SANITAIRE™ ROOM AIR SANITIZER

GERMICIDAL ULTRAVIOLET

Since 1963, Atlantic Ultraviolet Corporation has pioneered the discovery and development of beneficial uses of ultraviolet energy. Over the years, these efforts have led to the development of valuable, cost effective and environmentally sound techniques and products now known and utilized throughout the world.

Ultraviolet is a unique and rapid method of disinfection utilizing germicidal ultraviolet lamps that produce short-wave radiation that is lethal to bacteria, virus and other microorganisms. An ever growing range of industries and consumer applications have found ultraviolet to be the ideal solution for their air treatment needs.
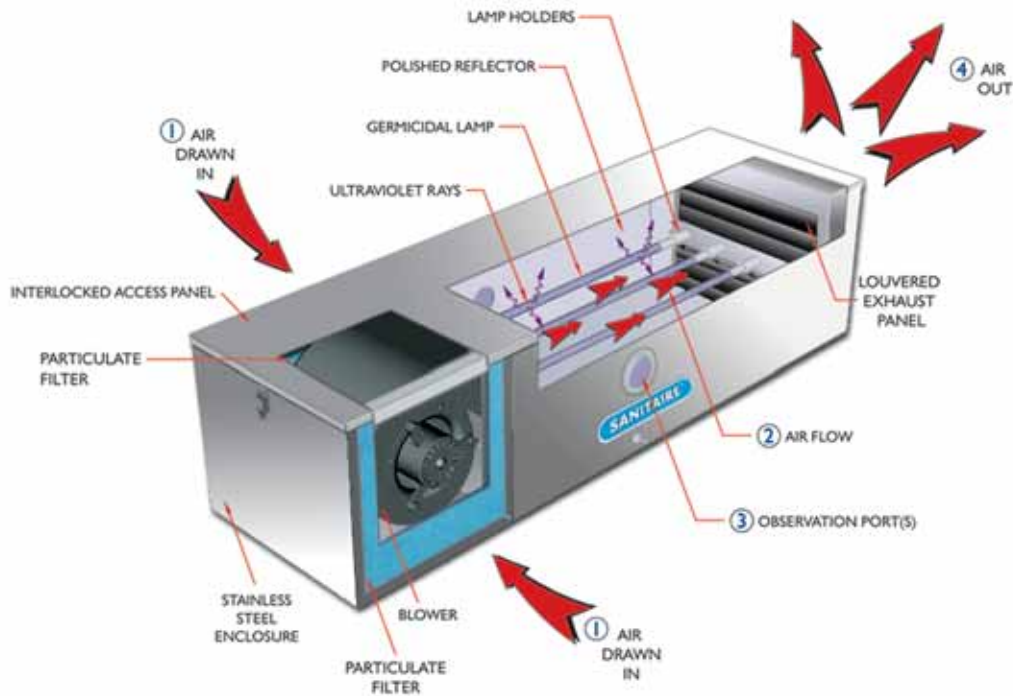
Atlantic Ultraviolet equipment and systems are manufactured in the USA.

ADVANTAGES OF THE SANITAIRE™ SYSTEM

- **EFFECTIVE** - air is drawn into the chamber and can be sized to meet room air changes required
- **ECONOMICAL** - equipment cost is generally less than other alternatives
- **SAFE** - virtually no risk of accidental ultraviolet exposure of occupants in treated area and no chemicals to contend with
- **EASY** - operation is simple and straightforward, with little or no installation required
- **AUTOMATIC** - continuous use - little operator attention required
- **VERSATILE** - most units are relatively portable and can be applied to different areas as needed
- **LOW MAINTENANCE** - annual lamp replacement and periodic filter cleaning is all that is required

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PRINCIPLE OF OPERATION

1. Air is drawn into unit through washable electrostatic particulate filters (except Model RSM2680 which utilizes disposable filters).

2. Air is forced into ultraviolet exposure chamber where it is irradiated by germicidal ultraviolet light (lamp quantity varies per model).

3. Observation port provides positive indication of germicidal lamp operation.

4. Purified air leaves exposure chamber through the louvered exhaust panel (which restricts ultraviolet radiation from passing into the room).

USES AND APPLICATIONS

SANITAIRE™ Room Air Sanitizers are germicidal ultraviolet fixtures that effectively destroy airborne microbes including bacteria, mold and virus in enclosed spaces and are available in a number of different configurations to adapt to any setting.

