

## UV disinfection for public transportation

No chance for germs: effective air and surface disinfection for buses, trains, cruise ships and airplanes.

Local and long-distance public transportation is considered a place of comparatively high risk infection: In buses, trains and similar means of transport, many people come together in relatively small spaces, often over a longer period. Ideal conditions for virus transmission.



### Soluva® Zone H

Mobile system for surface sterilization.



### Soluva® Air V

Permanently installed system for air disinfection in ventilation systems.



### Protect your passengers reliably

There is a reliable solution to protect your passengers and employees: disinfection with UV light. The advantages: UV disinfection is highly efficient, provides fast results, and is dry and chemical free. It is also low-maintenance and easy to install.

UV light has been used for years to disinfect surfaces, air and water – for example to disinfect drinking water and the packaging of sensitive products such as baby food.

Singapore airport uses UV lamps to keep the air clean and protect against germs. The DNA of the microorganisms absorbs the UV light which then destroys the cell structure.

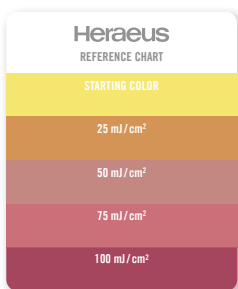
Heraeus Noblelight, the inventor of the UV lamp, has many years of experience with disinfection solutions. We recently developed a disinfection product line which offers an ideal solution for public transportation: Soluva® UV.



## Soluva® Zone H

A short, scanning over the surface with Soluva® Zone H is sufficient enough. SARS-CoV-2 has only a thin lipid layer. UV-C breaks through this layer and destroys the virus RNA immediately.

Places of use: Anywhere surfaces need cleaning quickly or frequently or where wet cleaning is not possible.



### How do I make sure a surface is exposed to UV for long enough?

The unit includes a UVC sensitive test strip, which changes color when exposed to UV light. The color change of the test strip varies depending on the distance to the irradiating surface and the speed of movement. The darker the color, the higher the UV dose. The test strip provides an example of how long you must irradiate the surfaces to achieve the desired disinfection performance. The same speed and distance should then be applied to the rest of the object's surface.

A UV dose of 25 mJ/cm² (orange color) is sufficient to achieve effective disinfection performance.

## Advantages and technical data of Soluva® Zone H

- Battery-powered device for maximum freedom of movement in use
- Safe, fast and reliable disinfection of the application site. 99.99% proven
- Dry cleaning – no use of chemicals or disinfecting liquids
- No damage caused by liquid or solid cleaning agents
- Cleaned items can be used again immediately
- Use with any domestic power source (normal plug connection)
- CE compliant device

- Dimensions (L×B×H): 58×18×12,5 cm (22.8"×7.1"×4.9")
- Weight: 1,7 kg (3,75 lbs), plus battery
- Low pressure UVC lamp
- Nominal electrical power: 39 W
- Nominal battery capacity: 2.5 Ah
- Nominal battery voltage: 18 V
- Typical runtime with fully charged battery: > 45 min



### Don'ts

UV radiation should not be directed onto persons, animals, or plants. Please cover skin and shield eyes completely.

Please read our safety instructions: [heraeus-noblelight.com/UVSafety](https://heraeus-noblelight.com/UVSafety)

## Applications



- Production machines
- Vehicles - interior and exterior
- Aircraft
- Public transportation
- Office (Keyboard, storage surfaces, copier)
- Handrails
- Fittings in restrooms

## Soluva® Air V

Soluva® Air V is a permanently installed UV-C air purification system for buses, trains, subways or passenger ships. It can be developed as a retrofit kit or for series production of vehicles. With the help of state-of-the-art simulation technology, the required disinfection performance is individually adapted to the vehicle and the air conditioning system. Customers and Heraeus experts then develop the best solution together.



### Advantages and technical data of Soluva® Air V

- Save and reliable disinfection (up to 3000 m<sup>3</sup>/h)
- Efficient protection for passengers and employees (viruses cannot build up resistance to UV light)
- Immediately ready for use after each start (also in hot or cold weather)
- Operation via the on-board power supply, continuous operation even while driving
- Customized system for your individual conditions
- Easy retrofitting possible
- Long service life: use of the most efficient low-pressure amalgam lamps
- Environmentally friendly & chemical free

Example: Installation in a city bus

- Number of installed air channels: 4
- Air disinfection capacity: 4,000 m<sup>3</sup>/h
- Electrical power: 4 × 100 W
- Optical performance: 4 × 37 W
- Applied Voltage: 24V
- Service life: 12,000 h
- CE compliant device

### Applications



Efficient air cleaning in public transportation such as:

- Buses, subways and trains
- Cruise ships
- Airplanes

## We know what we do

For effective air disinfection it is crucial to design the UV solution exactly to your specific ventilation systems. Important parameters include the air flow, materials, cross section and radiator arrangement in the duct, and the air temperature and humidity. Our UV experts developed a simulation tool that factors in these parameters to precisely tailor a system to your required disinfection capacity and level of safety.



Examples of Heraeus expert simulations to the radiator design.

## Simple and fast

## Fast delivery!

1

We simulate the air flow in your specific transportation vehicle using our proprietary simulation tool.

2

We then optimize the system design to fit your specific conditions.

3

Upon request, our Service Technician can install the system.

4

We are happy to maintain your system.

**MADE IN GERMANY**  
**100% QUALITY**  
**CONTROL**

[www.soluva.com](http://www.soluva.com)

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Please note that all information regarding the products and their properties may vary.

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