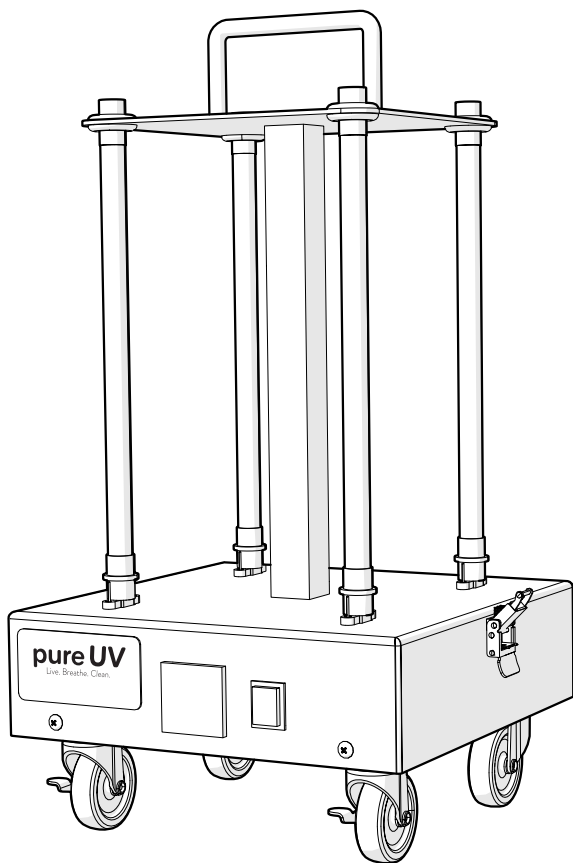


# pure UV<sup>®</sup>

Live. Breathe. Clean.



## QuadClean

User Manual

**IMPORTANT SAFEGUARDS  
READ AND FOLLOW ALL SAFETY INSTRUCTIONS  
SAVE THESE INSTRUCTIONS**

**CAUTION – RISK OF PERSONAL INJURY**

**WARNING:** Risk of electric shock. Can cause injury or death. Disconnect all remote electric power supplies before servicing.

**WARNING:** Do not expose eyes or skin to UV light. UV light is harmful to bare skin and eyes. Never look at bulbs while illuminated.

**CAUTION:** Breakable glass hazard. Use caution when handling the bulb(s) and wipe clean if dirty.

**CAUTION:** This device contains mercury in the sealed ultraviolet bulb(s). Dispose of used bulbs according to regulations.

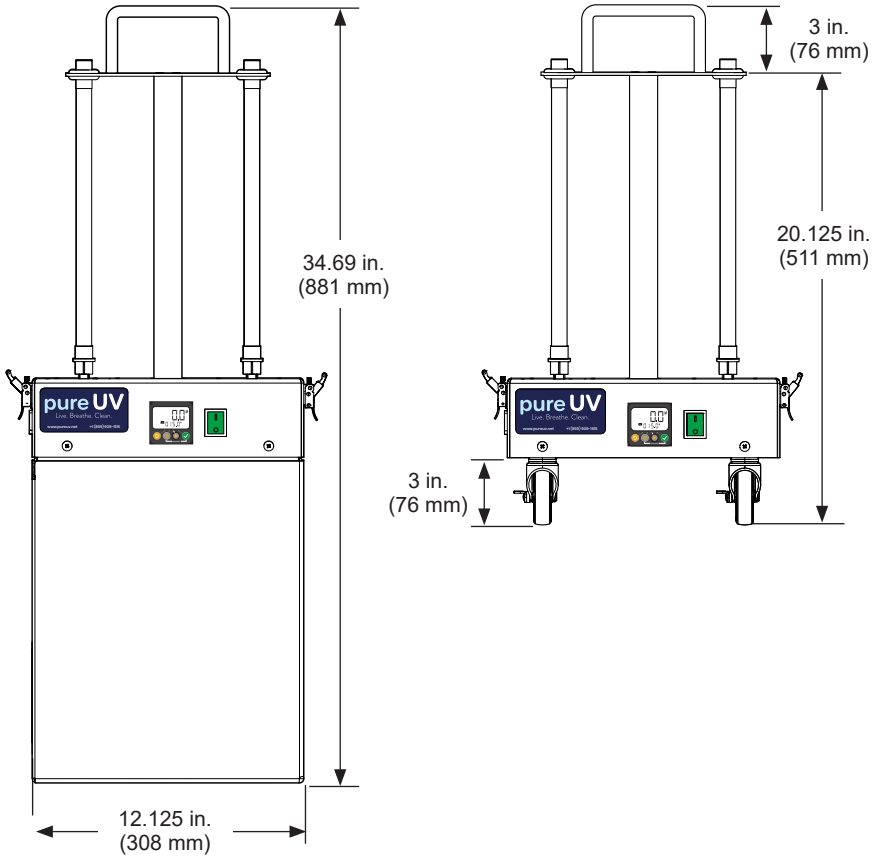
Do not use this equipment for other than intended use.

