

# SteriZAP<sup>®</sup> UV-C HVAC Sterilizer

| Catalog # | Description/Content  | Contents   |
|-----------|--|--|
| E72WHVAC  | SteriZAP <sup>™</sup> UV-C HVAC Sterilizer, 72W, 110V-220V | SteriZAP Base<br>UV-C bulb, 2 each<br>Sticker template, 1 each<br>Screws, 4 each<br>Gloves, 1 each |

| Related Products  | Catalog # |
|---|-----------|
| FirstResponder <sup>®</sup> Sterilizer, 110V                | E4110FRS  |
| SteriZAP <sup>™</sup> UV-C Electrostatic Backpack Sprayer   | E700EBS   |
| SteriZAP <sup>™</sup> Intelligent UV-C Air Sterilizer       | E500UVIS  |
| SteriZAP <sup>™</sup> UV-C Ceiling Air Sterilizer 2x2, 110V | E22UVAC   |
| SteriZAP <sup>™</sup> UV-C Room Sterilizer ST, 110V         | E500UVST  |

## INTRODUCTION

UV-C light is electromagnetic radiation with wavelengths shorter than visible light. UV-C can be separated into various wavelength ranges, with the short-wavelength UV-C considered to be germicidal. Furthermore, and at the specific wavelength range of 260 to 270 nm, UV-C is found to be mutagenic to bacteria, viruses and other microorganisms. Germicidal UV-C kills or inactivates microorganisms by destroying their nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions.

The SteriZAP<sup>™</sup> UV-C HVAC Sterilizer harnesses the germicidal power of UV-C light, in particular in the 254 nm wavelength. This unit uses shortwave UV-C lamps that emit ultraviolet light with the major peak output (~90%) band at 253.7 nm. The doped fused quartz glass tubes of the SteriZAP lamps passes the 254 nm radiation (which produces very low ozone levels) but blocks the 185 nm wavelength (which produces higher ozone levels).

Once installed into the HVAC system, the SteriZAP HVAC Sterilizer's shortwave UV-C light will eliminate airborne germs and contaminants and will leave the air cleaner. This unit is suitable for hospital rooms, schools, apartments, offices, fitness rooms, restaurants, gyms, hotel rooms, etc.

| Specifications                | Catalog Number: E36WVAC                           |
|-------------------------------|---|
| Power Consumption             | 36 Watts  |
| UV-C Bulb Power Output        | 12 Watts  |
| Number of Bulbs               | One   |
| Irradiance                    | 110 $\mu\text{W}/\text{cm}^2$ @ 3 feet (~1 meter) |
| Dimensions (L x W x H)        | 9.6 x 7.4 x 17.3 inches (244.6 x 187 x 440 mm)    |
| Amperage                      | 1.5A  |
| Ambient Operating Temperature | 80°F (26.7°C)                                     |
| Bulb Wavelength               | 254 nm UV-C fluorescent bulb                      |
| Voltage                       | 110-120V AC. / 220-240V AC. - 50/60 Hz            |
| Bulb Lifetime                 | 8,000 hours                                       |
| Ballast Type                  | Electronic, PF>0.9                                |
| Materials Build               | 304 Stainless steel box/casing                    |
| Mounting                      | HVAC air duct, UV-C bulb internal                 |

## SAFETY NOTIFICATION:



UV-C radiation can damage the superficial tissues of the eye, and care must be taken to avoid any exposure to the eyes. Wear eye protection at all time, such as glass or plexiglass eyewear, or face mask in case of accidental exposure to UV-C light. Exposure of unprotected skin to UV-C for extended periods of time may cause skin burn and possible damage to cellular or tissue DNA. In case of robot malfunction, turn the unit off using the emergency stop button, and flip the power switch off (Section 6, Step 2)

