

**What is Ultraviolet Energy?**

**What is UVC?**

**What is Upper-room UVGI?**

### **What is Ultraviolet Energy?**

The most common form of Ultraviolet Energy is sunlight, which produces three main types of Ultraviolet rays:

- 1) UVA
- 2) UVB
- 3) UVC

UVA rays have the longest wavelengths, followed by UVB, and UVC rays which have the shortest wavelengths. While UVA and UVB rays are transmitted through the atmosphere, all UVC and some UVB rays are absorbed by the Earth's ozone layer.

### **What is UVC?**

UVC energy is the shortest and most powerful energy portion of the UV energy spectrum. UVC is an established, effective method for inactivating (killing) airborne and surface pathogens, including viruses, bacteria, mold, yeast and spores. It is known in the industry as Ultraviolet Germicidal Irradiation (UVGI).

UVC has been widely and effectively used for over 80 years to stop the spread of airborne pathogens and is considered the most effective, sustainable, evidence-proven, cost-effective method to kill pathogens in the air and on surfaces, in the rooms where they occur.

For COVID-19, it is essential that engineering strategies target transmission in occupied rooms “It is no exaggeration to claim that the most effective, evidence-based, cost effective, safe, sustainable, and available engineering intervention to disinfect air is germicidal ultraviolet (GUV) air disinfection”.

- Harvard Medical School

“Upper-room UVGI kills pathogens in the room where they are released. For airborne viral particles, upper-room UVGI systems provide air changes per hour that are similar to the introduction of clean air into the space.”

- CDC

The ASHRAE Journal Supplemental October 2020

“One of the oldest applications of germicidal UV for space infection control, upper-room/air systems work by effectively intercepting pathogens and viruses at their source in the room air.

Operating 24/7/365, upper-room/air germicidal fixtures can inactivate these microbes in a matter of seconds.

- ASHRAE

## NZGUV's Upper-room UVGI Fixture “Essential for Airborne Infection Control”



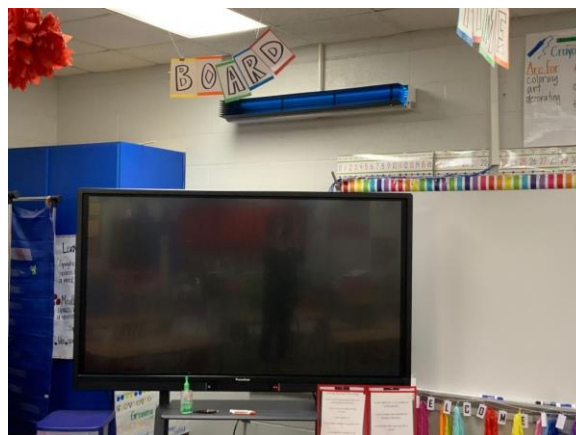
UL 1598 / UL 8802

“In contrast to mechanical ventilation and room air-cleaners, upper room GUV air disinfection with good air mixing has been shown under real-life conditions to produce the equivalent of adding as much as 24 room air changes per hour quietly, safely and sustainably. Under high-risk conditions, especially where few buildings have efficient mechanical ventilation systems, **the only approach to the environmental control of airborne infection is upper room GUV.** Upper room GUV is so highly effective because such large volumes of room air are decontaminated at one time.”

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- Harvard Medical School

Germicidal Upper-room UVGI, has for over 80 years provided a safe and highly effective way to disinfect air in occupied rooms where person to person transmission is likely to occur. **No other technology is as effective in eliminating airborne transmission as silently, safely and cost-effectively as Upper-room UVGI.** - Harvard School of Public Health



- Affordable
- Operates 24/7/365
- Safe for Occupied Rooms
- Maintenance Free
- Chemical Free
- Ozone Free
- Silent
- Automated Lamp Replacement Notice
- Proven for over 80 Years in Hospitals to Stop Airborne Infections
- Disinfects and Cleans the Air to the equivalent of fresh Air, the equivalent of 24+ ACH (air changes per hour).



# Germicidal Ultraviolet Direct to Target Disinfection Handheld System

UV-C 254 nm Ultraviolet Light kills Bacteria, Pathogens and Viruses on any Surface



Affordable Chemical-Free Surface Disinfection in Seconds



Portable Power Pack Option for use where power is not readily available

- Lightweight
- 2 powerful doped quartz glass 253.7 nm NZGUV ultraviolet lamps
- Powerful (16.8 mj / m2 per second at 200mm)
- Portable (plug it in to any outlet or use the portable power pack where power is not available)
- Delivers fast and dependable disinfection to any surface area or technology

- Clean and Disinfect Technology
- Computers and Laptops
- Medical Equipment
- Classroom Surfaces
- Manufacturing Equipment
- Dentist and Doctors Offices
- Mask (including N95 Mask)
- Avionics
- Car, Truck & Ambulance Interiors
- Restaurants
- Commercial Kitchens
- Day Care Facilities
- Senior & Assisted Living Facilities
- Prison & Jails
- Hotels
- Public Restrooms
- Cafeterias
- Locker Rooms
- Gyms & Gym Equipment
- Mattresses (Hotels & Hospitals)
- Police Cars & Public Transportation
- Guns, Radios, Etc.
- Daycare Toys
- Surfaces and objects of any type



**FIFRA**  
COMPLIANT



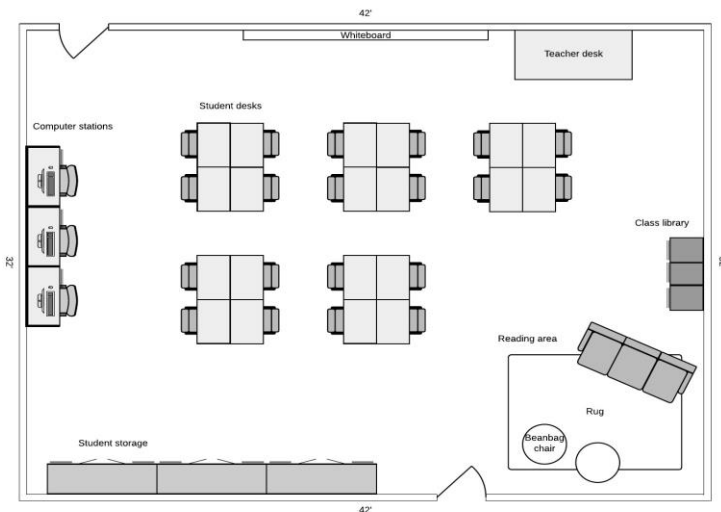
**nZGUV**<sup>®</sup>  
GERMICIDAL LIGHTING

# Rapid Deployment Portable UV-C Disinfection Tower

- 8-253.7 nm Quartz Glass UV-C Lamps
- 360° UV-C Coverage
- Motion-Sensor Safety Cutoff
- Tablet for Cloud Based Data Reporting
- FCC compliant with Part 15 Class A
- Environmentally safe – uses no chemicals
- Inactivates viruses & bacteria in air and on surfaces
- Remote Control On/Off Switch on Safety Stand
- Produces no ozone or other contaminants
- 5 Year, Non-prorated Warranty (excluding bulbs)
- Six foot tall unit to deliver balanced and uniform UV exposure
- Automatically shuts off if movement is detected and sounds alarm
- Powerful fans in base circulate air in treatment area for maximum disinfection
- High-quality locking casters allow easy movement and positioning of unit
- Removable warning stand with remote on/off switch incorporated into handle
- EPA-Establishment Numbers: #98440-DV-2, #98440-GA-1

## Affordable Whole Room Surface & Air Disinfection in Minutes

### Hospital Grade Disinfection



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