

The UVS-Series™ The Ultimate in Ultraviolet Air Disinfection Performance, Convenience and Safety

For those who recognize the importance of optimizing indoor air quality, UV air disinfection is a must and the UVS-Series is the choice. No other residential system offers more disinfection power

combined with better features: like premium, high performance UV lamps, our sophisticated UVLampMonitor microprocessor, and a rock solid, auto-voltage sensing electronic power supply. Combined they form the UVS-Series, the clear winner in UV air disinfection equipment for HVAC systems.

Industrial strength disinfection power

Philips® Compact-Twin “U” Shaped UV Lamps

The UVS Series uses either 9" or 16" Philips® Compact-Twin, Low Pressure, Short Wave “U” shaped UV lamps. Delivering far more output than a conventional lamp of the same length, these lamps enable the UVS Series to provide more UV intensity. This means there is more complete disinfection of air passing through the HVAC system. In addition, there will be more complete destruction of allergy causing mold in the part of the HVAC system where the UV equipment is installed. The Philips® lamps in the UVS Series not only deliver more output when new—their patented design enables them to retain a higher percentage of their original output over the entire life of the lamp, compared to conventional designs (See Ultravation UV Lamp Technology Information Sheet).



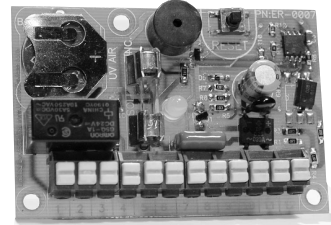
Lowest Mercury Content

UVS Series UV lamps use a fraction of the mercury that conventional lamps use—less than 5mg per lamp compared to up to 50mg in conventional lamps. This helps keep mercury levels minimized in landfills and greatly reduces problems that might arise from a broken lamp. Having the lowest lamp mercury content contributes to the fact that the Ultravation UVS -Series models are the the most environmentally friendly UV air disinfection systems available.

A UV system with a brain...

The UVLampMonitor

The UVLampMonitor™ resolves the two most important issues that an owner of UV equipment could have with a UV system. Should the UV lamp(s) go out, or if the owner forgets to change the UV lamp(s), the disinfection process stops. Operating a UV system with expired lamps is especially troublesome because UV lamps will still light long after their UV disinfection power is gone. This might allow the impression that the system is working, when in fact there is little or no disinfection occurring. The UVS Series makes certain that the consumer never has to worry about these concerns! The UVLampMonitor—an industry first in microprocessor control—is there to make sure the system is functioning properly 24/7. It keeps the owner informed of the status of the disinfection



process as it actively monitors the system. An alarm is triggered if a lamp ever goes out. To prevent use with expired lamps, it sounds a second, different alarm warning that the lamps in use will expire—30 days before the change is required (Industry standard for UV lamp life is twelve months. (See Ultravation UV Lamp Technology, page 6) System status conditions are communicated in two ways: visually using the front panel LED, and through an audible alarm.

UVLampMonitor alerts:

- Green LED—OK
- Red LED—Replace UV lamp(s) within 30 days
- Flashing Red with beep every 30 minutes—lamp life expired, replace lamps
- Pulsing Red with steady beep—UV lamp(s) out, immediate service required

For UV output stability, installation ease and HVAC electrical compatibility...

ESP™ Electronic-Smart Power

The UVS Series is equipped with ESP™, our auto-voltage sensing, fully electronic power supply. It automatically adjusts for every standard voltage—from 120 to 277 VAC 50/60Hz with no step-down transformers or switches. It stabilizes voltage and current flow to the lamps, optimizing disinfection and output throughout lamp life, even when the line voltage fluctuates. In a lamp-out situation, ESP™ automatically protects itself from an un-loaded condition. While ESP™'s high level of stability maintains lamps at optimum output while running remarkably cooler than a standard ballast. There is no UV power supply system more efficient or reliable. In fact the entire—top performing—UVS 2036 uses no more power than 75 watt light bulb!



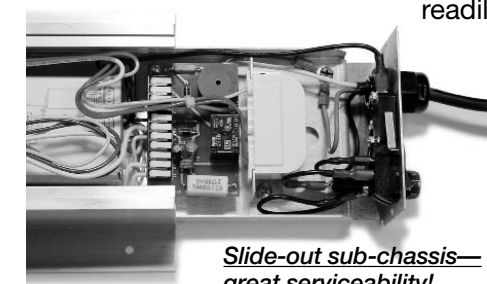
VOC option

Reduces volatile organic carbons (VOCs), such as fumes from new carpet, cleaners, etc. as well as dust mite populations. The VOC option is a titanium oxide based catalyst strip that attaches to the UV system next to a lamp (or between lamps in a 2-lamp system). The strip and UV light work together to reduce these elements in the air. The VOC option can also be used to shield sensitive parts in an HVAC system.



