STERIL-AIRE

First and Best in UVC for HVAC®

ESE Series For Enhanced UVC Emitters™

Enhanced Single-Ended, Very High Output Germicidal UVC for HVAC Systems

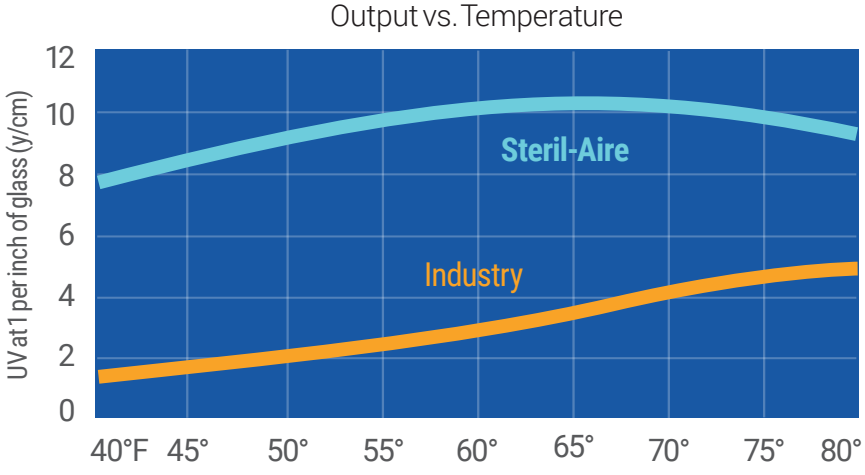
Features

- Supports Emitters up 61" in length from an easy to install 304 stainless steel fixture that mounts on the outside of the unit.
- Maintenance of the Power Supply and Emitter change out are simple and accessible without disruption of the AC Unit operation.
- Reduces HVAC energy costs by restoring heat transfer and net cooling capacity.
- Uses germicidal UVC irradiation proven as an effective inactivation method for mold, bacteria and viruses.
- Eliminates costly cleaning programs and the use of harmful chemicals and disinfectants by continuously cleaning coils, drain pans, plenums and ducts.
- Delivers up to 6 times the output of competitive UVC products at HVAC operating temperatures, for longer life and more reliable germicidal control.
- Produces no ozone or other secondary contaminants.
- Installs quickly and easily – ideal for small systems and/or ducts.
- Improves Indoor Air Quality (IAQ).

Competitive UVC lamps must be changed every 3-4 months because they quickly lose the output or "killing power" needed to maintain biofilm control. The UVC Emitter, by contrast, has a 12-month service life – and even after a full year, it has more than 3 times greater output than competitive devices deliver on Day 1! As a result, only Steril-Aire can ensure the germicidal performance you need.

Applications

Steril-Aire Enhanced Single-Ended (ESE Series) fixtures are used for newand retrofit fan coils, heat pumps, unit ventilators, terminalunits and ductwork. Installed from the exterior of the AHU,they provide easy installation by making a hole in the AHUwall or duct and simply mounting the fixture to the unit exterior. The Emitter penetrates into the system, while the power supply remains external. Enhanced SE Emitters are availablein eight lengths (16", 20", 24", 30", 36", 42", 50" and 61") with a universal 120-277V power supply.



Steril-Aire's multi-patented UVC Emitter provides the best and longest-lasting UVC performance available. As shown in the comparison graph (above), it has been independently tested to deliver up to 6 times the output of other ultraviolet devices under HVAC operating conditions (50 °F @ 400 fpm air velocity).

Specifications

The UVC Emitter and fixture shall be factory assembled and tested. They shall consist of a fixture, power supply, support bracket/reflector, Emitter socket and Emitter.

The fixture shall be constructed of 304 stainless steel to withstand HVAC environments and shall be equipped with a 1/2" electrical conduit opening to facilitate wiring. All components shall be incorporated into one integral assembly that maximizes serviceability.

It shall be designed for mounting from outside the airstream with only the Emitter in the conditioned air. Emitter shall be held in place and supported in the airstream by a patented integral collar, o-ring, heavy-duty spring wire fastener and omnidirectional support bracket/reflector. The housing shall include an on-off switch and an indicator light to verify electrical power. Clearance on the side of the AHU should be allocated to facilitate installation and service (clearance length must be equal to or greaterthan Emitter length).

The power supply shall be a Class P2, electronic rapid start type with a power factor of >0.98 and a power conversion of >90%. It shall be available in 120-277V, 50/60 Hz, single phase (will perform satisfactorily @ 100 V - 277V). It shall be designed to maximize photon production, irradiance and reliability in cold airstreams of 0-140 °F, 100% RH. The design shall include RF and EMI suppression.

The socket shall be a Steril-Aire Enhanced® 4 pin type with sufficient wire lengthto facilitate service.

The Emitter shall be a very high output, hot cathode, T5 diameter, Steril-Aire Enhanced® type that produces a germicidal UVC band of 253.7 nm. The ESE Emitter shall operate in air velocities of up to 2000 fpm and air temperatures of 35-140 °F. It shall produce no ozone orother secondary contaminants.

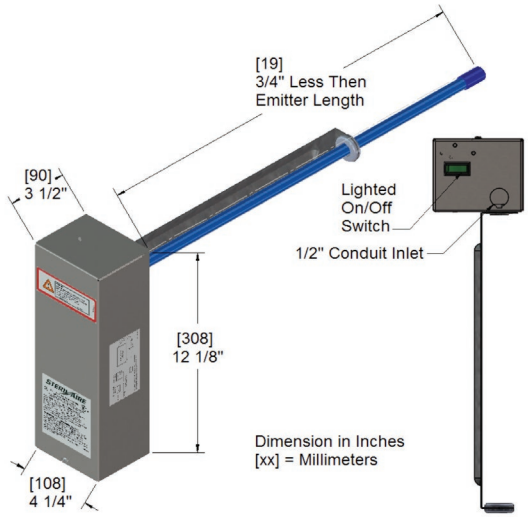
Independent testing: The unit shall be tested by an independent test laboratory, and shall be verified to provide output per one inch arc length of not less than 7.8 µW/cm2 at 1 meter in a 400 fpm airstream of 50 °F.

Unit shall comply with ANSI/UL Standards 153, 1598, 1995 and CSA and CE Standards. The manufacturer shall be an ISO 9001:2008 and ISO 14001:2004 certified facility.

Ordering information

Fixture	Part No	Description	Length	Electrical
ESE 1 VO	11003000	Enhanced Single-Ended Fixture	NA	120-277V

Emitter	Part No	Description	Length	Electrical
EGTS 16 VO	21000110	Enhanced UVC Emitter	16"	55 W
EGTS 20 VO	21000210	Enhanced UVC Emitter	20"	64 W
EGTS 24 VO	21000310	Enhanced UVC Emitter	24"	72 W
EGTS 30 VO	21000410	Enhanced UVC Emitter	30"	86 W
EGTS 36 VO	21000510	Enhanced UVC Emitter	36"	100 W
EGTS 42 VO	21000610	Enhanced UVC Emitter	42"	110 W
EGTS 50 VO	21000910	Enhanced UVC Emitter	50"	130 W
EGTS 61 VO	21000810	Enhanced UVC Emitter	61"	155 W



This product may be covered by one or more of the following patents, others pending: 6,267,924 / 6,313,470 / 6,423,882 / 6,500,267 / 6,589,476 / 6,627,000 / 6,997,578 / 7,140,749 / 7,282,728 / 7,459,694.

STERIL-AIRE®

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Complies with current U.S. and Canadian safety standards for use in HVAC equipment

Represented by: