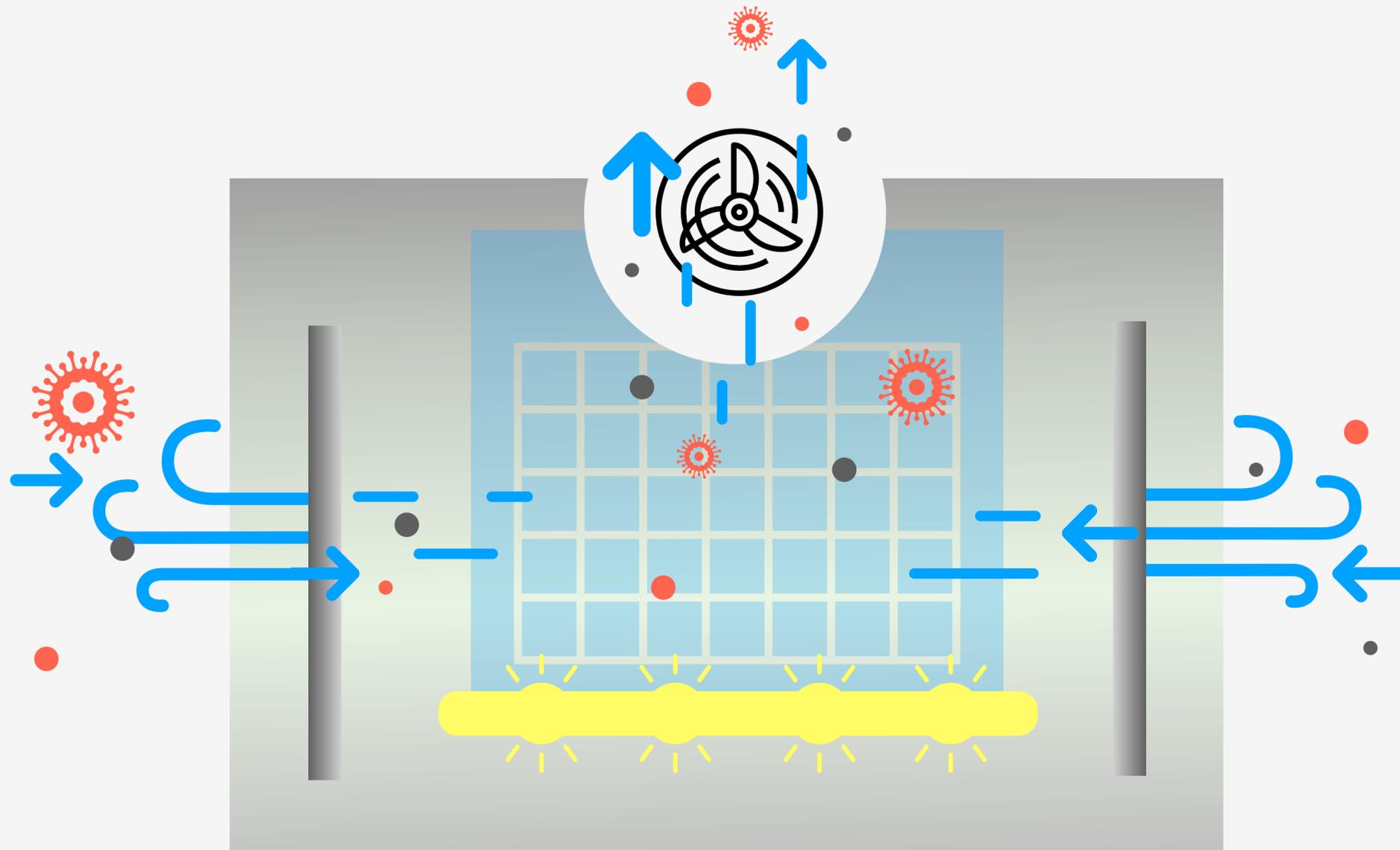
# UV-C lamps



**Air is led through a tube with UV-C lamps.**

- i** No proven performance against viruses or bacteria in the air, only on surfaces
- i** Contributes to the distribution of pollutants
- i** UV-C generally produces ozone (health risk)
- i** Lifespan of max. 10.000h

