

MonozoneTM

ULTRAVIOLET AIR OZONE GENERATORS



Model 2-OZ, 3-OZ
*free standing, wall,
or ceiling mount*



Model 6-OZ
free standing, wall, or ceiling mount

ATLANTIC **AU** **ULTRAVIOLET**
CORPORATION®

SINCE 1963

ABOUT US

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 respected throughout the world. Ozone (O₃) is a highly reactive form of oxygen that is useful as a deodorizer and a cleaning agent. Ultraviolet wavelengths shorter than 200 nanometers are capable of producing ozone from Oxygen (O₂) in the air. **STER-L-RAY**® ozone lamps, in addition to emitting germicidal ultraviolet output at 254 nanometer wavelength, also emit ozone producing rays at 185 nanometer wavelength.

The UV Application Specialists at Atlantic Ultraviolet Corporation® assist customers in the selection of germicidal lamps and equipment. Their specialized knowledge is a valuable resource in formulating effective and cost-conscious ultraviolet solutions.

Extensive inventories and a dedicated staff enable Atlantic Ultraviolet Corporation® to fulfill its commitment to provide fast deliveries and responsive customer service.

GERMICIDAL ULTRAVIOLET

Ultraviolet is a unique and rapid method of disinfection. It utilizes germicidal ultraviolet lamps producing short-wave radiation at 254 nanometers (nm)— a wavelength highly 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 Corporation® equipment and systems are manufactured in the USA.



Model 2-OZ and 3-OZ
free standing, wall or ceiling mount

ADVANTAGES

Effective

Virtually all microorganisms are susceptible to **Monozone™** ultraviolet disinfection.

Economical

System requires very little power to operate.

Fast

Disinfects air in seconds.

Easy

Simple installation and maintenance.

Automatic

Continuous disinfection.

Durable

Polished Stainless Steel and Aluminum.

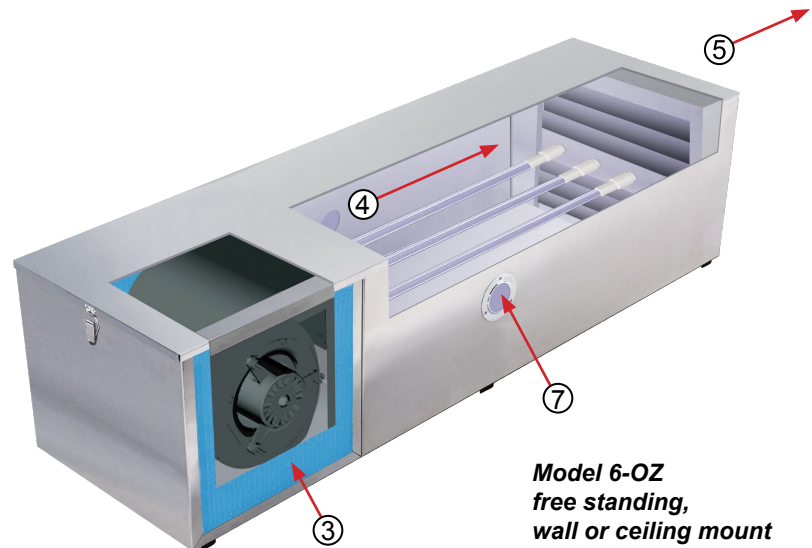
Versatile

Models are portable and can be applied to different areas as needed.

PRINCIPLE OF OPERATION

The **Monozone™** design has been carefully conceived to provide adequate germicidal ultraviolet and ozone exposure for air disinfection of **unoccupied** areas by the means of germicidal ultraviolet ozone lamps. These special lamps generate high levels of germicidal ultraviolet radiation which is lethal to infectious microorganisms such as bacteria, mold, and virus. Ozone that is emitted will remove mold, smoke, and other strong odors.

The dosage, as it applies to ultraviolet and ozone disinfection, is a function of time, and the intensity, of ultraviolet radiation, to which the air is exposed. Our UV application specialist would be happy to perform the necessary calculations to ensure the equipment we provide is appropriate for your particular application.