This luminaire is designed for use with germicidal lamps and must be operated in compliance with competent technical directions to prevent the user's eye and bare skin from exposure to harmful UV radiation.

When using electrical equipment, basic safety precautions should always be followed, including the following:

- a. This equipment is designed for use with germicidal UV radiation sources and must be operated in compliance with competent technical directions to prevent risk of personal injury from UV radiation.
- b. UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes and bare skin.
- c. IT IS THE RESPONSIBILITY OF THE OPERATOR TO ENSURE THAT PERSONS WILL NOT BE EXPOSED TO EXCESSIVE UV OR OPTICAL RADIATION DURING EQUIPMENT OPERATION.
- d. Equipment should be operated in locations where it will not readily be subjected to tampering by unauthorized personnel.
- e. Maintenance and servicing of this UV generating equipment shall be performed by authorized personnel.
- f. When replacing lamps, replace them only with the lamps for which the equipment is marked and intended.
- g. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

# DIMENSIONS



# TECHNICAL SPECIFICATIONS

Model	Weight	Input Voltage	Power	Current	Fuse
PUVQC128W	23 lb (10.4 kg)	120 VAC	128 W	1.2 A	3.15 A

## PREPARATION

For best results, place QuadClean in the center of the room where UV-C light will not be obstructed. Follow these general guidelines:

- Operate indoors in dry locations with temperatures ranging between 40 to 95°F (4.4 to 35°C).
- Operate in unoccupied areas only.
- Post notices of operation when in use.
- See below UV-C intensity at specific distances. See the following page for recommended exposure times and UV-C doses for 99.9% inactivation of common contaminants.

## UV-C INTENSITY AT SPECIFIC DISTANCES

Distance	UV intensity*
3.28 feet (1 m)	223 $\mu\text{W}/\text{cm}^2$
10 feet (3.05 m)	23.38 $\mu\text{W}/\text{cm}^2$
20 feet (6.1 m)	6.22 $\mu\text{W}/\text{cm}^2$

\* Measured at a third-party testing agency.

# RECOMMENDED EXPOSURE TIMES

To calculate recommended exposure time (in seconds), divide the UV-C dose by the UV intensity at the specific distance.

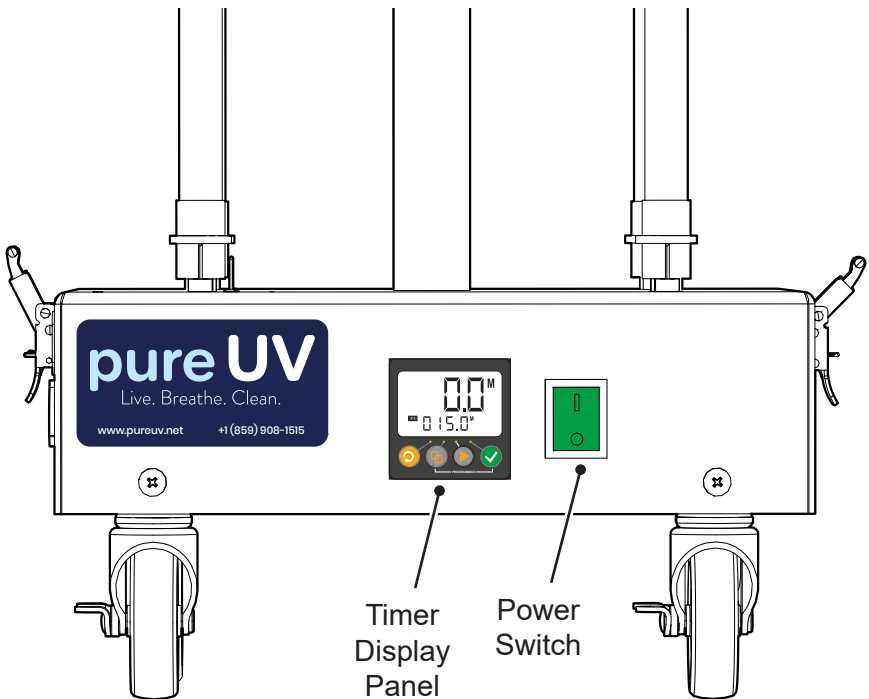
Duration	UV-C Dose ( $\mu\text{Ws}/\text{cm}^2$ )		
	3.28 feet (1 m)	10 feet (3.05 m)	20 feet (6.1 m)
300 seconds (5 minutes)	66,900	7,014	1,866
600 seconds (10 minutes)	133,800	14,028	3,732
900 seconds (15 minutes)	200,700	21,042	5,598
1,800 seconds (30 minutes)	401,400	42,084	11,196