SANITAIRE™ Room Air Sanitizers utilize *STER-L-RAY*™ germicidal lamps which are completely enclosed within a stainless steel exposure chamber and are safe for use in every application. **SANITAIRE**™ Room Air Sanitizers may be mounted into the ceiling, on a wall or are available for portable or mobile use.

SANITAIRE™ Room Air Sanitizers are utilized to protect personnel, clients and patients from infection due to airborne microbes, particularly in crowded or poorly ventilated areas, and in situations where the risk of cross infection is high. **SANITAIRE**™ Room Air Sanitizers are the solution in healthcare facilities where communicable respiratory diseases are present and for air disinfection in offices, food processing facilities, pharmaceutical manufacturing, dairy plants, bakeries, methadone clinics, clean rooms, homeless shelters, prisons and jails.

SANITAIRE™ Room Air Sanitizers are available to disinfect air in large conference rooms, auditoriums, waiting areas, gymnasiums and ballrooms.

STER-L-RAY™ GERMICIDAL LAMP DATA

Lamp No. (Quantity)	Model No.	Lamp Length	Lamp Length (including lampholders)	Power ① Consumption	Ultraviolet Output ② (per lamp)	Rated Average Effective Life
05-1348 (1)	RS72	21-7/8" (556 mm)	24"	25 Watts	8.5 Watts	10,000 Hours
(2)	RS140					
05-1352 (4)	RS435	27-7/8" (708 mm)	30"	32 Watts	11.2 Watts	10,000 Hours
(4)	RSA760					
(4)	RSCS280					
05-1334 (12)	RSM2680	45-7/8" (1165 mm)	48"	50 Watts	19.3 Watts	10,000 Hours

① Wattage is lamp watts only and does not include ballast loss.
② Ultraviolet output at 254 nanometers at 100 hours and 80 degrees Fahrenheit (approximate).

STER-L-RAY™ germicidal lamps are shortwave, low pressure mercury vapor discharge tubes that produce ultraviolet wavelengths lethal to microorganisms. We maintain a complete stocking inventory of all germicidal ultraviolet replacement lamps. Call for our STER-L-RAY™ Germicidal Lamp Catalog.
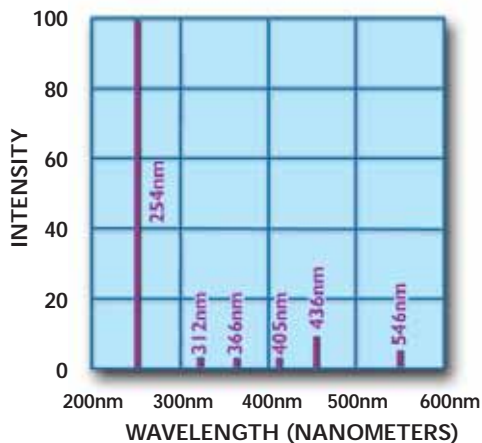

STER-L-RAY™ germicidal lamps are manufactured by the Atlantic Ultraviolet Corporation.

STER-L-RAY™ and the STER-L-RAY™ logo are trademarks of the Atlantic Ultraviolet Corporation.
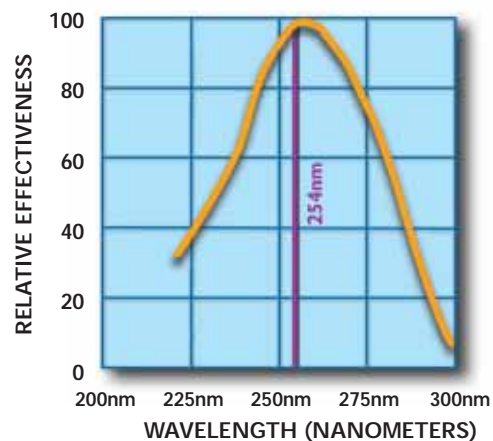
CAUTION: Overexposure to direct or reflected germicidal ultraviolet rays will cause painful eye irritation and reddening of the skin. Personnel subject to such exposure must wear suitable face shield, gloves and protective clothing.

OPERATING CHARACTERISTICS

Relative Spectral Energy Distribution (Typical)

Germicidal Effectiveness As Related to Wavelength

Approximately 95% of the ultraviolet energy emitted from STER-L-RAY™ germicidal lamps is at the mercury resonance line of 254 nanometers, the region of germicidal effectiveness most destructive to bacteria, mold and virus.

