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 ensures that an owner of UV equipment will have a much lower lamp usage than 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 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 face 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—220V, 240V, 120V 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!

UV Lamp monitoring and protection systems help 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 most environmentally friendly UV air disinfection systems available.

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 most environmentally friendly UV air disinfection systems available.

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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.

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**

- Disinfects the air that circulates through an HVAC system
- Helps people stay healthy by sterilizing microbes that cause allergies, such as those from pollen and dust mites.
- Provides relief for allergy sufferers.
- Disinfects HVAC components such as AC coils.
- **UVLampMonitor™**
- **ESP™ Electronic-Smart Power Supply**
- Philips® Compact-Twin UV Lamps
- Easy to install and service
- **10 Year Advance Replacement Warranty**

**UVS Series Features and Benefits—Quick Reference**

- **UVS Series Features and Benefits**
  - Disinfects the air that circulates through an HVAC system.
  - Helps people stay healthy by sterilizing microbes that cause allergies, such as those from pollen and dust mites.
  - Provides relief for allergy sufferers.
  - Disinfects HVAC components such as AC coils.
  - **UVLampMonitor™**
  - **ESP™ Electronic-Smart Power Supply**
  - Philips® Compact-Twin UV Lamps
  - Easy to install and service
  - **10 Year Advance Replacement Warranty**

**Technical specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of lamps</th>
<th>Lamp length</th>
<th>Microwatts/cm²</th>
<th>Use in areas up to (sq. ft.)</th>
<th>Power consumption</th>
<th>Dimensions</th>
<th>Shipping weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>UVS-1000</td>
<td>1</td>
<td>9”</td>
<td>1500</td>
<td>1000</td>
<td>18 watts</td>
<td>L:11” W:6” H:2-1/4”</td>
<td>4 LBS</td>
</tr>
<tr>
<td>UVS-1036</td>
<td>1</td>
<td>16”</td>
<td>2600</td>
<td>1500</td>
<td>36 watts</td>
<td>L:11” W:6” H:2-1/4”</td>
<td>4 LBS</td>
</tr>
<tr>
<td>UVS-2036</td>
<td>2</td>
<td>16”</td>
<td>3100</td>
<td>3300</td>
<td>72 watts</td>
<td>L:13.25” W:6” H:2-1/4”</td>
<td>5 LBS</td>
</tr>
</tbody>
</table>

**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.
  - Single or double lamp systems may be used depending on system configuration.

**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.
- **ESP™** Electronic-Smart power supply
- Power switch
- Lamp connector
- UVLampMonitor™ system control
- 6 ft. power cord—easily adapts for hard wire connection
- VOC option mounts between lamps or elsewhere, at any angle to double as a UV shield

**Lamp measurements**

- Lamp status indicator
- Cover screw
- Mounting hole
- Service cover
- Lamp status indicator
- Cover removal safety switch

**Lamp measurements**

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