## Recommended UV-C dose for 3-log (99.9%) inactivation of common contaminants:

Pathogen	UV-C Dose ( $\mu\text{Ws}/\text{cm}^2$ )
Bacillus Anthracis (Anthrax)	17,000
Bacillus Anthracis Spores (Anthrax spores)	88,000
Clostridium Difficile Spores (C.diff spores)	46,000
Clostridium Tetani (Tetanus)	37,000
Escherichia Coli (E. Coli)	15,000
Mycobacterium Tuberculosis	16,000
Staphylococcus Aureus (MRSA)	17,000
Vibrio Comma (Cholera)	13,000
Bacteriophage (E. Coli)	17,000
Infectious Hepatitis	11,000
Influenza	13,000

# OPERATION

1. Position QuadClean in the center of area to be exposed to UV-C light. Make sure no people, animals, or plants are in the space.
2. Plug the power cord into 120 V, 60 Hz grounded power outlet. The green power switch will illuminate.
3. Flip the green power switch to the on position and exit the room within 90 seconds. *QuadClean bulbs will illuminate after a 90 second countdown.*
4. The disinfection cycle lasts 15 minutes (default). QuadClean will automatically turn off when the cycle is complete. Do not enter the room while the bulbs are illuminated. *See the following page for instructions on adjusting the disinfection time.*
5. If needed, reposition the unit to expose any obstructed areas and repeat the procedure.



# DISINFECTION TIME ADJUSTMENT

The default disinfection time is 15 minutes. To adjust the default disinfection time:

1. Flip the green power switch to the on position.
2. Press the buttons on the timer display panel to adjust the disinfection time. Each button corresponds to the number indicated on the panel as shown below.
3. After 90 seconds, the bulbs will illuminate. If you do not intend to operate QuadClean, flip the power switch to the Off position within 90 seconds. QuadClean will remember the new default disinfection time.



**⚠ Disconnect power before servicing!**

## TROUBLESHOOTING

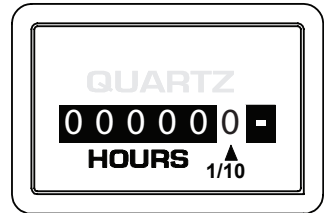
- Check that all bulbs are securely installed.
- Check that adequate power is being supplied to the unit at the power outlet.

## MAINTENANCE

Check and clean the bulbs before each use to ensure optimal performance. Annual lamp replacement recommended. Avoid exposure to direct or reflected UV light.

### Usage Meter

The usage meter is located on the side of the enclosure and measures the total number of hours QuadClean has been in operation with the bulbs illuminated.



Record the number prior to each use to track operation hours. Pure UV recommends replacing the bulbs after 10,000 hours of operation to ensure optimal performance and safety.

### Replacing the bulbs

*Do not touch the bulb surface with your skin. Pure UV recommends replacing the bulbs after 10,000 hours of operation.*

1. Make sure power is disconnected. If recently operated, allow the bulb(s) cool for at least 15 minutes before proceeding.
2. Gently pull the bulb upward to loosen, and then carefully remove the bulb with a downward and outward motion. Repeat for remaining bulbs.
3. Insert the new bulb(s) and secure in place.
4. Dispose of bulbs in accordance with local regulations.



## Replacement Parts

Contact Pure UV at +1 (859) 908-1515 or visit [www.pureuv.net](http://www.pureuv.net) for replacement parts.

## WARRANTY

Pure UV warrants QuadClean, excluding bulbs, to be free from defects in the workmanship or materials, under normal use and service, for a period defined in the table below, from the date of purchase by the consumer. If, at any time during the warranty period, the product is defective or malfunctions, Pure UV shall repair or replace it (at Pure UV's option) within a reasonable period of time. If the product is defective, return it, with a dated proof of purchase, to Pure UV. This warranty does not cover removal or reinstallation costs. This warranty shall not apply if the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, AND OF ALL OTHER OBLIGATIONS AND LIABILITIES ON PURE UV'S PART, AND PURE UV NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCTS. PURE UV SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT.

Component	Period
Enclosure and Mechanical Components	5 years
Electrical Components	2 years





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**EPA Est. No. 100268-KY-1**