

**GERMICIDAL ULTRAVIOLET IRRADIATORS** 





# **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.

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

Germicidal Ultraviolet is a unique and rapid method of disinfection. It utilizes germicidal ultraviolet lamps producing ultraviolet wavelengths at 254 nanometers (nm)—a level 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 and surface treatment needs.

Atlantic Ultraviolet Corporation® equipment and systems are manufactured in the USA.





# **ADVANTAGES**

# PRINCIPLE OF OPERATION

### **Effective**

Virtually all microorganisms are susceptible to SaniLIGHT® ultraviolet disinfection.

# **Economical**

Fixtures require very little power to operate.

### **Fast**

Disinfects both air and exposed surfaces in seconds.

# Easy

Simple installation and maintenance.

### **Automatic**

Continuous disinfection without special attention.

# **Durable**

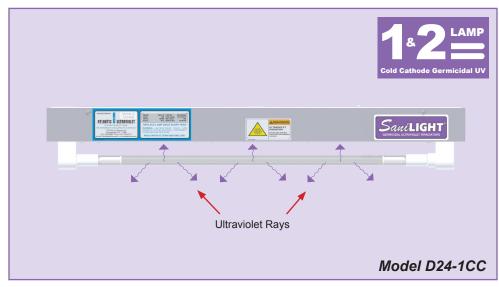
Polished Stainless Steel Type 304.

# Versatile

Numerous models available to handle various applications.

### Low Maintenance

Routine cleaning and annual lamp replacement is required.



**Figure 1** — Circulated room air and any exposed surfaces are irradiated with direct germicidal ultraviolet rays. Shown with cold cathode germicidal lamps. Also available with high output, and instant start germicidal ultraviolet lamps.

The SaniLIGHT® Germicidal Ultraviolet Irradiator design has been carefully conceived to provide direct germicidal ultraviolet exposure for air or surface disinfection. The Stainless Steel fixture should be used in open, <u>unoccupied</u> space to disinfect and prevent areas and surfaces from microorganisms such as bacteria, mold, and virus. The treatment is very effective when there is a long unobstructed path of the germicidal ultraviolet rays. The dosage, as it applies to ultraviolet disinfection, is a function of time, and the intensity, of ultraviolet radiation, to which the air or surfaces are exposed.

Our UV Application Specialists would be happy to perform the necessary calculations to ensure the fixture selected is appropriate for your particular application.

**SaniLIGHT**® Germicidal Ultraviolet Irradiators should be utilized during periods when the room is **unoccupied** or when occupants take appropriate protective measures.

# Model DHO24-1S with Lamp Guard



Shown with high output germicidal lamp, Also available with cold cathode and instant start lamps.

All SaniLIGHT® Models are available with optional Lamp Guard. This wire form lamp guard helps protect lamps(s) from accidental breakage. (See page 8 for sample of Applications and page 10 for Optional Accessories.)





# SaniLIGHT® Instant Start Germicidal Ultraviolet Irradiator

Utilize the SaniLIGHT® Instant Start Germicidal Ultraviolet Irradiator for direct germicidal ultraviolet exposure for air and/or surface disinfection. Our UV Application Specialists would be happy to perform the necessary calculations to ensure the fixture selected is appropriate for your particular application. (See Applications below.)

# Surelite™ Electronic Ballast

State-of-the-art electronic ballasts are designed specifically to operate ultraviolet lamps. Surelite™ Electronic Ballasts offer these advantages over conventional ballasts:

- · deliver high uv lamp output
- · lightweight
- · operate cool for longer life
- versatile—each operates a wide range of lamps
- · save energy through high efficiency
- · provide silent operation

# Steadfast™ Lampholder

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

# Stainless Steel Construction The fixture is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish. Model D24-1S (see page 10 for Optional Accessories)

# STER-L-RAY® Instant Start Germicidal Lamp

Lamps are instant starting and provide the utmost in quality, sustained output, and longevity.(See page 11 for information.)

# Saution

# Wire Form Lamp Guard (optional)

Wire form lamp guard helps protect lamp(s) from accidental breakage. Must be ordered at same time as fixture.

# **APPLICATIONS\***

laboratories • hospitals • clinics • maternity areas • labor & delivery areas • pathology labs kidney dialysis labs • operating rooms • methadone clinics • burn centers • TB clinics • homeless shelters prisons and jails • detention centers • nursing homes • universities • schools • veterinary clinics animal husbandry • kennels • food industry • food processing • dairy processing • bakeries • office buildings conference rooms • clean rooms • pharmaceutical mfg. • electronic production • cosmetic production manufacturing facilities • morgues • conveyor belt systems

\* Other Applications Possible. Contact our Ultraviolet Application Specialists.







Figure 2 - SaniLIGHT® Instant Start Germicidal Ultraviolet Irradiator D24-2S is shown above

Proper placement of the SaniLIGHT® Instant Start Germicidal Ultraviolet Irradiator is essential to ensure safe and effective operation. The location should have an appropriate power source, not be mounted under any source of moisture or condensation, and be easily accessible and allow enough clearance for routine cleaning or maintenance.

# SPECIFICATIONS—SaniLIGHT® INSTANT START GERMICIDAL ULTRAVIOLET IRRADIATORS ——

Model	Lamp (Quantity)	Power Consumption	Total Ultraviolet Output ②	Dimensions (Inches)			Rated
				Length	Width	Height	Lamp Life (Hours)
D12-1S	05-1500-R (1)	12.0 Watts	3.1 Watts	13-1/4"	5"	3-3/4"	10,000
D18-1S	05-1340-R (1)	22.0 Watts	5.8 Watts	19-1/4"	5"	3-3/4"	10,000
D24-1S	05-1348-R (1)	30.7 Watts	8.5 Watts	25-1/4"	5"	3-3/4"	10,000
D30-1S	05-1352-R (1)	38.4 Watts	11.2 Watts	31-1/4"	5"	3-3/4"	10,000
D36-1S	05-1343-R (1)	42.9 Watts	13.8 Watts	37-1/4"	5"	3-3/4"	10,000
D48-1S	05-1334-R (1)	66.0 Watts	19.3 Watts	49-1/4"	5"	3-3/4"	10,000
D64-1S	05-1338A-R (1)	94.0 Watts	25.0 Watts	65-1/4"	5"	3-3/4"	10,000
D12-2S	05-1500-R (2)	24.0 Watts	6.2 Watts	13-1/4"	5-5/8"	3-3/4"	10,000
D18-2S	05-1340-R (2)	44.0 Watts	11.6 Watts	19-1/4"	5-5/8"	3-3/4"	10,000
D24-2S	05-1348-R (2)	61.4 Watts	17.0 Watts	25-1/4"	5-5/8"	3-3/4"	10,000
D30-2S	05-1352-R (2)	76.8 Watts	22.4 Watts	31-1/4"	5-5/8"	3-3/4"	10,000
D36-2S	05-1343-R (2)	85.8 Watts	27.6 Watts	37-1/4"	5-5/8"	3-3/4"	10,000
D48-2S	05-1334-R (2)	132.0 Watts	38.6 Watts	49-1/4"	5-5/8"	3-3/4"	10,000
D64-2S	05-1338A-R (2)	188.0 Watts	50.0 Watts	65-1/4"	5-5/8"	3-3/4"	10,000

<sup>1</sup> Total power consumption including ballast loss.

② Ultraviolet Output at 254 nanometers at 100 hours and 80 degrees F (approximate).

<sup>• 120</sup> Volts 50/60 Hz and 230 Volts 50/60 Hz models are standard - specify when ordering.

<sup>•</sup> Fixtures are available in various voltages - Consult factory with specific power requirements.

<sup>·</sup> Models with other lamp quantities and configurations available. Consult factory with specific requirements.



# SaniLIGHT® Cold Cathode Germicidal Ultraviolet Irradiator

Utilize the SaniLIGHT® Cold Cathode Germicidal Ultraviolet Irradiator for direct germicidal ultraviolet exposure for air and/or surface disinfection. Our UV Application Specialists would be happy to perform the necessary calculations to ensure the fixture selected is appropriate for your particular application. (See Applications below.)

# Surelite™ Electronic Ballast

State-of-the-art electronic ballasts are designed specifically to operate ultraviolet lamps. Surelite TM Electronic Ballasts offer these advantages over conventional ballasts:

- · deliver high uv lamp output
- · lightweight
- · operate cool for longer life
- versatile—each operates a wide range of lamps
- · save energy through high efficiency
- · provide silent operation

# Steadfast™ Lampholder

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

# Stainless Steel Construction The fixture is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish. Model D24-1CC (see page 10 for Optional Accessories)

# STER-L-RAY® Cold Cathode Germicidal Lamp

Lamp utilizes large cylindrical cathodes instead of tungsten filaments. Cold Cathode lamps are recommended for applications where temperature is colder than standard room temperature, for example, walk-in refrigerators and holding rooms. (See page 11 for information.)



# Wire Form Lamp Guard (optional)

Wire form lamp guard helps protect lamp(s) from accidental breakage. Must be ordered at same time as fixture.

# **APPLICATIONS\***

Best used for applications where frequent starting and stopping is required and where fixtures must be operated in cooler temperatures. cool rooms • meat lockers, refrigeration units • freezers • holding rooms

\* Other Applications Possible. Contact our Ultraviolet Application Specialists.





Figure 3 - SaniLIGHT® Cold Cathode Germicidal Ultraviolet Irradiator D24-2CC is shown above

Proper placement of the SaniLIGHT® Cold Cathode Germicidal Ultraviolet Irradiator is essential to ensure safe and effective operation. The location should have an appropriate power source, not be mounted under any source of moisture or condensation, and be easily accessible and allow enough clearance for routine cleaning or maintenance. Cold Cathode Lamps are recommended for walk-in refrigerators and holding rooms and are also employed in applications where frequent starting is a requirement.

# SPECIFICATIONS—SaniLIGHT® COLD CATHODE GERMICIDAL ULTRAVIOLET IRRADIATORS ——

Model	Lamp	Power	Total	Dimensions (Inches)			Rated
Model	(Quantity)	Consumption  1	Ultraviolet Output ②	Length	Width	Height	Lamp Life (Hours)
D12-1CC	05-0052A (1)	18.8 Watts	1.4 Watts	13-1/4"	5"	3-3/4"	20,000
D18-1CC	05-0040-R (1)	26.3 Watts	3.2 Watts	19-1/4"	5"	3-3/4"	20,000
D24-1CC	05-1118-R (1)	28.8 Watts	5.0 Watts	25-1/4"	5"	3-3/4"	20,000
D36-1CC	05-0044-R (1)	35.0 Watts	8.5 Watts	37-1/4"	5"	3-3/4"	20,000
D48-1CC	05-0042-R (1)	42.5 Watts	11.2 Watts	49-1/4"	5"	3-3/4"	20,000
D18-2CC	05-0040-R (2)	52.6 Watts	6.4 Watts	19-1/4"	5-5/8"	3-3/4"	20,000
D24-2CC	05-1118-R (2)	57.6 Watts	10.0 Watts	25-1/4"	5-5/8"	3-3/4"	20,000
D36-2CC	05-0044-R (2)	70.0 Watts	17.0 Watts	37-1/4"	5-5/8"	3-3/4"	20,000
D48-2CC	05-0042-R (2)	85.0 Watts	22.4 Watts	49-1/4"	5-5/8"	3-3/4"	20,000

<sup>1</sup> Total power consumption including ballast loss.

- 120 Volts 50/60 Hz and 230 Volts 50/60 Hz models are standard specify when ordering.
- Fixtures are available in various voltages Consult factory with specific power requirements.
- Models with other lamp quantities and configurations available. Consult factory with specific requirements.

② Ultraviolet Output at 254 nanometers at 100 hours and 80 degrees F (approximate).



# SaniLIGHT® High Output Germicidal Ultraviolet Irradiator

Utilize the SaniLIGHT® High Output Germicidal Ultraviolet Irradiator for direct germicidal ultraviolet exposure for air and/or surface disinfection. Our UV Application Specialists would be happy to perform the necessary calculations to ensure the fixture selected is appropriate for your particular application. (See Applications below.)

# Surelite™ Electronic Ballast

State-of-the-art electronic ballasts are designed specifically to operate ultraviolet lamps. Surelite TM Electronic Ballasts offer these advantages over conventional ballasts:

- · deliver high uv lamp output
- · lightweight
- · operate cool for longer life
- versatile—each operates a wide range of lamps
- · save energy through high efficiency
- · provide silent operation

# Steadfast™ Lampholder

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



# STER-L-RAY® High Output Germicidal Lamp

Lamp provides the utmost in quality, sustained output, and longevity. Yields more UV watts than standard UV-C lamps of the same length. (See page 11 for information.)



# Wire Form Lamp Guard (optional)

Wire form lamp guard helps protect lamp(s) from accidental breakage. Must be ordered at same time as fixture.

# **APPLICATIONS\***

Optional Accessories)

laboratories • hospitals • clinics • maternity areas • labor & delivery areas • pathology labs kidney dialysis labs • operating rooms • methadone clinics • burn centers • TB clinics • homeless shelters prisons and jails • detention centers • nursing homes • universities • schools • veterinary clinics animal husbandry • kennels • food industry • food processing • dairy processing • bakeries • office buildings conference rooms • clean rooms • pharmaceutical mfg. • electronic production • cosmetic production manufacturing facilities • morgues • conveyor belt systems

\* Other Applications Possible. Contact our Ultraviolet Application Specialists.







Figure 4 - SaniLIGHT® High Output Germicidal Ultraviolet Irradiator DHO24-2S is shown above

Proper placement of SaniLIGHT® High Output Germicidal Ultraviolet Irradiator is essential to ensure safe and effective operation. The location should have an appropriate power source, not be mounted under any source of moisture or condensation, and be easily accessible and allow enough clearance for routine cleaning or maintenance.

# SPECIFICATIONS—SaniLIGHT® HIGH OUTPUT GERMICIDAL ULTRAVIOLET IRRADIATORS —

Model	Lamp (Quantity)	Power Consumption	Total Ultraviolet Output ②	Dimensions (Inches)			Rated
				Length	Width	Height	Lamp Life (Hours)
DHO18-1S	05-0687 (1)	58.0 Watts	11.5 Watts	19-1/4"	5"	3-3/4"	13,000
DHO24-1S	05-0686 (1)	73.7 Watts	17.0 Watts	25-1/4"	5"	3-3/4"	13,000
DHO30-1S	05-0685 (1)	92.2 Watts	23.0 Watts	31-1/4"	5"	3-3/4"	13,000
DHO36-1S	05-1060-R (1)	108.0 Watts	28.0 Watts	37-1/4"	5"	3-3/4"	13,000
DHO48-1S	05-0576 (1)	158.4 Watts	40.0 Watts	49-1/4"	5"	3-3/4"	13,000
DHO64-1S	05-0690 (1)	193.0 Watts	54.0 Watts	65-1/4"	5"	3-3/4"	13,000
DHO18-2S	05-0687 (2)	116.0 Watts	23.0 Watts	19-1/4"	5-5/8"	3-3/4"	13,000
DHO24-2S	05-0686 (2)	147.4 Watts	34.0 Watts	25-1/4"	5-5/8"	3-3/4"	13,000
DHO30-2S	05-0685 (2)	184.3 Watts	46.0 Watts	31-1/4"	5-5/8"	3-3/4"	13,000
DHO36-2S	05-1060-R (2)	216.0 Watts	56.0 Watts	37-1/4"	5-5/8"	3-3/4"	13,000
DHO48-2S	05-0576 (2)	316.8 Watts	80.0 Watts	49-1/4"	5-5/8"	3-3/4"	13,000
DHO64-2S	05-0690 (2)	386.0 Watts	108.0 Watts	65-1/4"	5-5/8"	3-3/4"	13,000

<sup>1</sup> Total power consumption including ballast loss.

- 120 Volts 50/60 Hz and 230 Volts 50/60 Hz models are standard specify when ordering.
- Fixtures are available in various voltages Consult factory with specific power requirements.
- Models with other lamp quantities and configurations available. Consult factory with specific requirements.

② Ultraviolet Output at 254 nanometers at 100 hours and 80 degrees F (approximate).

# **OPTIONAL ACCESSORIES**



# SENTINEL® Germicidal UV 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, or 100 foot cable. (\*Available for All **SaniLIGHT**® fixtures, but must be ordered at same time as fixture. Installed in factory.)



# ArmorLite™ Germicidal UV Lamp Safety Shield

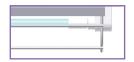
Protective coating applied to **STER-L-RAY®** Germicidal Lamps ensures protection for employees, products, and work environments by eliminating dangers associated with broken lamp fragments. (Lamp on right has **ArmorLite™** coating. Available for **STER-L-RAY®** lamps used in ALL **SaniLIGHT®** fixtures at time of purchase. Coating installed at the factory.)



## Zenith™ Germicidal Ultraviolet Detector

The **Zenith**<sup>™</sup> UV-C Detector is a sensitive hand-held, self-contained battery operated ultraviolet meter that can be used for:

- Monitoring UV-C Germicidal Lamp Intensity & Aging
- · Measuring UV-C Germicidal Fixture Leakage



# Wire Form Lamp Guard \*

Wire form lamp guard helps protect lamp(s) from accidental breakage. (\*Available for All **SaniLIGHT**® fixtures at the time of purchase. **Wire Form Lamp Guard** needs to be installed in factory.)

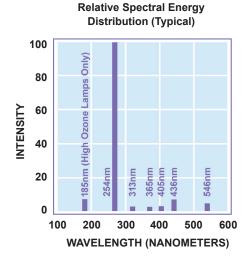


# Promate™ Danger Signs

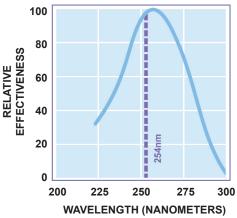
To be affixed to entry door(s) to warn that an ultraviolet sanitizer is in use and that the treatment area <u>MUST</u> not be entered. SaniLIGHT® is for use only in <u>unoccupied</u> areas. 2 signs are supplied with each fixture.

NOTE: Danger Signs have English on one side and Spanish on the other.

# **OPERATING CHARACTERISTICS**



# Germicidal Effectiveness As Related to Wavelength



# **Assure™ UV-C Dosimeter**

A portable, full-featured instrument that provides highly-accurate UV-C measurements in mJ/cm². Sits upright, on back or side, and can be placed in supplied wall holder. Uses 1 AAA battery.



# **UV-C Dosimeter Card**

Contains a patented colorimetric indicator that changes color at 25, 50, and 100 mJ/cm² to visibly confirm that your SaniLIGHT® is achieving the desired UV-C exposure. Each card is designed for 1 treatment cycle and CANNOT be reused.



# Personal UV-C Exposure Indicators

These indicators change color to reveal the word "STOP" if personnel are exposed to an accumulated dose of 6 mJ/cm² of UV-C irradiation. Adhesive backing sticks to clothing. Available in packs of 10. Designed for single, daily use and **CANNOT** be reused.



# Promate™ Safety Glasses

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



# Promate™ Face Shield

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





# GENUINE STER-L-RAY® GERMICIDAL LAMPS

**STER-L-RAY**® **Germicidal UV 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**<sup>®</sup> **Instant Start Germicidal UV Lamps** utilize tungsten filaments. Lamp life is governed by the life of the filaments and is affected by the frequency of starting. **STER-L-RAY**<sup>®</sup> lamps are well suited for a variety of air and surface applications.

**STER-L-RAY® Cold Cathode Germicidal UV Lamps** are instant start lamps and utilize large cylindrical cathodes instead of tungsten filaments. **STER-L-RAY®** Cold Cathode Germicidal Lamps possess favorable operating characteristics; their life is significantly longer than that of other lamp types. They are not adversely affected by the frequency of starting and they maintain a high ultraviolet output throughout their life, even at reduced temperatures. Cold cathode germicidal lamps are widely used in walk-in refrigerators and holding rooms, and are also employed in applications where frequent starting is a requirement.

**STER-L-RAY® High Output (HO) Germicidal UV Lamps** are similar in size and shape to conventional germicidal UV lamps but are capable of operating at higher UV output. The HO lamps yield more UV watts than standard UV-C lamps of the same length. Lamp life is governed by the life of the filaments and is affected by the frequency of starting. **STER-L-RAY®** High Output Lamps are well suited for a variety of air and surface applications which require high output ultraviolet intensity.



**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 face shield, gloves, and protective clothing.

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



# GERMICIDAL ULTRAVIOLET DOSAGE

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

ORGANISM	ALTERNATE NAME	TYPE	DISEASE	DOSE*
Corynebacterium diphtheriae	C. diphtheriae	Bacterium	Diptheria	6.50
Legionella pneumophila	L. pneumophila	Bacterium	Legionnaire's Disease	12.30
Mycobacterium tuberculosis	M. tuberculosis	Bacterium	Tuberculosis (TB)	10.0
Pseudomonas aeruginosa	P. aeruginosa	Bacterium		3.90
Serratia marcescens	S. marcescens	Bacterium		6.160
Staphlylococcus aureus	S. aureus	Bacterium		6.60
Staphlylococcus epidermidis	S. epidermidis	Bacterium		5.80
Methicillin-resistant Staphylococcus aureus	MRSA	Bacterium		6.50
Clostridium difficile	C. diff	Spore	Colitis	16.0
Adenovirus Type 3		Virus		4.50
Coxsackie A2		Virus	Hand, Foot, and Mouth Disease, Conjunctivitis, Meningitis	6.30
Influenza		Virus	Flu	6.60
SARS-CoV-2		Virus	COVID-19	5.0

<sup>\*</sup> Nominal Ultraviolet dosage (mJ/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



ATLANTIC ULTRAVIOLET.COM

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