



UV Light Disinfection & Air Purification

UV Light Disinfection Systems

- 1 *UV Light for Indoor Air Quality*
- 2 *UV Light for Surface and Air Disinfection*

Germicidal UV technology is implemented in a variety of ways and can be used to disinfect **both air and surfaces**. Major differences between surface and air disinfection is that some UV equipment must be used while the room is unoccupied, while other UV products can be used while the room is occupied.

UV Air Purification

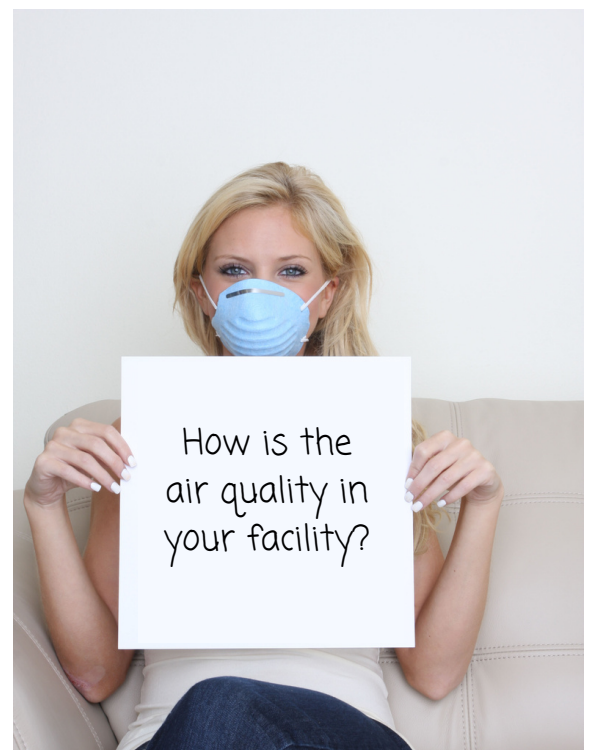
UV light equipment that provides continuous UV air disinfection for occupied spaces. There are two primary methods of UV Air Purification that can be implemented, each of which has multiple product types that can be utilized:

1.) In-Room Air Sanitizers

- UV Fans
- Upper-Air UV

2.) UV Light for HVAC

- In-Duct UV Air Purifier
- On-Coil UV Disinfection



1 In-Room Air Sanitizers:

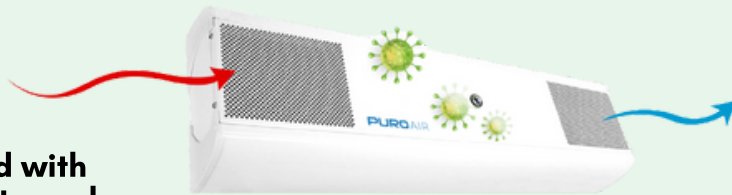
UV purifiers that offer In-Room disinfection are typically wall mounted or mobile fixtures that cover up to 450 Sq. Ft per unit. These products utilize internal fan and filtration systems that circulate the air within a room over UV Lamps. As pathogens within the air are exposed to the UV light, causing damage to the germs DNA, leaving them unable to reproduce and cause illnesses.

UV Fans

UVC Fans are designed to disinfect air in occupied spaces and can be mobile enough to transfer to multiple spaces if needed. They are usually very quiet machines that covers about 2,000 cubic feet. These units are usually intended for smaller spaces like bathrooms, smaller class rooms and offices



Air filled with contaminants such as bacteria and viruses, are pulled into the air cleaning unit



UVC rays within the unit safely neutralize bacteria & viruses

Clean air is blown back into the room

Upper Air UV

Upper Air UV-C units are installed in high areas of a room, usually above people's heads where the rays do not come into direct contact with people. This is the specific type of UV is recommended by the CDC as a viable means to improve air quality. With this type of disinfection, the top layer of air is disinfected by the unit and circulated to the bottom layer, where people are breathing.



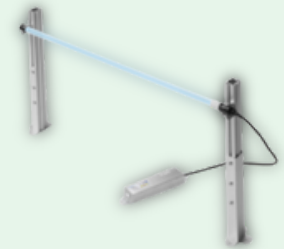
2 UV Light For HVAC

HVAC UV systems disinfect the air as it flows through the HVAC system, either at the AHU or within the duct-work itself, eradicating viruses, bacteria, molds and spores.. This type of UV barrier inhibits the proliferation of pathogens settling inside the Air Condition Unit. In addition, the creation of biofilm is inhibited, increasing the Indoor Air Quality (IAQ) and comfort.



In-Duct UV Air Purifiers

UV disinfection systems mounted in new or existing duct systems (you don't even have to get new duct work). They control the spread of airborne toxins by killing germs in the air before it circulates



On-Coil UV Disinfection

For continuous disinfection for both coils and moving air in ventilators, fan coil units, and large AHUs. These are excellent for eliminating biofilms.



UV Surface and Air Disinfection

UV light surface disinfection systems provide **localized surface disinfection** and **spot treatment**. These units should only be used to disinfect unoccupied spaces.

In addition to the target surfaces, the air between the UV unit and the target surface is also sanitized, as light passes through the air to disinfect the surface. These units cannot be used when the room is occupied, and thus, are designed with sensors and controls, meaning the units automatically shut off when someone enters the room, or they can be programmed to operate at a specific time or integrated into a building's automation system (BAS).

UV disinfection systems for surfaces are the most quantifiably **effective way to inactivate pathogens**.

There are (3) primary methods that UV Light provides surface disinfection. Each of which can NOT be used even when a space is occupied.

1.) Fixed-Position & Ceiling-Mounted UV Disinfection Systems

2.) Portable and Mobile UV Light Systems

3.) UV Robots



Fixed-Position & Ceiling-Mounted UV Disinfection Systems

Fixed-Position UV Disinfection Fixtures: UV fixtures that can be mounted in the ceiling, suspended, or on the wall. These units can be implemented with scheduled commissioning, integration into the facility Building Automation System (BAS), or simply utilized on demand. Multiple fixtures can be installed in a room or space, providing a scalable method of UVC disinfection for both large and small spaces.



Portable & Mobile UV Light Systems

UVC Mobile units utilize the same fixture technically as Fixed-Position UV disinfection units, however they are mounted on stands that can be moved via folding tri-pods or rolling castors. These units or carts can be moved easily from room to room to disinfect multiple spaces. Mobile units most often utilize an on-demand single cycle operation and are designed to provide user flexibility in deployment. Similar to Fixed-Position UV disinfection fixtures, multiple mobile units can be deployed in a space, providing scalable disinfection for large or small spaces.



UV Robots

These fully-automatic UV machines disinfect high traffic areas and shared spaces and can disinfect up to 1,000 feet of linear surface areas in an 8-hour shift. Scheduling of disinfection can be initiated or modified from anywhere using a mobile device, browser, or integration with a scheduling system.



» All of these UV options can disinfect on demand with preset and controllable cycles. You can even run the cycles overnight or whenever the spaces are unoccupied, and all fixtures have automatic shutoff sensors if anyone enters the space during disinfection. (You can read more on Germicidal UV Safety [here](#)).

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**What's
Next?**

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*We can create a customized
UV plan for you!*

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*If you want to learn more about UV light, you can explore
all our [UV content here](#).*