

UV-C Disinfection



**Safer Environments,
Saves Lives.**

**Effective
Disinfection of
viruses &
bacteria**

Technical Specifications

UV-C Disinfection

Plugin Power cord: 220V

Weight: $\geq 40\text{kg}$

Dimensions: W:53 (cm) x H:160 (cm)

Disinfection Coverage: 360 degrees

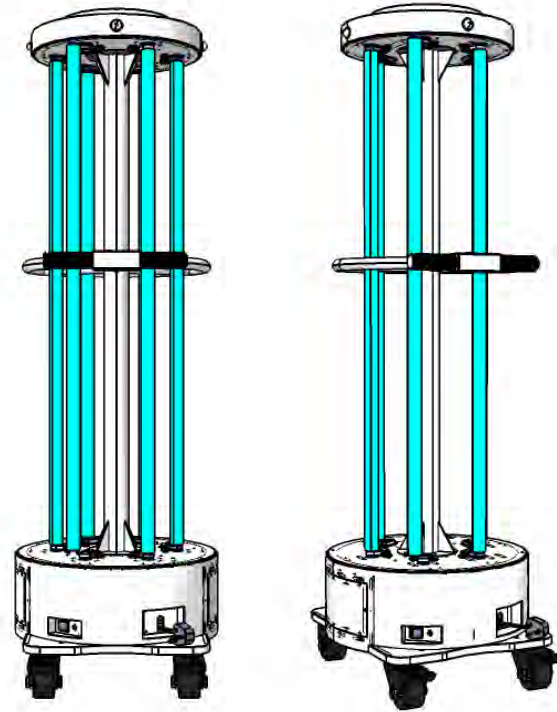
Disinfection Time: 15 / 30 / 60 / 90 / 120 mins

Connectivity: Wireless (Bluetooth)