AIR BORNE INFECTIOUS ORGANISMS

ORGANISM	ALTERNATE NAME	TYPE	DISEASE	DOSE*
Corynebacterium diphtheriae	*C. diphtheriae*	Bacteria	Diptheria	6,500
Legionella pneumophila	*L. pneumophila*	Bacteria	Legionnaire's Disease	2,700
Mycobacterium tuberculosis	*M. tuberculosis*	Bacteria	Tuberculosis (TB)	10,000
Pseudomonas aeruginosa	*P. aeruginosa*	Bacteria		3,900
Serratia Marcescens	*S. marcescens*	Bacteria		6,160
Staphlylococcus aureus	*S. aureus*	Bacteria		6,600
Staphlylococcus epidermidis	*S. epidermidis*	Bacteria		5,800
Adeno Virus Type III		Virus		4,500
Coxsackie A2		Virus		6,300
Influenza		Virus	Flu	3,400

* Nominal Ultraviolet dosage (µWSec/cm2) necessary to inactivate better than 99% of specific microorganism.
Consult factory for more complete listing.

SPECIFICATIONS FOR STANDARD MODELS

Model	Nominal ① Unit Capacity (cubic feet per minute)	Dimensions			Electrical *② Requirement	Max. Room Size Treated @ 3 Room Air Changes/Hour	Max. Room Size Treated @ 6 Room Air Changes/Hour	Max. Treatment Capacity (cubic feet per hour)
		Length	Width	Height				
RS72	54	34-$^1/_2$"	7-$^3/_4$"	7-$^3/_4$"	1.30 amp	1,080 Cubic Ft.	540 Cubic Ft.	3240
RS140	105	34-$^1/_2$"	7-$^3/_4$"	7-$^3/_4$"	2.90 amp	2,100 Cubic Ft.	1,050 Cubic Ft.	6300
RS435	326	47-$^5/_{16}$"	14"	12"	4.93 amp	6,525 Cubic Ft.	3,263 Cubic Ft.	19,575
RSA760	380	59"	14"	12"	5.96 amp	7,600 Cubic Ft.	3,800 Cubic Ft.	22,800
RSCS280	210	46-$^5/_8$"	22-$^1/_8$"	9-$^7/_{16}$"	4.26 amp	4,200 Cubic Ft.	2,100 Cubic Ft.	12,600
RSM2680	2000	32"	30"	78-$^3/_4$"	11.00 amp	40,000 Cubic Ft.	20,000 Cubic Ft.	120,000

① Unit capacity incorporates an estimated allowance for airflow friction loss across filter and unit.
② Information listed refers to 120 Volt 60 Hz units. Contact factory for specifics on other voltages.
 * Consult factory with specific power requirements.

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C O R P O R A T I O N

SPECIAL FEATURES OF THE RS72, RS140, RS435 or RSA760
WALL OR CEILING MOUNT

GERMICIDAL LAMPS
Genuine *STER-L-RAY*™ Ultraviolet Germicidal Lamps provide the utmost in quality, sustained high output and long life.

LAMPHOLDERS
Steadfast™ Lampholders are spring loaded telescopic type that facilitate convenient, easy lamp change that is quick and hassle-free.

INTERLOCK SAFETY SWITCH
The interlock safety switch is a standard feature that disconnects power to the unit when the access panel is removed for lamp or filter replacement.

POLISHED REFLECTOR
Interior chamber is polished providing a highly reflective surface to maximize ultraviolet intensity within the chamber.

STANDARD WALL MOUNT KIT
Consists of (2) pre-drilled stainless steel brackets. Brackets enable unit to be mounted to wall in either the vertical or horizontal position.

LOUVERED EXHAUST PANEL
Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

OBSERVATION PORT(S)
A visible glow through the clear sight glass provides positive indication of germicidal lamp operation.

STAINLESS STEEL CONSTRUCTION
The chamber is Type 304 stainless steel for an attractive finish, unparalleled strength and durability.

PARTICULATE FILTER
• Washable Electrostatic Filter
• Absolute Filter - HEPA Type (Model RSA760)

OPTIONAL ACCESSORIES

• Disposable Filters
• Integral Elapsed Time Indicator *
• Optional Wall Mount Kit
• Integral Key Lock Switch *
• Ceiling Mount Kit
• SENTINEL™ Lamp Operation Indicator

* Item must be ordered at same time as Room Air Sanitizer Unit (installed at factory).

