



uvmedico

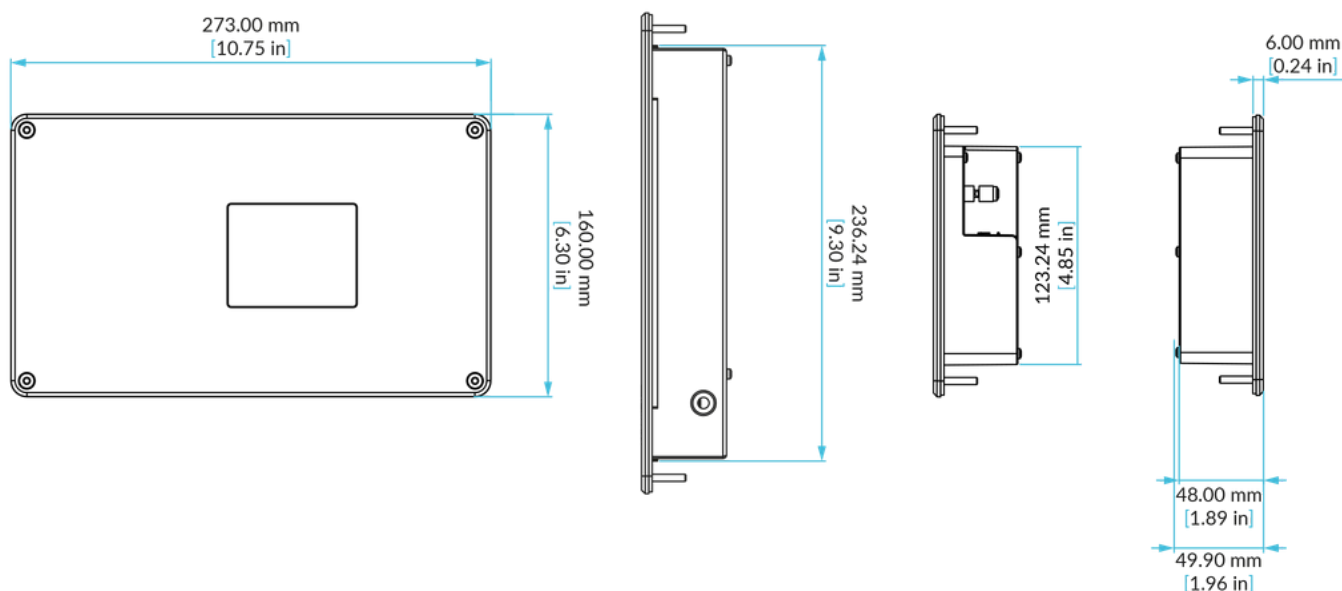
UV222 Ambulance



Application

The UV222 Ambulance is a Far-UVC disinfecting lamp designed specifically for ambulances and other emergency response vehicles. It provides continuous air and surface disinfection in high risk environments, helping reduce microbial contamination inside the patient compartment and supporting a cleaner environment for patients and healthcare personnel. Designed for demanding operating conditions, the lamp delivers a minimum lifetime of 17,500 hours.

UV Medico's patented active dehumidification technology removes humidity and corrosive molecules to prevent internal corrosion, while the integrated solid state electrolytic dehumidifier and IP66 rated enclosure ensure reliable performance and long term durability.



General product specifications

Light source	Krypton Chloride Excimer Lamp
Wavelength	222 nm
60° output	115 mW (Typical)
100° output	70 mW (Typical)
Input voltage	9–28 V DC
Mode (programmable)	Continuous / duty cycle / motion activated
Max power consumption	20 W
Weight	1 kg (2.2 lbs)
Dimensions	273 x 160 x 48 mm (10.75 x 6.3 x 1.89 in)
Power lead (PVC)	3 x 0.75 mm ² / 3 m (18 AWG / 9.8 ft)
Operating temperature	0° to + 50° C (32° to 122° F)
Ambient humidity	5-90% RH Non condensing
Materials	Aluminum, quartz glass*

*Chemically-inert, non-porous, transparent quartz glass with high-temperature resistance.

UV222 Ambulance

Key Features and Benefits

The UV222 Ambulance boasts a compact and versatile design that allows for direct mounting in various locations within the vehicle, including side panels, top panels, and corners. This flexibility ensures that the device can be tailored to meet the specific needs of different ambulance models while remaining unobtrusive. By utilizing Far-UVC technology, the UV222 Ambulance continuously inactivates microorganisms, providing essential protection for both emergency care personnel and patients. The proactive nature of this system helps to mitigate the risk of cross-contamination and enhances overall patient safety during transport, ultimately leading to improved outcomes in emergency medical situations.



Advanced Control Systems

The UV222 Ambulance is equipped with advanced control systems that allow for versatile operation modes, including continuous use, duty cycle, and motion activation. This adaptability enables the device to function effectively in various scenarios, ensuring that decontamination occurs precisely when needed. Emergency personnel can easily control the system, allowing for enhanced efficiency in high-pressure situations.

Facts about UV222

Safety	UV222 is safe for use in the presence of humans and animals, and fully complies with international safety standards and guidelines.
Efficacy	Far-UVC light at 222 nm is a proven and effective decontamination method. Research from around the world has demonstrated its germicidal effectiveness.
Knowledge	UV222 has been developed and engineered in cooperation with several universities. It is thoroughly tested and well-documented. Note: UV222 installations must be performed by authorized installers only.
Ecological	UV222 is mercury-free. It offers decontamination without the use of chemicals or leaving any residue.

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Photometrics and Efficacy of the 60° Model

The UV222 Ambulance serves as a vital tool for infection control and prevention. Its effectiveness in inactivating harmful pathogens makes it suitable for various applications.

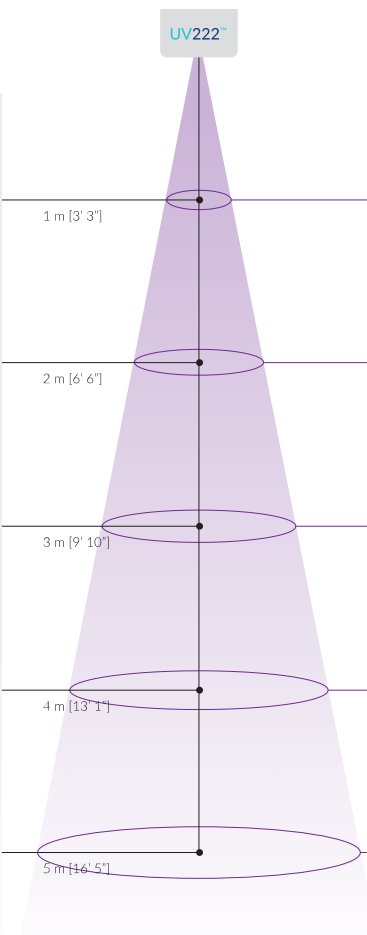
The UV222 Ambulance employs Far-UVC technology, which has demonstrated efficacy in inactivating a wide range of pathogens, including those responsible for zoonotic diseases. With a peak emission wavelength of 222 nm, this system effectively targets microorganisms while remaining safe for use around humans.

Our UV222 solutions come in two distinct versions, each tailored to meet different needs. The 60° model delivers a higher output with a concentrated beam, making it ideal for rapid and targeted disinfection in areas where time efficiency is crucial, such as hospital rooms, laboratories, or high-traffic public spaces.

Exposure time to reduce 90% of SARS-CoV2

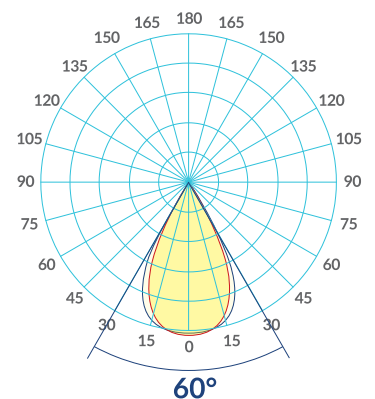
Surfaces Surface spanned by beam angle
43 sec. at centre 1 min. 27 sec. for 1.05 m ² 11.26 ft ²
2 min. 54 sec. at centre 5 min. 48 sec. for 4.19 m ² 45.09 ft ²
6 min. 31 sec. at centre 13 min. 3 sec. for 9.42 m ² 101.39 ft ²
11 min. 36 sec. at centre 23 min. 11 sec. for 16.75 m ² 180.29 ft ²
18 min. 7 sec. at centre 36 min. 14 sec. for 26.18 m ² 281.80 ft ²

Aerosols
29 sec.
1 min. 56 sec.
4 min. 21 sec.
7 min. 44 sec.
12 min. 5 sec.



60° photometrics

Surfaces	Irradiance at centre
Diameter: 1.15 m Surface: 1.05m ² 3' 9" 11.26 ft ²	13.8 µW/cm ²
Diameter: 2.30 m Surface: 4.19 m ² 7' 6" 45.09 ft ²	3.42 µW/cm ²
Diameter: 3.46 m Surface: 9.42 m ² 11' 4" 101.39 ft ²	1.52 µW/cm ²
Diameter: 4.62 m Surface: 16.75 m ² 15' 2" 180.29 ft ²	0.86 µW/cm ²
Diameter: 5.77 m Surface: 26.18 m ² 18' 11" 281.80 ft ²	0.55 µW/cm ²



Peak emission wavelength: 222 nm

Output power in range (200-230 nm): 115 mW

Dose needed (222 nm, COVID-19) 90% inactivation for aerosols: 390 µJ/cm²

Dose needed (222 nm, COVID-19) 90% inactivation for surfaces: 600 µJ/cm²

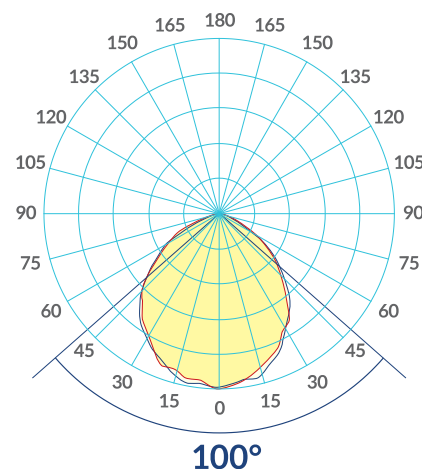
UV222 Ambulance

Photometrics and Efficacy of the 100° Model

Continuous exposure during operation not only enhances biosecurity but also contributes to a healthier environment for both patients and staff.

The 100° model, with its wider beam and lower intensity, is designed for extended operation while staying well within safe exposure limits. This version is particularly suited for larger or frequently occupied areas.

Whether you need quick, effective action or long-term, comprehensive coverage, UV222 offers the flexibility to adapt to your specific disinfection needs.

