Enhancing guest safety and confidence with UV-C disinfection

Solutions for Cruise Ships & Luxury Hospitality Experiences
Guests and crew deserve the best possible protection against COVID-19, Norovirus, and other easily transmitted viruses.

Ensuring a safe trip is crucial to the reputation of your business and vital for the health and well-being of everyone on board.
Virus transmission occurs through:

1. Direct air-borne transmission between people
2. Indirect air-borne transmission through air flows
3. Indirect surface-borne transmission via contaminated surfaces
Signify and Boston university have validated the effectiveness of our light sources on inactivating the virus that caused COVID-19.

In laboratory testing, our UV-C light sources inactivated 99% of SARS-CoV-2 virus on a surface with an exposure time of 6 seconds.¹

¹ Data made available to us by the National Emerging Infectious Diseases Laboratories (NEIDL) at Boston University (to be the subject of a forthcoming scientific publication) shows that Signify’s UV-C light sources irradiating the surface of a material inoculated with SARS-CoV-2 (the virus that causes the COVID-19 disease) resulted in a 99% reduction of the SARS-CoV-2 virus at a UV-C dose of 5mJ/cm² (exposure time 6 seconds). Research variables are available upon request.
With an average age of cruise ship guests of 48, and on longer trips above 55, precautions are warranted.

In January 2022, all 92 cruise ships in US waters have reported coronavirus and are under CDC investigation.

Almost all cruise liners have implemented additional health and safety protocols to deal with the pandemic.

Signify and Century Ship Service are partnering to design, engineer, supply, install and commission UV-C for you.
Solutions for your Cruise Ships

- Restaurants & Bars
- Lobbies & Common Areas
- Cabins & Suites
- Comedy & Theatre
- Leisure & Facilities
- Crew operations
## Cruise Ship Application Areas

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UV-C Solutions for Upper Air Disinfection

Air disinfection

UV-C Low Grid Ceiling Solution
- Using Philips UV-C (253.7nm) lamps
- Mounts into 2x2 grid ceiling for Upper-air disinfection
- 4 lamp 9W PL-S Philips TUV
- White or Black external housing options

Application
- Typical application include small rooms / zones with ceiling heights of 9ft & above and mostly in combination with the other products to provide an effective and efficient solution based on the disinfection requirements

Safety
- Positioned at a height, out of the reach of guests to help disinfect the air at this level as it circulates.
- Can be integrated with Interact solutions for scheduled operation, remote control and monitoring.

UV-C Low Wall Mount Solution
- Effectively inactivates airborne viruses and bacteria with UV-C (253.7nm) light sources.
- White polyester powder coated housing (black optional)
- Single lamp 20 W T5 Philips TUV lamp

Application
- Typically suited for applications areas with the mounting height 10ft and above To ensure adequate coverage, design team needs to create a layout with placements for your space.

Safety
- Positioned at height, out of the reach of guests to help disinfect the air at this level as it circulates.
- Can be integrated with Interact solutions for scheduled operation, remote control and monitoring.
Surface disinfection Applications

When someone coughs or exhales, they can release droplets of fluid. Most of these droplets fall on nearby surfaces and objects – such as desks, tables or telephones. If the person is carrying a virus, other people could become infected by touching contaminated surfaces or objects, then touching their eyes, nose or mouth.

Circulation areas
Circulation loading docks, corridors and staircases carry a high volume of guests and crew, increasing the risk of a carrier passing through. UV-C can be used for surface disinfection outside of opening hours, such as overnight, or behind protective screens. Throughout working hours, you can also disinfect the upper air to prevent recirculation of viruses and bacteria.

Furniture, Luggage, and Devices
Guest’s luggage, chairs, and other devices can be effectively disinfected with UV-C light while on the ship.
We recommend placement of UV-C chambers where devices used by multiple persons need to be cleaned efficiently.

Working areas
Adding UV-C as a disinfection method can be suitable in case room surfaces cannot be cleaned with chemicals to ensure disinfection or as part of a multi-barrier protection strategy, raising the levels of confidence in room disinfection.

Bars & Restaurants
Theatres, bars, restaurants, and casinos are high contact areas and due to interacting activity have higher levels of surface contamination.
UV-C can be applied to conduct a full disinfection to supplement existing cleaning processes. In addition, upper air disinfection in high ceiling as well as low ceiling environments can be applied while people are present.
Introducing a disinfection process to your daily cycle of item reuse and recharging helps ensure that viruses and bacteria are inactivated!

Small items including casino chips, key cards, phones

Everyday your crew and guests interact with items like casino chips and key cards which carry a risk of surface transmission between due to frequent contact.

Placing items or devices in a UV-C chamber helps ensure a much faster and thorough disinfection process than other means of cleaning, which is more prone to human error and diligence.
Philips Dynalite UVC Controls

- Built in Safety & Redundancy protection
- Easy of Use / No commissioning
- Monitor & Manage
- Standalone and scalable
- Correct Usage

✓ The UV-C lamps must run for a pre-described time to ensure that full disinfection of an area has taken place
✓ An automated system can ensure this and report back if there has been any issues in performing the full duty cycle

Defining the number of network sensors connected to the system
Set the UV-C dosage time, 30, 60, 90, 120, 150 min
Display time remaining While UV-C cycle is running
If system successfully ran to the end of cycle then shown complete.
Reach out to learn how UV-C lighting can disinfect your cruise ships today!