Easy installation and service

Installation requires selecting the best location for the unit (see page 3), drilling a hole for each lamp (template provided) and fastening the unit with supplied self tapping screws. Electrical connection is made with the standard 6ft. plug-in power cord. However, the cord is easily removed so the unit will readily accept electrical fittings for hard wire connection. Should service ever be required, the slide-out sub-chassis makes the exchange of internal components very easy.



Slide-out sub-chassis—great serviceability!

TEN-YEAR Warranty

The advanced design of Ultravation UV products means better reliability, so we are confident in providing a 10 year warranty. In the event that service is required however, we provide entire replacement sub-chassis units, simplifying a service call to a matter of minutes.

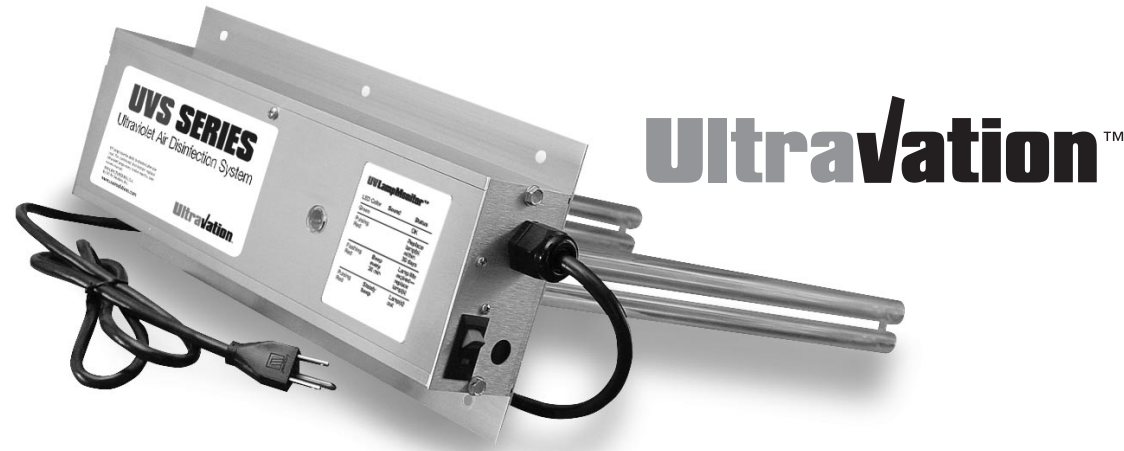
Additional features...

- Safety interlock switch on service cover
- Easy lamp replacement
- High finish aluminum alloy case
- 1 year UV lamp warranty



UVS-Series™

Ultraviolet Air Disinfection System Technical Information



Ultravation™

UVS Series Features and Benefits—Quick Reference

- Disinfects the air that circulates through an HVAC system** — **Helps people stay healthy by sterilizing microbes** Kills airborne diseases from the common cold virus to more serious bacterial threats like Legionella.
- Provides relief for allergy sufferers** — **Highly effective in reducing mold and fungi in indoor air—mold is one of the five most common allergens.**
- Disinfects HVAC components such as AC coils** — **Improves HVAC efficiency** by keeping the system free of mold and mildew. Helps optimize HVAC heat exchange, minimizing operating costs.
- UVLampMonitor™** — **The industry's first and only microprocessor controlled UV air disinfection system.** Audible and visual monitoring of UV system performance with a two-stage alert system. Tracks lamp life and makes sure the lamp(s) are operational.
- ESP™ Electronic-Smart Power Supply** — **Auto-voltage sensing**—connects directly to 120 - 277VAC without switches or transformers. Compatible with all systems and simplifies installation.
- Philips® Compact-Twin UV Lamps** — **Compact "U" shape** creates more UV output than standard lamps. They retain more output intensity over lamp life and are environmentally friendly because they contain far less mercury than standard UV lamp types.
- Easy to install and service** — **Installs in about 30 minutes.** Lamps change easily. **Slide out sub-chassis** for quick, easy serviceability.
- 10 Year Advance Replacement Warranty** — **Replacement sub-chassis shipped** when service is required.