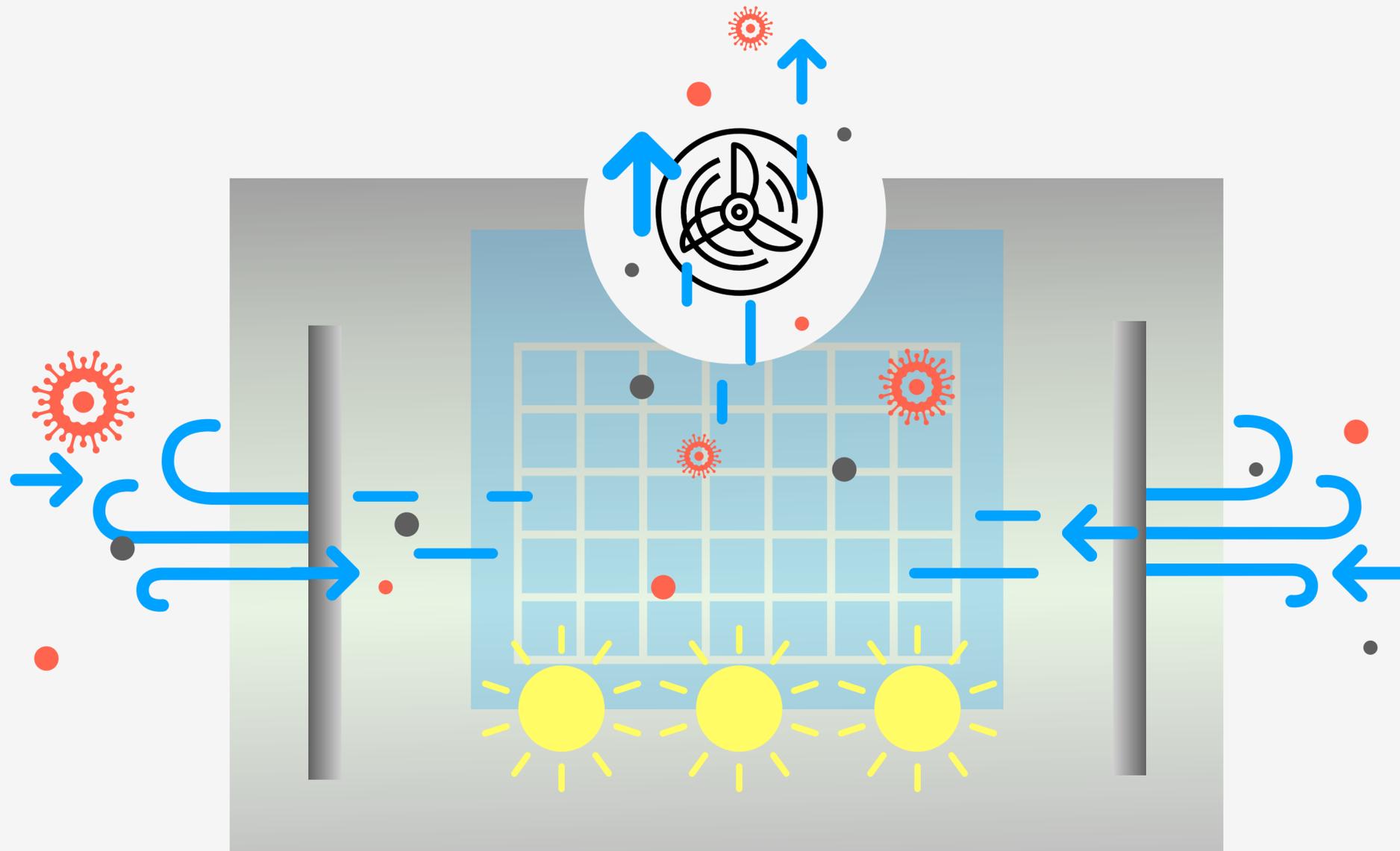
# UV-A lamps + Titanium Dioxide coating (Photocatalysis)



Air is passed through the device in a controlled way. Photocatalysis takes place on the titanium dioxide surface so that the air that comes into contact with it is disinfected.

- i** Theory confirmed
- i** The wavelength generated by UV lamps is not consistent and may vary, with a negative impact on the photocatalytic process.
- i** Titanium dioxide only as coating on base plate (only 1-3g of  $\text{TiO}_2$ , depending on the manufacturer)
- i** Titanium dioxide is damaged by UV lamps, microparticles are released (health risk)
- i** Lifespan of max. 10.000h