The operation of the **Monozone™** is as follows:

1. Clear area of all occupants. **Monozone™** can only be used in **unoccupied** areas. Post warning signs at entryway of area that will be irradiated.
2. Turn **Monozone™** on and leave area.
3. Air is drawn into **Monozone™** generator through the washable electrostatic particulate filter(s).
4. The air is forced into the ultraviolet exposure chamber where it is irradiated by germicidal ultraviolet ozone lamp(s).
5. The purified air exits the generator, through the louvered exhaust panel, located at the opposite end of the generator. Air exiting the generator includes ozone.
6. Infectious microorganisms such as bacteria, mold, and virus are deactivated while mold, smoke, and other strong odors are removed.
7. Observation Port/Sight Glass provides positive indication of **STER-L-RAY®** Germicidal Ultraviolet Ozone Lamp operation.
8. When area treatment is complete and the **Monozone™** is off, ventilate the area before occupying.

SPECIAL FEATURES

Monozone™ 2-OZ, 3-OZ and 6-OZ Ozone Generator

Monozone™ Generators are germicidal ultraviolet ozone generators that effectively deactivate infectious microorganisms including bacteria, mold, and virus, and are available in different configurations to adapt to any setting.

The **Monozone™** Ultraviolet Ozone Generators utilize **STER-L-RAY®** Germicidal Ozone Producing Lamps which are completely enclosed within a stainless steel exposure chamber and emit ozone that will remove mold, smoke, and other strong odors.

STER-L-RAY® Ozone-Producing Germicidal Lamp(s)

Lamps are instant starting and provide the utmost in quality, sustained output, and longevity. (Lamp quantity varies by model.)

Interlock Safety Switch

The interlock safety switch is a standard feature that disconnects power to the model when the access panel is unhinged for lamp or filter replacement. (located under the cover)

Stainless Steel Enclosure

The model is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish.

Steadfast™ Lampholders

Set includes a stationary and a spring-loaded, telescopic holder that holds a single pin lamp securely. The spring-loaded feature on one end facilitates convenient, quick and easy lamp changes.

Louvers Exhaust Panel

Restricts ultraviolet radiation from passing into the area.

Polished Reflector

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

Promate™ Observation Port/ Sight Glass Assembly

A Sight Glass Assembly allows for visual inspection of the lamp(s).

Model 6-OZ

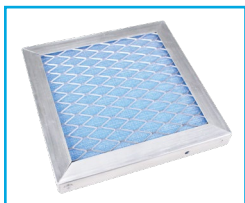
(see **Page 6** for Optional Accessories)

Promate™ Particulate Filter(s)

Washable Electrostatic Filter

Promate™ Standard Wall Mount Kit

Consists of (2) pre-drilled stainless steel brackets. Brackets enable model to be mounted to wall in either the vertical or horizontal position (included).

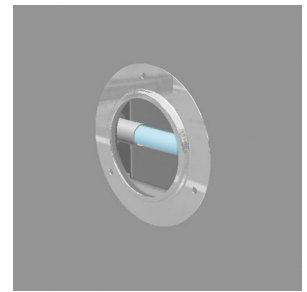


INSTALLATION



Figure 1 - Monozone™ 2-OZ and 3-OZ (shown) For maximum efficiency the Monozone™ should be located as centrally as possible, preferably not close to the floor or the corners of the area to be treated.

Access must be controlled and the area **unoccupied** while the generator is operating. The louvered exhaust panel of the Monozone™ Ozone Generator restricts ultraviolet radiation from passing into the area, but allows circulation of ozone that will remove mold, smoke, and other strong odors. All models can be installed utilizing wall mounting brackets included with purchase, or can be left mobile to be moved as needed from one area to another.



**Promate™ Observation Port/
Sight Glass Assembly**

A Sight Glass Assembly allows for visual inspection of the lamp.

