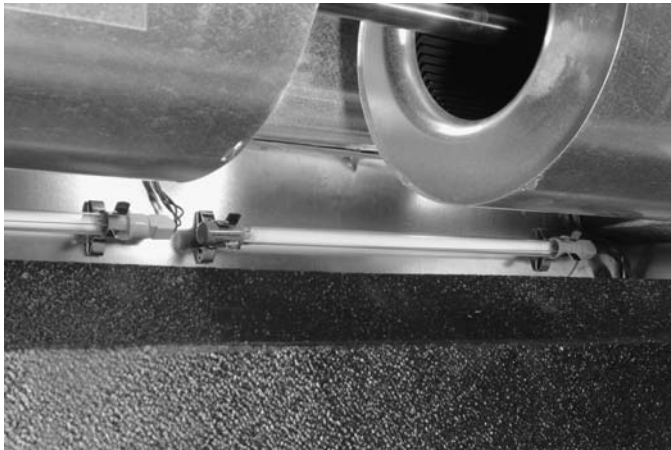


# STERIL-AIRE®

## UVC for HVAC™

## Unit Ventilator UVC Kit™

Very High Output Germicidal  
Light Source for Classroom  
Unit Ventilator Systems

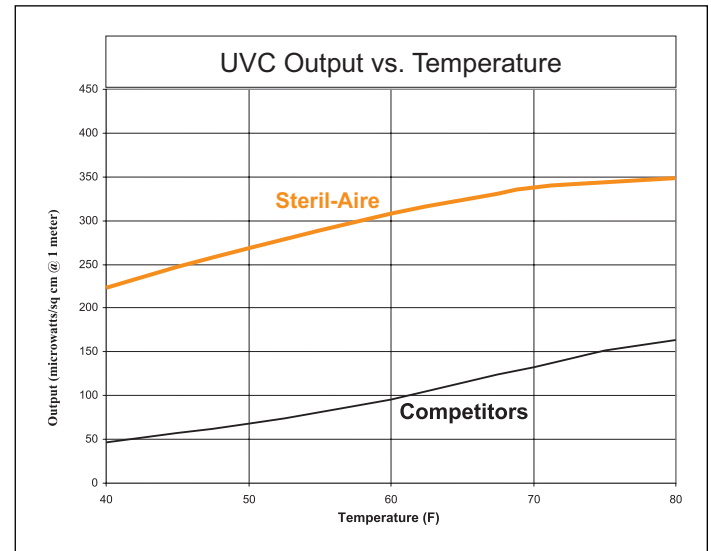


The Unit Ventilator UVC Kit packages Steril-Aire's proven technology into a convenient kit designed specially for classroom unit ventilators. Using Steril-Aire's multi-patented UVC Emitter™, it delivers the best and longest-lasting UVC performance available. As shown in the comparison graph (*top right*), it has been independently tested to deliver an average of 5 times the output of other ultraviolet devices under HVAC operating conditions (45° F @ 550 fpm air velocity). Steril-Aire's increased output provides the most reliable germicidal performance and longest service life.

Classroom unit ventilators have long presented an IAQ challenge because many are equipped with low efficiency filters that do not effectively capture infectious disease contaminants or mold. Due to space and airflow limitations, these units cannot be retrofitted with high efficiency filtration. The Unit Ventilator UVC Kit provides a practical and effective solution using UVC technology. Installed Emitters fit across from the cooling coil, emitting high output UVC energy, to eliminate surface contaminants and reduce airborne microbial contaminants.

### Applications

Each Unit Ventilator UVC Kit contains one UVC Emitter and one power supply plus all necessary hardware components to retrofit a unit ventilator with UVC – including wire, holding clips, mounting screws, and wire ties. The correct quantity of kits (generally two to six) must be selected to irradiate the



entire coil. The space-saving, snap-in design fits all major unit ventilator brands such as McQuay (Herman Nelson, American Air Filter), Carrier, Trane and MSI for both blow-through and draw-through coil styles.

### Benefits

- Kills and/or reduces surface and airborne microorganisms that contribute to poor IAQ and/or the spread of infectious disease, including: mold and mold spores, bacteria (including *TB*, *Legionella* and *whooping cough*); and viruses (including *colds*, *flu*, *measles* and *SARS*).
- Delivers an average of 5 times the output of competitive UVC products at HVAC operating temperatures, for 3-4 times longer life and more reliable germicidal control.
- Uses patented state-of-the-art solid-state electronic power supply for enhanced reliability and performance.
- Continuously cleans coils – improving airflow, temperature and humidity control while saving energy.
- Produces no ozone or other secondary contaminants – will not harm classroom occupants, equipment or furnishings.
- Offers lowest life-cycle cost of any UVC product. Return on investment is often less than one year.
- Quick and easy snap-in installation.

## Unit Ventilator UVC Kit Specifications

**The UVC Emitter™** and power supply shall be factory assembled and tested. They shall consist of a power supply, Emitter socket and Emitter.

**The power supply** shall be a Class P, electronic rapid start type with a power factor of >0.95 and a power conversion of >75%. It shall be available in 115-208/230 or 277 Vac, 50/60 Hertz, and single phase. It shall be designed to maximize photon production, irradiance and reliability in cold or moving



*This product may be covered by one or more of the following patents, others pending: 5,334,347/ 5,866,076/ 5,817,276/ 6,372,186/ 6,313,470/ 6,245,293/ 6,267,924/ 6,280,686/ 6,423,882*

airstreams of 35-170° F, 100% RH and up to 2000 fpm. The design shall include RF and EMI suppression.

**The socket** shall be a Circline® 4 pin type with 10 feet of wire length to facilitate installation and service.

**The Emitter** shall be a very high output, hot cathode, T5 diameter, Circline® cell-base type that produces a UVC band of 250-260 nm. Each tube shall be capable of producing the specified output at up to 2000 fpm velocity and temperatures of 35-170° F. It shall produce no ozone or other secondary contaminants.

**Kit Components:** The wire shall be UV-resistant and rated for installation in an HVAC system. The spring mounting clips shall be provided with mounting screws and custom designed to hold the UVC Emitter ceramic end without damaging the tube during installation or replacement.

**Independent testing:** The unit shall be tested by an independent test laboratory in accordance with the general provisions of IES Lighting Handbook, 1981 Applications Volume, and shall be verified through independent testing to provide output per inch of glass of not less than 10 µW/cm<sup>2</sup> at 1 meter in a 400 fpm airstream of 45° F.

Unit shall comply with UL Standard 1995 for use in HVAC equipment and shall carry the "UL" and "ULC" labels.

## Ordering Information

| Model No. | Part No. | Description             | Length | Electrical                  | Weight   |
|-----------|----------|-------------------------|--------|-----------------------------|----------|
| UVK 161   | 11003100 | Unit Ventilator UVC Kit | 16"    | 115, 208/230 V: 70-85 watts | 1.1 lbs. |
| UVK 161   | 11003200 | Unit Ventilator UVC Kit | 16"    | 277 V: 70-85 watts          | 1.1 lbs. |
| GTS 16 VO | 21000100 | 16" Single-Ended Tube   | 16"    | N/A                         | 0.15 lb. |

# STERIL-AIRE®

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*Complies with current U.S. and Canadian UL Standards for use in HVAC equipment.*

Represented By: