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FRL-EMX-18-90W-FUVC

90W UV Excimer Lamp - 222nm Far UVC Disinfection - Surface Mount - Quartz Glass/Ozone Free

Product ID: 269378

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

This unit is Made In USA - Manufactured in Texas

FRL-EMX-18-90W-FUVC UVC Sanitation Lamp - Ozone Free

Lamp Technology: Far UV-C Excimer Lamp
Dimensions: 17.32"-L x 1.22"-H x 0.984"-OD
Weight: -
Voltage: 120 V and 240 V
Frequency: 60 Hz
Total Watts: 90W
Total UV Output: -
Effective UV Intensity: 80 uW/cm2 @ 1.57"
Expected Lifespan: 10,000+ Hours
UV Wavelength: Far UV-C, 222nm
Lamp Type: -
Lamp Base: -
Replacement Lamp: -
Beam Angle: 360º
Light Configuration: Flood
Amps: -
Ambient Operating Temp Range: -
Materials: -
Lens Material: Quartz Glass
Mounting: Customer Provided Clamps/Hangers
Wiring: Flying Leads

Ratings/Features

222nm Germicidal Light
Kills 99% of Viruses and Other Germs
Mercury Free Lamp
Instant-On Lamp, No Warm Up Time
More Efficient & Effective than UVC Lamps
No Harmful UVC Emissions
No Block Off/Bandpass/Cutoff Filters) Needed
Skin Safe & Eye Safe
Ozone Free
Low Heat Output
EPA Reg. No 98409-1
EPA Est. No. 98409-TX-1

Special Orders - Special Requirements

Contact us for special requirements

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PLEASE NOTE: UV-C light can cause temporary or permanent loss of vision, and temporary acute redness or ulceration (mild to severe sunburn) to exposed skin. To prevent exposure, do not operate the device in any application that allows UV-C light to be visible during operation. NEVER LOOK DIRECTLY AT THE BULB OR DISINFECTING TARGET ZONE. DO NOT touch bulb with bare hands. The oils in your skin will damage the lamp. Fingerprints will result in reduced performance and significantly reduce the lifespan of the lamp unless they are removed with alcohol. Please read instruction manual for UV safety requirements before operating.

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The Larson Electronics FRL-EMX-18-90W-FUVC UV Excimer Lamp can disinfect 99% of viruses, bacteria, mold, and spores in facilities and on surfaces. This ozone-free unit offers 222nm UV-C output. Considered to be eye and skin safe, the far-UV lamp offers instant start and cool operation.

Please note: This product produces UV light. Make sure to follow all safety guidelines and protocols found in the user manual. UVC light in the proper setting kills up to 99.9% of viruses, mold, spores, and bacteria. Click here to learn more about UVC and the corona virus*

The FRL-EMX-18-90W-FUVC is a powerful sanitation solution that has eye and skin safe features for industrial sites and commercial facilities. This 90-watt excimer lamp offers 80 uW/cm2 UV intensity at 222nm UV wavelength. The ozone-free light has an expected lifespan of 10,000+ hours and emits a flood beam pattern with 360 degrees of coverage. This UV light is protected by a quartz glass. The far-UV light can disinfect over 99% of viruses, bacteria, mold, and spores. Adhering closely to recommended exposure time for viruses, multiple lights can be purchased to cover larger areas quicker.

This lamp is considered to be eye and skin safe (the 222nm UV wavelength cannot penetrate the eyes and skin of humans), making applications suitable in occupied areas requiring sanitation. Designed for cool operation, the instant-start light is efficient at eliminating harmful microbes, viruses, and bacteria at low doses.

Benefits of Excimer Far UV Lamps: When it comes to Far-UV lamps, there are few options in the skin-safe and eye-safe wavelengths. Similar to LED lamps, excimer lamps provide "instant-on" startup, and do not require a warmup period; excimer lamps are at 100% peak output when switched on. Most lamp technologies that do product UVC use mercury in the manufacturing process. Excimer lamps have ZERO mercury, making them more environmentally friendly. Excimer lamps can be tuned to specific wavelengths (222nm wavelength for this product) and produce no harmful UVC radiation or wasteful visible light and infrared light. Excimer lamps are more efficient at converting electricity (input power) into UV irradiance, which reduces the heat output from excimer lamps over other technologies. Fluorescent, amalgam, low-pressure mercury, and high-pressure mercury lamps do not product as tight of a wavelength and generate more heat, both of which wastes energy for the UV sanitation application. Excimer lamps have a higher average UV irradiance per square inch and have a higher photon emission over other lamp technologies. Being safe for use in occupied areas, instant-on power, mercury free, higher UV output, and low heat output make Far-UV excimer lamps the preferred choice for UV sanitation and disinfecting applications.

Power/Wiring: The FRL-EMX-18-90W-FUVC is compatible with 120V AC and 240V AC, 60Hz and is equipped with flying leads to allow operators to complete wiring connections.

Mount: The UVC lamp can be mounted using customer provided clamps or holders. **Please note that clamps/holders are NOT provided and that this lamp is NOT compatible with tombstones.**

Note on Environment: Sunlight and visible light fixtures do not impact the effectiveness of the disinfecting on this UVC sanitation product. Metal halide, high pressure sodium, fluorescent, and LED light fixtures can be left on. The UV radiation emitted from this product is not disrupted by any type of lighting in the environment. Put simply, NO it DOES NOT need to be dark in the area you plan to disinfect. The UV radiation is harmful to the eyes and skin, and that is why you

should not be in the area while it is in operation. Please see user manual for additional safety information.
Suggested Applications: Sanitation, disinfection, commercial locations, industrial parks, medical centers, labs, manufacturing and semiconductors; kills 99% of viruses, bacteria, mold and spores.
At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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Frequently Asked Questions (FAQ)

FRL-EMX-18-90W-FUVC

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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Catalog Page - Product Series**
- **Certificate 4, Misc**
- **Lighting Facts & Information**
- **Spectrum Curve (Wavelength Graph)**
- **HigResPic1**
- **Video1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**