## PRECAUTIONS AND WARNINGS

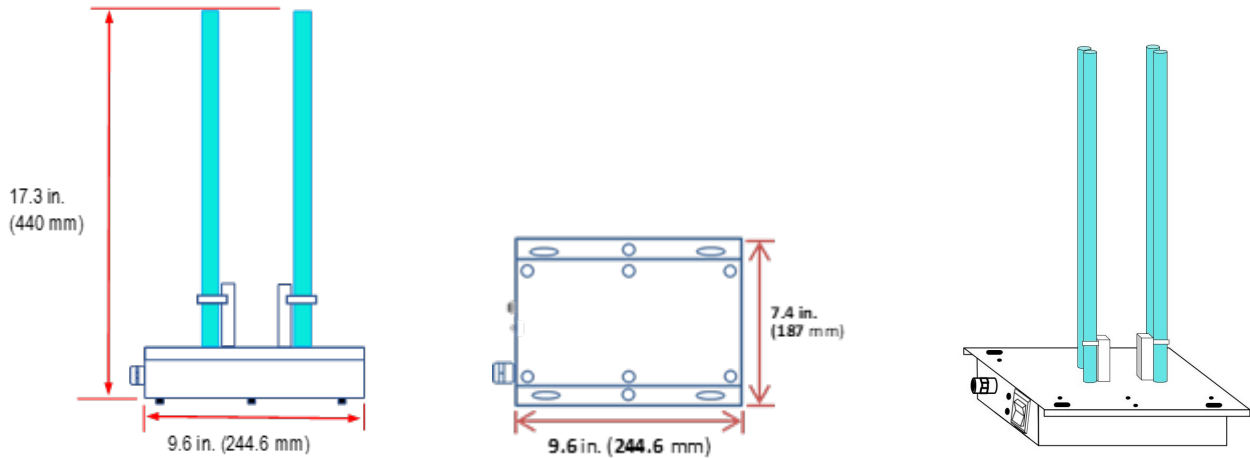
- Read all instructions before using the unit. Use of this unit is only for intended purposes as described in this manual.
- FOR SAFE AND PROPER OPERATIONS, DO NOT TAMPER WITH THE UNIT IN ANY WAY.**
- DO NOT EXPOSE UNIT TO LIQUIDS OF ANY KIND. KEEP UNIT AWAY FROM HIGH VAPOR AND MIST ENVIRONMENTS.**
- It is normal for the unit to emit a small amount of ozone gas when operating; briefly aerate the area afterward if needed.
- Do not operate if the unit or the power cord are damaged or not working properly.

### Note and Disclaimer

\*The SteriZAP<sup>™</sup> UV-C HVAC Sterilizer is not a replacement or substitute for multi stage or HEPA air filtration. Genlantis/FirstResponder Technologies makes no claims and offers no guarantees of any kind that the SteriZAP<sup>™</sup> UV-C HVAC Sterilizer will eliminate or reduce all contaminants and under all possible circumstances. For best results, users should closely follow the recommended instructions below.

- (f) Do not attempt to repair or open the unit unless you are a qualified repair technician.
- (g) To avoid injury, handle broken lamps carefully by using protective hand, face, and eye gear. Dispose of broken glass in sharps containers and obey all applicable laws.

**PRODUCT INSTALLATION**



**WARNING:** for safe operations and to avoid injury, have a certified electrician or similarly qualified technician install the unit into your HVAC system.

1. Put on the provided gloves. It is important not to touch the UV-C bulbs with bare hands;
2. Insert the UV-C bulbs into the base socket(s);
3. ensure that the bulbs' bases are fully inserted into the connector on the base;
4. Peel off the provided sticker template and adhere onto the chosen location for the SteriZAP UV-C HVAC Sterilizer insertion.
5. Drill holes as indicated on the sticker template;
6. Insert the unit into the holes by sliding the UV-C bulbs in first, and then setting the base of the unit on the HVAC surface.
7. Attach the base of the unit with the provided screws;
8. Connect the unit to the power supply and turn it on by flipping the switch on the base.

