

M4 Upper-Air UVC for Challenging Environments



Advantages:

Enclosed UVC is 100% Safe (People and Materials) • Effective at reducing viral load in the facility
Low initial costs • Low unit cost • Low installation cost • Energy savings
Commercial-grade materials • Low maintenance costs

Upper-Air UVC: The Best Solution for Humans and Animals

- Sanitize the air in the confinement on a 24/7 basis.
- Create a layer near the ceiling that sanitizes all the air that passes into it.
- Each unit emits the invisible protection out 10' from the unit. Placing the units 20' apart from each other creates a full layer of protection for the entire building.

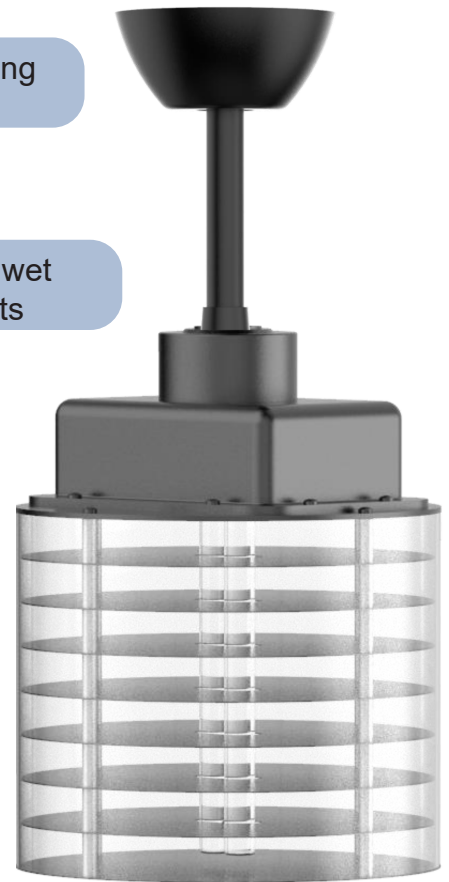
Designed for harsh environments:

- Quartz Sleeve and seals are added to the standard unit to bring it to IP54 Standards. This protects the electronics from high humidity and water sprayed on the unit.
- Quartz is used for strength and because it does not interfere with UVC wavelength of light.

Self-Leveling Ceiling
Mount Bracket

IP4 Rated for wet
environments

UVC Light travels only
horizontally



Sealed Quartz Sleeve
(Can be wet washed)

USA and Foreign Patents and Patents pending.

After analysis of the needs in the swine, chicken and turkey industry, we have developed a comprehensive airborne disease protection plan. The products have been developed, tested and certified to human health standards and modified to meet the challenging environments in farming.



Shining a light on UV technology

Philips is the world leader in UV-C Lamp Technology. All our UV-C Products use Philips UV-C lamps exclusively

UV-C is a known disinfectant for air, surfaces and objects that can help mitigate the risk of acquiring an infection.

What is UV technology?

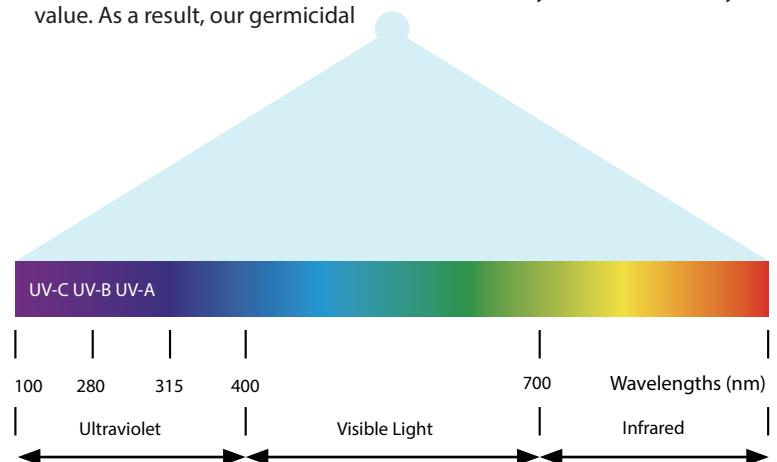
- Ultra-Violet (UV) light is invisible to the human eye and is divided into UV-A, UV-B and UV-C.
- UV-C is found within 100-280 nm range. The germicidal action is maximised at 265 nm. Philips Low pressure UV-C lamps have their main emission at 254 nm where the action on DNA is 85% of the peak value. As a result, our germicidal

lamps are extremely effective in breaking down the DNA and RNA of micro-organisms. This means that they cannot replicate and cause disease.

- The technology has primarily been used in areas where there is a risk of microbiological contamination, and has been used safely and effectively for more than 40 years.

“Our test results show that above a specific dose of UV-C radiation, viruses were completely inactivated: in a matter of seconds we could no longer detect any virus.”

Dr. Anthony Griffiths, Associate Professor of Microbiology at Boston University School of Medicine



Advanced Features:

- **UV-C lamp Operation monitor:** confirms the lamp is operating properly. If lamp is not working properly, the LED indicator will turn off.
- **UV-C lamp Life monitor :** indicates when it is time to change the lamp based on actual usage time.

Safety:

- Safe to use in all area's. Safe for eyes, skin and surfaces
- No Ozone – CARB certified for use in California

Certifications:

- UL 507 standard certified by ETL
- CARB certified
- EPA registered factory
- Independent lab tested

Maintenance and Service:

- Once per year service
- UV Bulb rated for 9,000 hours

Warranty:

- 2 year replacement warranty excluding UV-C lamp
- UV-C lamp has a 1 year replacement warranty



Meets California ozone emissions limit: CARB certified.

USA and Foreign Patents and Patents pending.

www.biosecureprotection.com