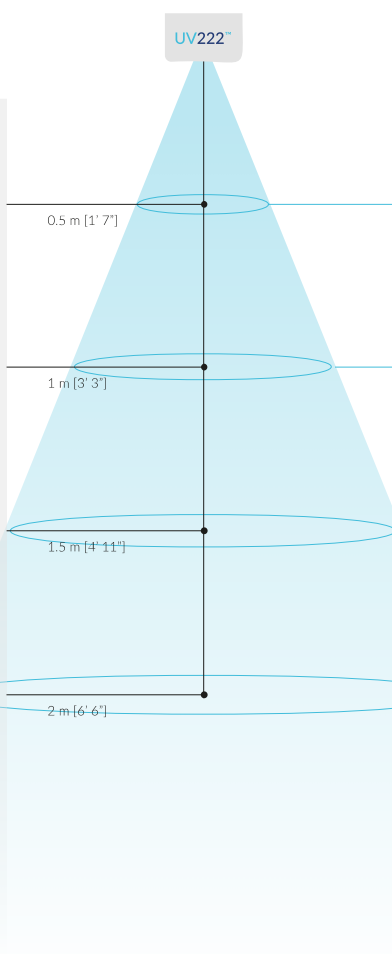


Exposure time to reduce 90% of SARS-CoV2

Surfaces
Surface spanned by beam angle
47 sec. at centre 1 min. 34 sec. for 1.12 m ² 12.0 ft ²
3 min. 8 sec. at centre 6 min. 15 sec. for 4.46 m ² 48.02 ft ²
7 min. 2 sec. at centre 14 min. 4 sec. for 10.03 m ² 108.06 ft ²
12 min. 30 sec. at centre 25 min. for 17.85 m ² 192.1 ft ²

Aerosols

30 sec.
2 min. 2 sec.
4 min. 34 sec.
8 min. 8 sec.



100° photometrics

Surfaces	Irradiance at centre
Diameter: 1.19 m Surface: 1.12 m ² 3' 9" 12.0 ft ²	12.8 µW/cm ²
Diameter: 2.4 m Surface: 4.46 m ² 7' 8" 48.02 ft ²	3.20 µW/cm ²
Diameter: 3.57 m Surface: 10.03 m ² 11' 7" 108.06 ft ²	1.42 µW/cm ²
Diameter: 4.77 m Surface: 17.85 m ² 15' 6" 192.1 ft ²	0.80 µW/cm ²

Peak emission wavelength: 222 nm

Output power in range (200-230 nm): 70 mW

Dose needed (222 nm, COVID-19) 90% inactivation for aerosols: 390 µJ/cm²

Dose needed (222 nm, COVID-19) 90% inactivation for surfaces: 600 µJ/cm²

UV222 Ambulance

Installation and Integration

Designed for straightforward installation, the UV222 Ambulance is created for direct mounting inside the rear cabin, it can be placed on side panels, top panels, corners, or other suitable locations based on specific requirements. The compact design of the UV222 Ambulance lamp ensures that it does not interfere with the work of emergency care personnel. These lamps are designed to continuously inactivate microorganisms, providing protection for both emergency care personnel and patients. This protection is effective both between patients and during ambulance operation, creating a safer environment for everyone involved in emergency care.

Maintenance & Serviceability

With a durable design and minimal maintenance requirements, the UV222 Ambulance ensures continuous operation with little intervention. Regular performance assessments can be performed easily, allowing facilities to keep track of its efficacy and ensure that it continues to meet hygiene standards. The device's robust construction further supports its longevity and reliability in demanding environments.

Environmental Impact

The 222 Ambulance is engineered with sustainability in mind, utilizing energy-efficient technology that not only reduces operational costs but also lowers the overall carbon footprint. By eliminating the need for chemical disinfectants, it contributes to a healthier environment, aligning with eco-friendly practices and supporting the commitment to sustainability in healthcare and public spaces.

Regulatory Compliance

The 222 Ambulance adheres to stringent health and safety regulations, ensuring it is compliant with international standards for safe use in occupied spaces. Its design prioritizes user safety while maintaining effective disinfection, making it a reliable choice for institutions that must uphold high hygiene standards.

The UV222 Ambulance complies with the following regulatory standards:

International Standards

ISO 15858	UV-C Devices – Safety information – permissible human exposure.
IEC 62471	Photobiological safety of lamps and lamp systems.
IEC PAS 63313 ED1	Position statement on germicidal UV-C irradiation - UV-C safety guidelines (see Global Lighting Association).

International Guidelines

ACGIH® (American Conference of Governmental Hygienists)	2021 and 2022 TLV (Threshold Limit Values) & BEI (Biological Exposure Indices) for chemical substances and physical agents.
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