SPECIFICATIONS—

Monozone™ 2-OZ, 3-OZ, & 6-OZ OZONE GENERATOR

| Model | Nominal Model Capacity (cubic feet/min) ① | Dimensions | | | Electrical* Requirements (Amps) ② | Max. Room Size Treated @ 3 Room Air Changes / Hour (cubic feet/hour) | Max. Room Size Treated @ 6 Room Air Changes / Hour (cubic feet/hour) | Max. Treatment Capacity (cubic feet/hour) |
|-------|---|------------|--------|--------|---|--|--|--|
| | | Length | Width | Depth | | | | |
| 2-OZ | 54 cfm | 34-1/2" | 7-3/4" | 7-3/4" | 1.25 | 1,080 | 540 | 3,240 |
| 3-OZ | 105 cfm | 34-1/2" | 7-3/4" | 7-3/4" | 230 | 2,100 | 1,050 | 6,300 |
| 6-OZ | 326 cfm | 47-5/16" | 14" | 12" | 4.52 | 6,525 | 3,263 | 19,575 |

① Model capacity incorporates an estimated allowance for airflow friction loss across filter and ozone generator.

② Information listed refers to 120 Volt 60 Hz models. Contact factory for specifics on other voltages.

*Consult factory with specific power requirements.

GENUINE STER-L-RAY® GERMICIDAL LAMP DATA

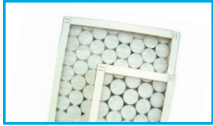
| Lamp No. (Quantity) | Model | Lamp Length | Lamp Length (including lampholders) | Power Consumption | Ultraviolet Output (per lamp) | Rated Average Effective Life |
|------------------------|-------|------------------|--|-------------------|----------------------------------|------------------------------|
| 05-1349-R (1) | 2-OZ | 21-7/8" (556 mm) | 24" | 25 Watts | 8.5 Watts | 10,000 |
| 05-1349-R (2) | 3-OZ | 21-7/8" (556 mm) | 24" | 25 Watts | 8.5 Watts | 10,000 |
| 05-0050-R (4) | 6-OZ | 27-7/8" (708 mm) | 30" | 32 Watts | 11.2 Watts | 10,000 |

OPTIONAL ACCESSORIES



SENTINEL® Remote Lamp Indicator*

The **SENTINEL**® Remote Lamp Indicator monitors lamp operation of one, two, or four lamp ultraviolet fixtures and is available with a 25, 50 and 100 foot cable. (Available for ALL **Monozone**™ generators at the time of purchase, **SENTINEL**® output connector needs to be installed for easy plug-in and operation.)



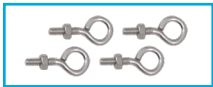
Promate™ Disposable Filters

Cost effective, filters for use when frequent filter changes are necessary.



Promate™ 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 model to be mounted to the wall in a horizontal position.



Promate™ Ceiling Mount Kit

Consists of (4) eye bolts used to suspend model from ceiling.



Promate™ 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.



Promate™ Warning Signs

To be affixed to entry door(s) to warn that an ultraviolet disinfection treatment is in progress and area should **NOT** be entered.



Promate™ Safety Glasses

Safety eyewear should be used as general-purpose safety protection and for additional shielding from germicidal ultraviolet rays.



Promate™ Face Shield

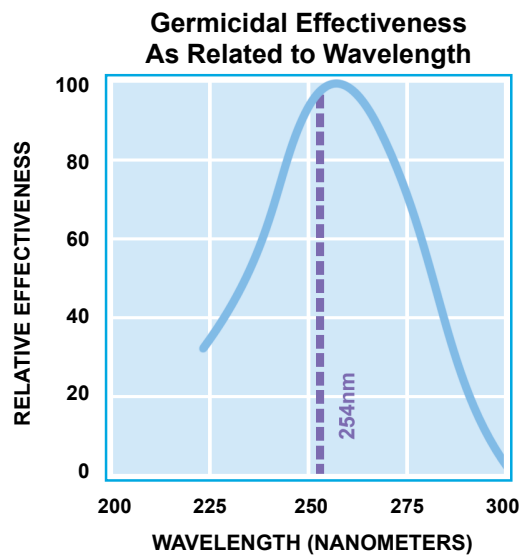
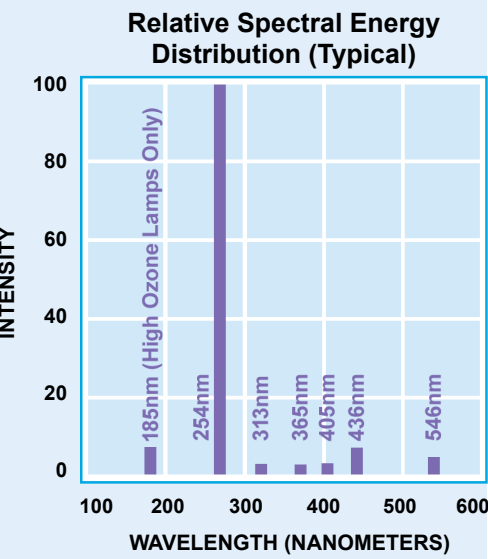
Lightweight visor with adjustable headgear provides eye and face protection from germicidal ultraviolet rays.