The UVS-Series™

Technical specifications

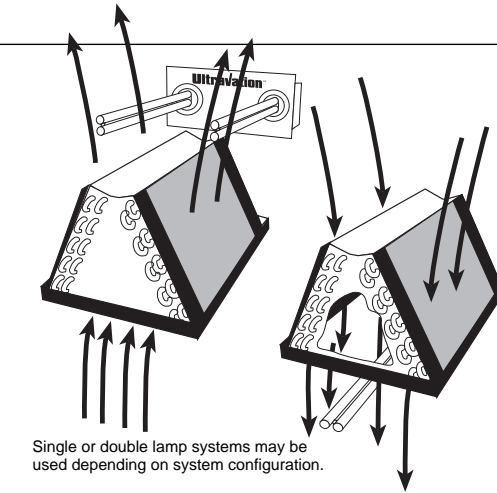
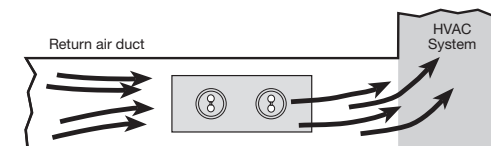
Model	Number of lamps	Lamp length	Microwatts/cm ² 6" from lamp	Use in areas up to (sq. ft.)	Power consumption	Dimensions	Shipping weight
UVS-1000	1	9"	1500	1000	18 watts	L:11" W:6" H:2-1/4"	4 LBS
UVS-1036	1	16"	2600	1500	36 watts	L:11" W:6" H:2-1/4"	4 LBS
UVS-2000	2	9"	1800	2000	36 watts	L:13.25" W:6" H:2-1/4"	5 LBS
UVS-2036	2	16"	3100	3300	72 watts	L:13.25" W:6" H:2-1/4"	5 LBS

All units include pre-drilled holes and mounting hardware. The UVS-Series is non ozone producing.

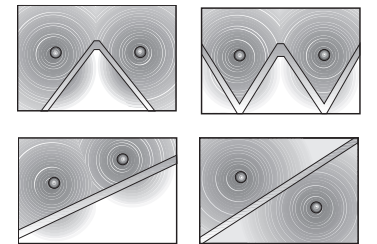
Installation options

Configurations

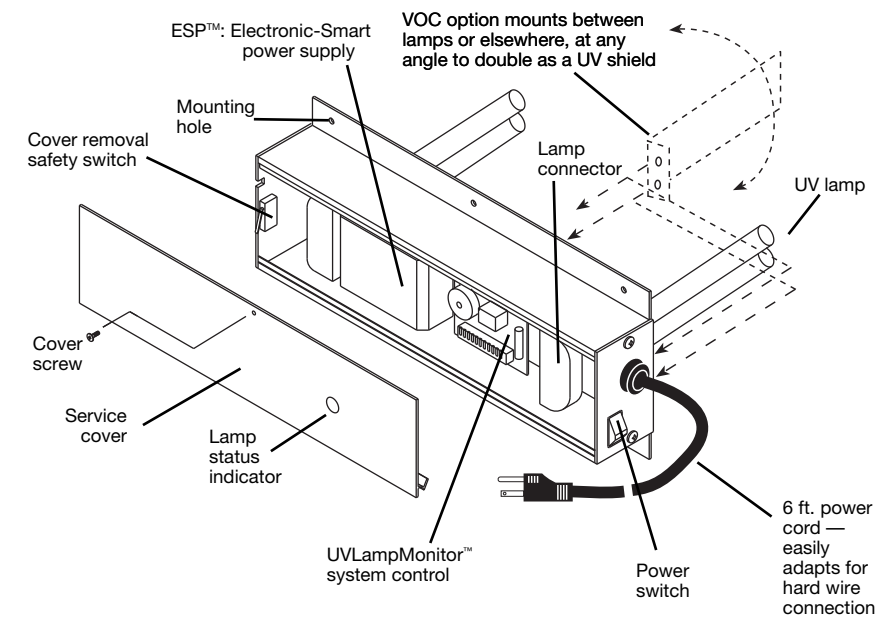
The UV system can be placed at the coil, or at the system return. Placement at the coil allows direct exposure for optimum mold and fungi reduction. Placement at the return optimizes UV exposure time and intensity. Care should be taken to protect HVAC component parts that may be UV sensitive.



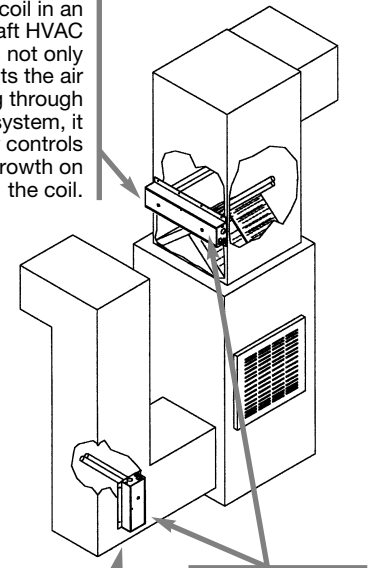
The UVS Series works with all common coil types



Typical layout



A UV system placed over the coil in an updraft HVAC design not only disinfects the air passing through the system, it directly controls mold growth on the coil.



A UV system placed on the return will disinfect the air before microorganisms have the opportunity to colonize in the HVAC system.

UV systems placed in both locations keeps the entire system clear and greatly improves the amount of disinfection in a single pass.

Lamp measurements were obtained in accordance with the National Primary and Secondary Ambient Air Quality Standards Section 40 CFR part 50.

