

UVMatrix™ CW-Series

3-Stage Large Room Air Purifier

Commercial and Institutional Applications

Specification Sheet



Recommended for:

- Public gathering areas
- Educational facilities
- Courtrooms
- Hospitals
- Physicians' facilities
- Veterinarians' facilities
- Kennels
- Restaurants
- Cocktail Lounges
- Country Clubs

Available from:

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Remove Airborne Pathogens, Allergens and Odors

The UVMatrix™ CW-Series is a self contained, commercial-grade large room air purifier that reduces common indoor air contamination from virtually any source.

It combines three technologies for air treatment for a comprehensive system that addresses the common indoor air quality problems.

Progressive Air Filtration

Air is drawn in through a premium MERV 11 Ultravation Progressive air filter, achieving 85% efficiency on particles as small as 3 microns (HEPA is available for even more stringent filtering).

Air Stream Disinfection

Air is then passed through a processing chamber where it is exposed to UV-C irradiation to reduce airborne pathogens allergens and mold spores.

VOC / Odor reduction using Photocatalytic Oxidation

At the same time the air stream is placed in contact with a reactor substrate grid that is coated with Titanium Dioxide (TiO₂), which is activated by UV-C light. Volatile Organic Compounds (VOCs) in the airstream are decomposed as the result of reacting with the activated TiO₂ coating on the grid.

System Features

- **Ceiling or Wall Mount**
- **MERV 11 Filtration (HEPA optional)**
- **Quiet operation with reverse impeller blower**
- **Variable speed: 400-950 CFM**
- **Low maintenance**
- **Philips Compact-Twin low mercury, long lasting UV lamps**
- **Electronic power supply for better UV lamp life and optimized output**
- **Easy to install wall or ceiling, auto adapts to any line voltage 120 to 277 VAC**

Ultravation®
Advanced technology for indoor air quality

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1. Scope of Supply

The stand alone (ceiling mount or wall mount) air cleaner shall consist of a heavy duty galvanized, powder coated enclosure, 2" MERV 11 filter, 1"Pre-filter, Two 55 Watt UVC Lamps, PCO treated screen for VOC removal, Variable speed blower (Capable of velocities up to 950 CFM), and an electronic power supply.

A. Filtration

- i. Equipment shall incorporate a 1 inch pre filter.
- ii. Equipment shall incorporate a 2" MERV 11 filter.

B. UVC Lamps

- i. The UVC Lamps shall be hot cathode type, twin-tube, 2G11 type base, and will produce broadband UVC of 250-260nm
- ii. The UVC Lamps shall produce 85% of the initial UVC output at end of lamp life (9000 hours), or 80% of initial UVC output at extended life (18,000 hours).
- iii. The UVC Lamps shall contain no more than 5 milligrams of mercury.
- iv. Light baffles shall be incorporated into the unit to ensure exposure to UVC light is not possible.
- v. A safety switch shall be incorporated into the equipment to prevent exposure to UVC light in the event of access panel being opened.

C. Blower / Motor

- i. Blower shall be High Velocity Reverse Impeller Motor for quiet operation
- ii. Blower shall be operated via fully variable controller to be adjusted as required.
- iii. Blower shall utilize sealed bearings to eliminate maintenance.

D. VOC Removal

- i. Equipment shall incorporate a removable PCO treated cartridge for VOC treatment.
- ii. The PCO cartridge shall have a minimum of 4.25 ft² of PCO treated surface that is continuously in contact with UVC light.

2. Installation:

- A. Determine a suitable location to install unit. (Unit either fits in standard 2' x 4' suspended ceiling grid, or can be mounted on wall)
- B. If installed in ceiling grid use supplied eyelets for support and insert into ceiling grid in center of area to be treated (Unit needs to suspend independent of ceiling grid). If installed on wall – mark out spacing of key holes and install supplied screws into wall. – Put supplied mounting tabs in corner locations.
- C. Hang unit on eyelets and secure by mounting through corner tabs.
- D. Turn on unit and inspect operation.

3. Optional Equipment:

Variable controller that mounts inside standard electrical box to hard wire to blower for remote operation of equipment.