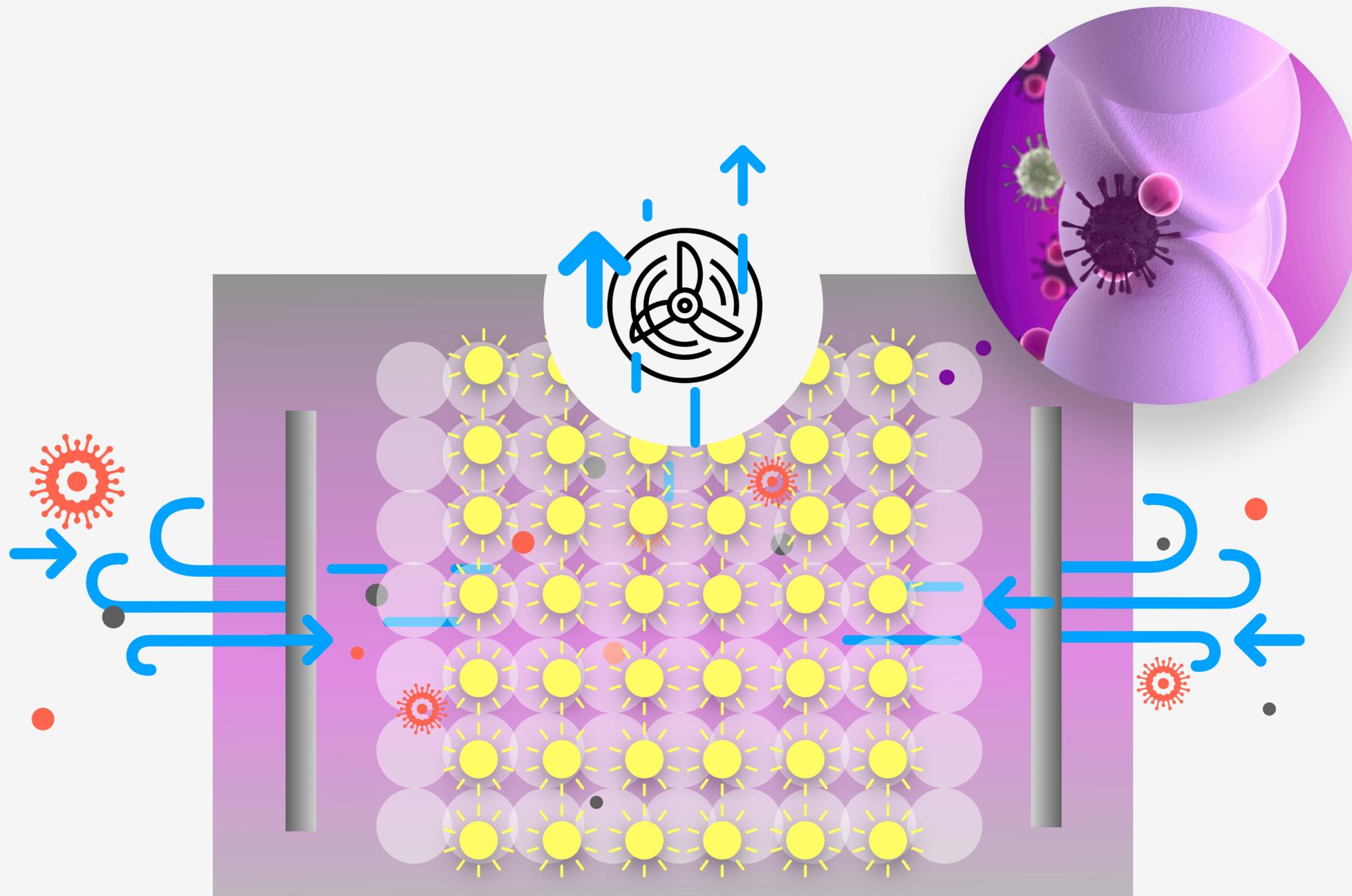
# UV-C lamps + Titanium Dioxide coating (Photocatalysis)



Air is passed through the device in a controlled way. Photocatalysis takes place on the titanium dioxide surface so that the air that comes into contact with it is disinfected.

- i** Theory confirmed
- i** UV-C wavelength range not optimal for photocatalysis
- i** Due to the broad light spectrum, UV-C lights damage titanium dioxide faster
- i** Harmful by-products (ozone)
- i** Lifespan of max. 10.000h

# UV-A LED + Titanium Dioxide in solid form (Photocatalysis)



## AiroDoctor

Air flows through the grid in a controlled way to increase exposure time. Titanium dioxide solid material maximizes the reaction surface due to its spherical shape.

- i** Proven in theory and in practice
- i** 100 LEDs consistently generate the UV-A wavelength of 385nm, reducing material wear and optimizing the photocatalysis process for best results
- i** Titanium dioxide solid material for long-lasting performance
- i** No emission of harmful byproducts such as microparticles, formaldehyde or ozone
- i** Lifespan of min. 50.000h