SPECIAL FEATURES OF THE RSCS280
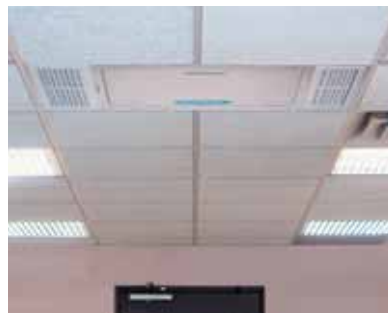### CEILING MOUNT

GERMICIDAL LAMPS
Genuine *STER-L-RAY*™ Ultraviolet Germicidal Lamps provide the utmost in quality, sustained high output and long life.

LAMPHOLDERS
Steadfast™ Lampholders are spring loaded telescopic type that facilitate convenient, easy lamp change that is quick and hassle-free.

INTERLOCK SAFETYSWITCH
The interlock safety switch is a standard feature that disconnects power to the unit when the access panel is removed for lamp or filter replacement.

POLISHED REFLECTOR
Interior chamber is polished providing a highly reflective surface to maximize ultraviolet intensity within the chamber.

LOUVERED EXHAUST PANEL
Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

LAMP OPERATION INDICATORS
Provide positive indication of germicidal lamp operation.

STAINLESS STEEL CONSTRUCTION
The chamber is Type 304 stainless steel for an attractive finish, unparalleled strength and durability.

PARTICULATE FILTER
• Washable Electrostatic Filter

OPTIONAL ACCESSORIES

• Disposable Filters
• Integral Elapsed Time Indicator *
SENTINEL™ Lamp Operation Indicator

* Item must be ordered at same time as Room Air Sanitizer Unit (installed at factory).

SPECIAL FEATURES OF THE RSM2680
MOBILE UNIT

GERMICIDAL LAMPS
Genuine *STER-L-RAY*™ Ultraviolet Germicidal Lamps provide the utmost in quality, sustained high output and long life.

LAMPHOLDERS
Steadfast™ Lampholders are spring loaded telescopic type that facilitate convenient, easy lamp change that is quick and hassle-free.

INTERLOCK SAFETY SWITCH
The interlock safety switch is a standard feature that disconnects power to the unit when the access panel is removed for lamp or filter replacement.

POLISHED REFLECTOR
Interior chamber is polished providing a highly reflective surface to maximize ultraviolet intensity within the chamber.

ELAPSED TIME INDICATOR
Realtime, non-resettable display of accumulated operating hours.

LOUVERED EXHAUST PANEL
Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

LAMP OPERATION INDICATORS
Provide positive indication of germicidal lamp operation.

STAINLESS STEEL CONSTRUCTION
The chamber is Type 304 stainless steel for an attractive finish, unparalleled strength and durability.

DISPOSABLE FILTERS
Inexpensive, disposable cardboard constructed filters used when frequent filter changes are necessary.

DIFFERENTIAL AIR PRESSURE GAUGE
Used to measure filter resistance by measuring the pressure differential between outside (the fixture) air and the pressure in the blower compartment.

3- POSITION POWER SWITCH
Power to the fixture is controlled by a three position key switch. In the **"OFF"** position, no power is supplied to the blower or the germicidal lamps. In the **"BLOWER ONLY"** position, power is supplied to just the blower and no power is supplied to the germicidal lamps. In the **"LAMPS & BLOWER"** position power is supplied to both the blower and the germicidal lamps.

OPTIONAL ACCESSORIES

DISPOSABLE FILTERS
Inexpensive, disposable cardboard frame filters for use when frequent filter changes are necessary.

OPTIONAL WALL MOUNT KIT
Consists of (2) pre-drilled stainless steel brackets. Brackets are designed to provide a more aesthetic look for the installation while allowing unit to be mounted to the wall in a horizontal position.

CEILING MOUNT KIT
Consists of (4) eye bolts used to suspend unit from ceiling .

INTEGRAL ELAPSED TIME INDICATOR *
The Elapsed Time Indicator is a real-time, non-resettable display of accumulated operating time. Useful for scheduling and recording maintenance and lamp replacement.

INTEGRAL KEY LOCK SWITCH *
The Key Lock Switch will insure tamperproof operation in either on or off position.

SENTINEL™ LAMP OPERATION INDICATOR
The **SENTINEL**™ monitors lamp operation in a remote location up to 25 feet away.

> * Item <u>must</u> be ordered at same time as Room Air Sanitizer Unit (<u>installed at factory</u>).

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