UV-Wavelength: 254 nm (UV-C rays) CE Certified

No. of UV-C lights: 6 x 75W Philips

Safety: Fitted with Human Detection IR Sensor

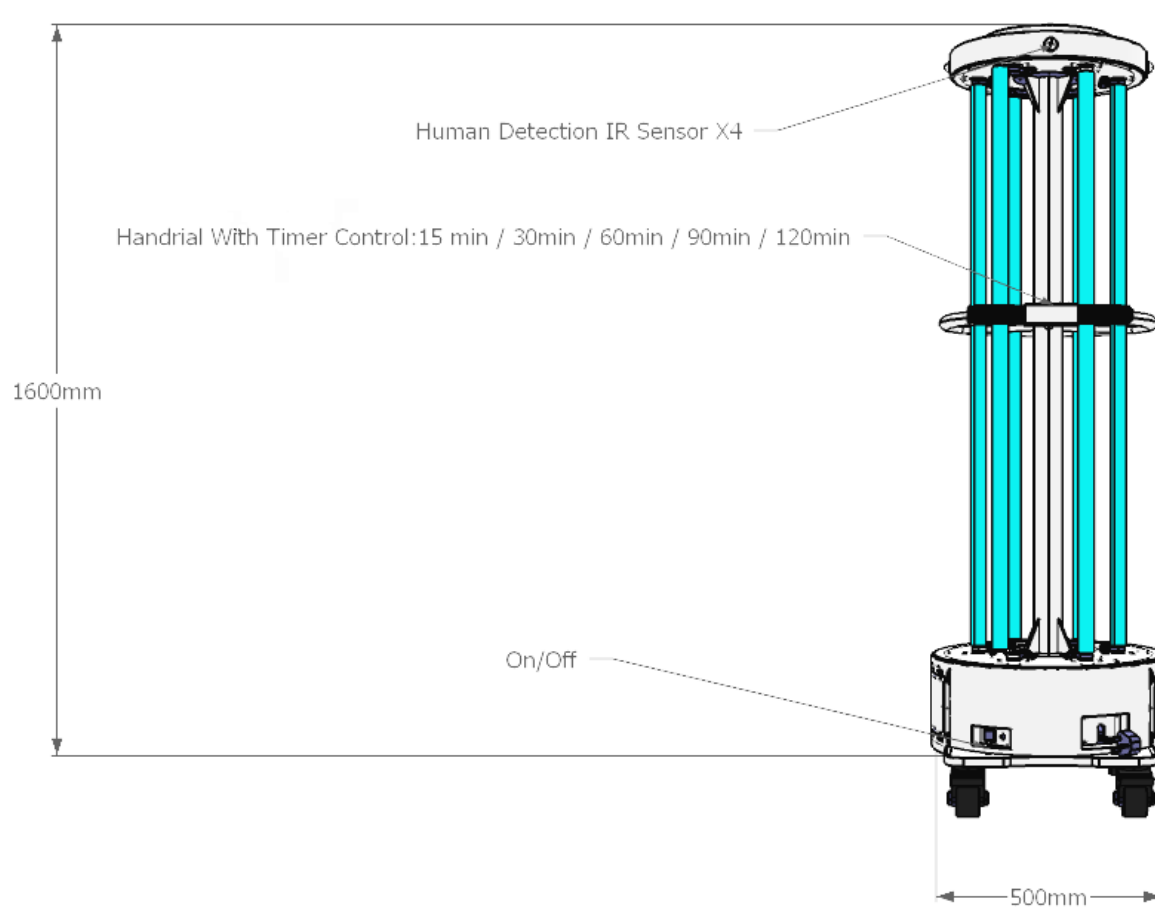


Kills 99% of all bacteria

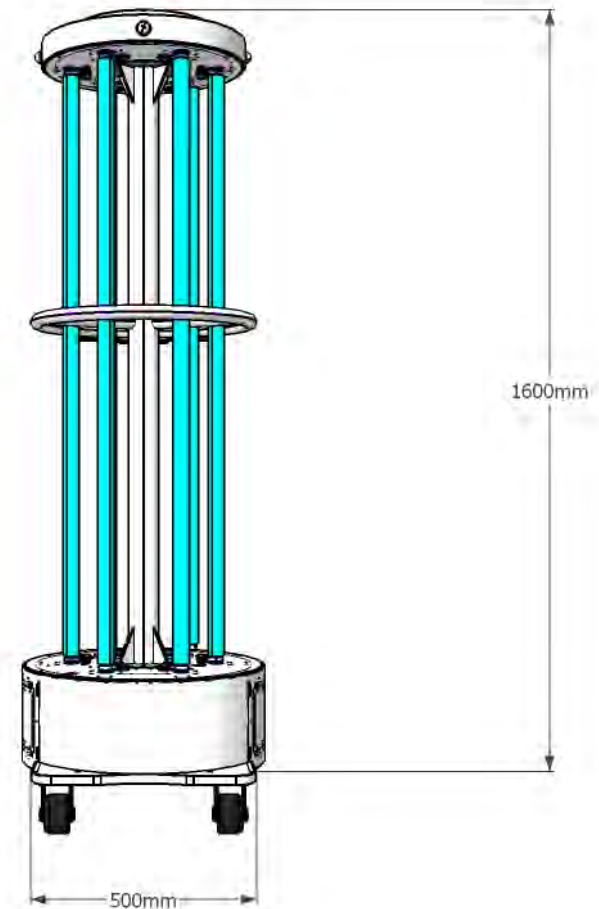
Suggested Disinfection Time:

***15 mins. for a regular 25m² indoor room**

Design Structure

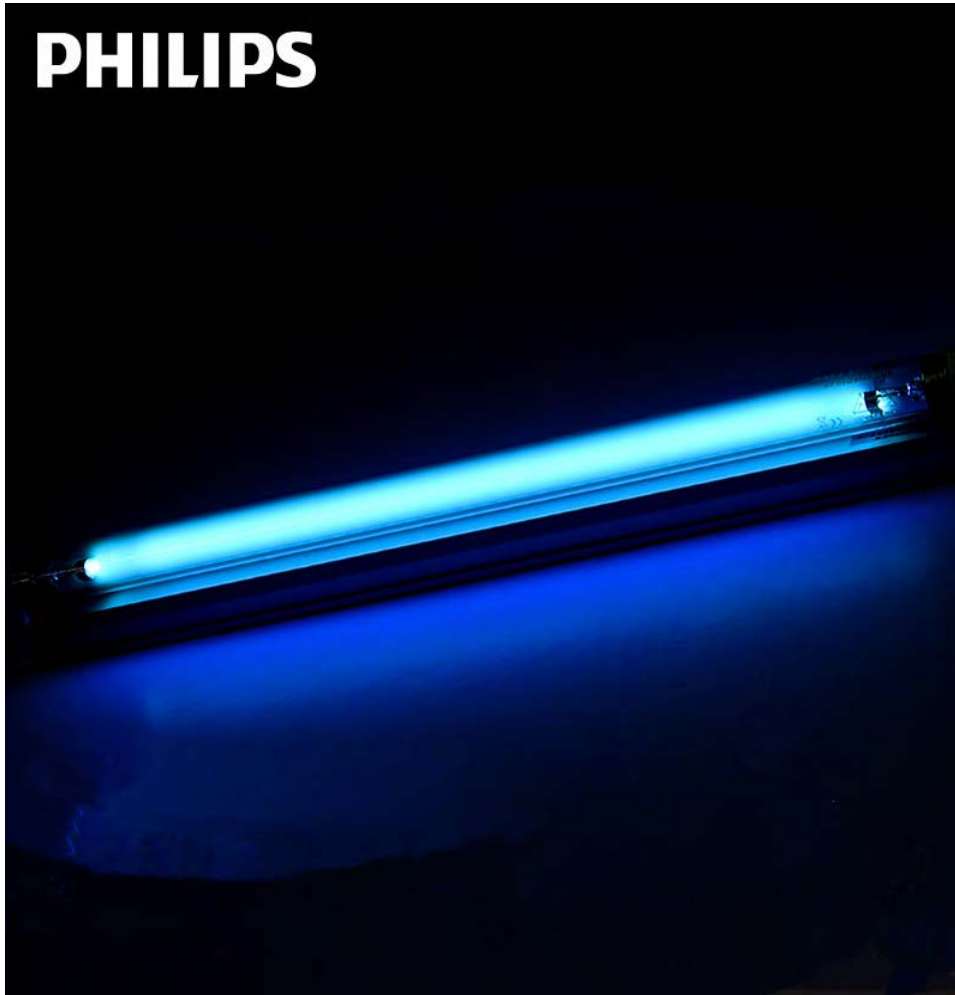


Front View



Back View

We use Philips ultraviolet lamps



Reliable UV-C output over lifetime

All Philips UV-C low pressure mercury lamps contain a unique coating on the inner glass wall that ensures the UV-C output over the useful life of the lamp never drops below 85% of its initial output.

“UV-C radiation is a known disinfectant for air, surfaces, objects and water that can help mitigate the risk of acquiring an infection and has been used extensively for more than 40 years. All bacteria and viruses tested to date (many hundreds over the years, including various coronavirus) respond to UV-C disinfection. In laboratory testing, our UV-C light sources inactivated 99% of the SARS-CoV-2 virus on a surface with an exposure time of 6 seconds. A clear indication that UV-C can play a valuable part in your protection strategy.”

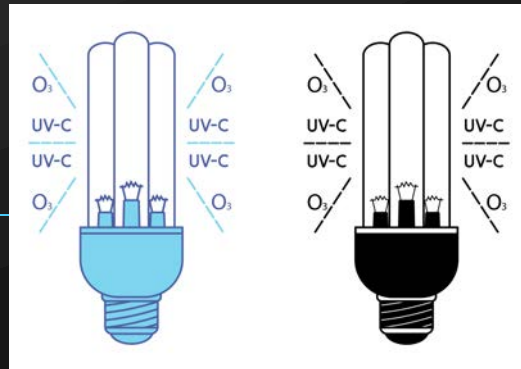
From Philips.co.uk

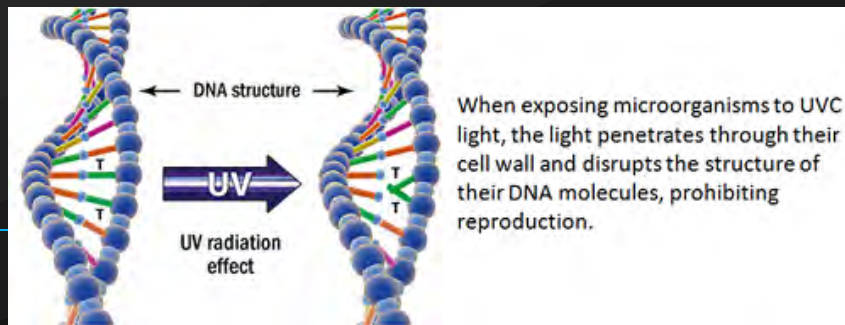
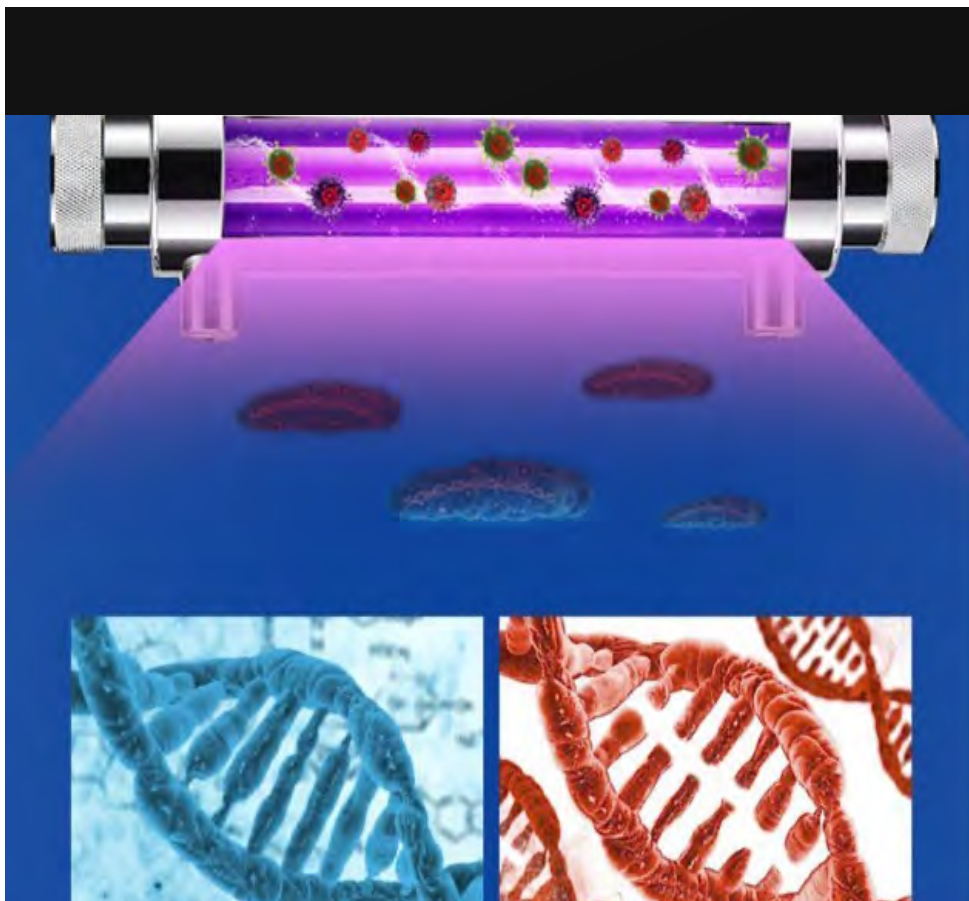
UV-C Disinfection Process

As we face one of the greatest healthcare pandemics of our generation, we know that bacteria, viruses and mold spread easily in densely populated public environments such as airports, cinemas, offices, shopping malls and public transport. It is particularly important that stringent preventive cleaning measures are in place in our care homes, hospitals, surgeries, dental practices etc as it could mean a matter of life and death.

- UV-C disinfection machines emit concentrated UV-C light radiation into the environment, space or room to kill all bacteria and viruses, both on surfaces and in the air.
- The UV-C light reduces the spread of infectious micro-organisms which are invisible to the human eye by breaking down their DNA structure and therefore preventing it from spreading through touch and transportation.
- The effective use of the UV-C disinfection process is known to reduce public areas infection rates considerably.
- A safe and user-friendly operation where the machine operator controls the disinfection process via an app.
- All UV-C machines are installed with a safety feature where if human detection is picked up by the IR sensor, the machine will immediately switch off automatically.

How it works





According to the International Ultraviolet Association, it is generally accepted that a dose of $40 \text{ mJ} \cdot \text{cm}^{-2}$ of 254 nm light will kill at least 99.99% of “any pathogenic microorganism”.

Many of the pathogens that cause these infections are multi-drug resistant and difficult, if not impossible to cure with drugs. It there makes sense to try to kill them before they can enter the body. UV-C disinfection light technology eliminates any remaining pathogens after manual cleaning processes, such as:

- Coronavirus
- Clostridium difficile (C.diff)
- Staphylococcus aureus
- Methicillin-resistant Staphylococcus aureus (MRSA)
- Vancomycin-resistant Enterococcus faecalis (VRE)
- Norovirus

Prior to the Covid-19 outbreak, UV-C disinfection was only used in hospitals. Going forward, by realising and learning how the Covid-19 pandemic has affected the world, by making the simple UV-C disinfection processes as part of routine cleaning. it would help eliminate the spread of viruses and bacteria.

Fogging vs UV-C Disinfection



Although just as effective, fogging disinfection is an alternative option to zap away bacteria and viruses and is widely used in offices and homes.

Fogging disinfecting involves a fine spray of chemicals being disbursed/sprayed over surfaces and areas. Tiny particles land on surfaces, effectively killing any bacteria and viruses.

Advantages of UV-C disinfection:

- Dry chemical-free way of reducing bacteria and viruses
- Faster process – UV-C disinfection can take as little as 15 minutes whereas fogging disinfection can take hours
- No need to wait to enter an area after a UV-C disinfection process. Fogging usually requires you to wait an amount of time to pass before entering
- Uses no chemicals and leaves no residue
- Fogging can leave chemicals on absorbent furnishings such as upholstered chairs or beds. Therefore, such items will need to be removed before fogging disinfection can start
- UV-C disinfection has the same disinfecting effects on the air as well as surfaces
- UV-C disinfection machines can be strategically positioned in difficult to reach areas, i.e. corner spaces, underside surfaces
- UV-C 100% safe for food environments
- No need to shut down HVAC systems. In fact, better to keep on to disinfect as much air as possible
- Fogging requires HVAC systems to close down to prevent leakage
- Over time, pathogens can become resistant to chemicals



For further information,
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