APPLICATIONS

- Water Damage
- Fire/Smoke Remediation
- Odor
- Mold
- Allergens
- Dust Mites
- Deodorizer
- Animal Odor
- Mildew
- Cooking Smells
- Restaurants
- Crawl Spaces
- Kennels
- Food Processing
- Cars
- Manufacturing
- RVs
- Boats
- Hotels & Motels
- Auditoriums
- Gymnasiums
- Locker Rooms

* Item must be ordered at same time as **Monozone**™ Ozone Generator (installed at factory).

GENUINE **STER-L-RAY®** GERMICIDAL LAMPS



STER-L-RAY® Germicidal Lamps are shortwave, low pressure tubes that produce ultraviolet wavelengths lethal to microorganisms. Approximately 95% of the ultraviolet energy emitted from **STER-L-RAY®** germicidal lamps is at 254 nanometers, the region of germicidal effectiveness most destructive to bacteria, mold and virus.

STER-L-RAY® Germicidal Ozone Producing Lamps – Ozone (O₃) is a highly reactive form of oxygen and is useful as a deodorizer. Ultraviolet wavelengths shorter than 200 nanometers are capable of producing ozone from Oxygen (O₂) in the air. Ozone (O₃) will remove mold, smoke and other strong odors. **STER-L-RAY®** ozone lamps, in addition to emitting germicidal ultraviolet output at 254 nanometer wavelength, also emit ozone producing rays at 185 nanometer wavelength. Because it is necessary to avoid exposing personnel to high concentrations of ozone, the use of ozone lamps is limited to applications in which ozone concentration will not exceed .05 parts per million in occupied spaces.

STER-L-RAY® and the **STER-L-RAY®** logo are trademarks of Atlantic Ultraviolet Corporation®.

CAUTION: Exposure 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 faceshield, gloves and protective clothing.

Hg – LAMP CONTAINS MERCURY, manage in accord with disposal laws, see: LampRecycle.org.

ULTRAVIOLET DOSAGE

Germicidal lamps provide effective protection against microorganisms. A small cross-section is shown below.

| ORGANISM | ALTERNATE NAME | TYPE | DISEASE | DOSE* |
|------------------------------------|------------------------|----------|-----------------------|--------|
| <i>Corynebacterium diphtheriae</i> | <i>C. diphtheriae</i> | Bacteria | Diphtheria | 6,500 |
| <i>Legionella pneumophila</i> | <i>L. pneumophila</i> | Bacteria | Legionnaire's Disease | 12,300 |
| <i>Mycobacterium tuberculosis</i> | <i>M. tuberculosis</i> | Bacteria | Tuberculosis (TB) | 10,000 |
| <i>Pseudomonas aeruginosa</i> | <i>P. aeruginosa</i> | Bacteria | | 3,900 |
| <i>Serratia Marcescens</i> | <i>S. marcescens</i> | Bacteria | | 6,160 |
| <i>Staphylococcus aureus</i> | <i>S. aureus</i> | Bacteria | | 6,600 |
| <i>Staphylococcus epidermidis</i> | <i>S. epidermidis</i> | Bacteria | | 5,800 |
| Adeno Virus Type III | | Virus | | 4,500 |
| Coxsackie A2 | | Virus | | 6,300 |
| Influenza | | Virus | Flu | 6,600 |

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

The Standard of Excellence In Ultraviolet



Manufacturers / Engineers / Sales / Service – Germicidal Ultraviolet - Equipment & Lamps

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