

Virus disinfection with UV-C light in public transportations City bus fleet offers passengers additional protection

Viruses, bacteria, and other microorganisms spread through tiny water droplets in the air, so-called aerosols. They can survive there for a long time and spread from person to person. The risk is particularly high in public transportation such as buses, trains, ships, and airplanes. Often, the situation is aggravated by the fact that ventilation is difficult if not impossible: ideal conditions for viruses.

UV-C light is very effective against viruses, bacteria, and fungi, especially viruses such as SARS-CoV-2 and its mutations which it easily destroys. These viruses have only a thin lipid (fat) layer that UV-C light easily penetrates to immediately destroy the virus.

In local and long-distance public transportation, many people travel in close quarters, often for long periods of time. Passengers on buses, trains and similar means of transport are therefore exposed to a comparatively high risk of infection. To minimize such risks, Stadtwerke Rüsselsheim GmbH (public services of the city Rüsselsheim, Germany) sought technical solutions to increase public safety in its buses. Soluva Air V represents a particularly reliable solution designed specifically for the disinfection of air in vehicles. The vehicle's ventilation system circulates the air continuously. UV light in the Soluva Air V immediately destroys viruses, bacteria, and other pathogens. Disinfection of the cabin air takes place continuously while the vehicle is on the move ensuring sufficient air exchange. The UV-C air purifiers simply mount on the ceiling of the passenger cabin and also retrofit very easily into buses and trains.

"We wanted to protect our passengers as best as possible. We especially thought about the students in the school buses," says Reinhard Blüm, head of the transport department of the public services of the city Rüsselsheim.



Stadtwerke Rüsselsheim/Koslowski

The renowned Fraunhofer Institute for Building Physics has for the first time confirmed the effectiveness of air disinfection by means of closed UV-C air purification devices under real conditions for a classroom on the basis of an elaborate scientific application test. Heraeus UV-C air purification devices can reduce the virus load in closed rooms by over 99 %. The disinfecting effect of UV-C light was also confirmed in further tests with the Hygiene Institut biotec and the University Hospital Tübingen.



Advantages of UV-C air purification with Heraeus Soluva equipment::

- ✓ chemical free
- ✓ no filters
- ✓ low maintenance requirements
- ✓ no ozone or by-products
- ✓ no uncontrolled escape of UV-C-light
- ✓ viruses can't build up resistance to UV-C