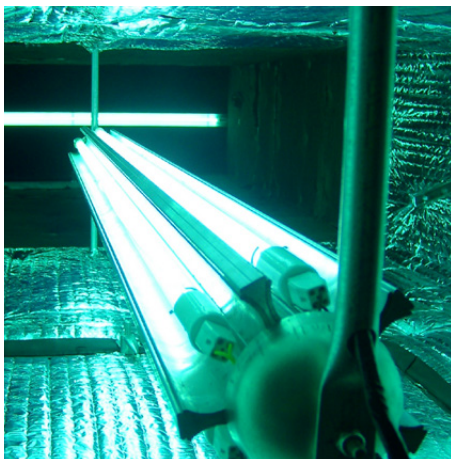




Ultraviolet Air  
Purifiers  
In-Duct and  
Standalone  
Applications

# UV Bio-Wall Series

## Ultraviolet Air Purifiers



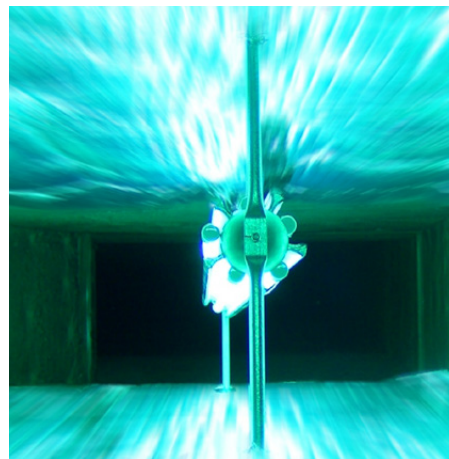
### UV BIO-WALL SERIES

Tri-Dim is proud to offer state-of-the-art UV air purification systems from Sanuvox. UV Bio-Wall provides a 'barrier wall' of UV energy that destroys biological and chemical contaminants passing through it. The UV Bio-Wall is mounted parallel to the airstream to purify the air and interior duct surface. High-intensity UVC lamps; high output, electronic-ballasts parabolic reflectors; and a full 360°-germicidal radiation make the UV Bio-Wall Series an effective air and surface purifier.



### UV LIGHT - HOW IT WORKS

The sun bombards the Earth's atmosphere with UV energy destroying contaminants in the air. This process is how the sun naturally purifies the air that we breathe. We create this same process indoors. The UV Bio-Wall series utilizes 19 mm UVC germicidal wavelength (254 nm) quartz lamps mounted parallel to the airstream. These lamps incorporate the latest in UV lamp technologies, guaranteeing the longest lamp life and low mercury content. The lamps feature anti-solarization coatings, proprietary gas mixtures, pure-fused quartz glass and heavy duty filaments that provide extra long life - more than twice the operating life when compared to competitive systems.



### BENEFITS OF REFLECTION

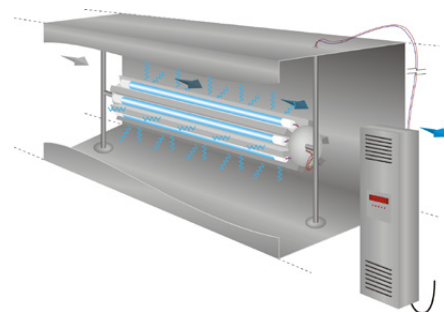
The UV Bio-Wall series utilize Anodized aluminum parabolic reflectors. These reflectors are an integral part of the Bio-Wall system and direct virtually all of the UV energy from the UV Lamps.

The principle of using light reflection to increase and direct light intensity is one we are all familiar with in a common flashlight. This same principle works on UV light as well - reflection is used to intensify and direct the UV light to where it is needed. Using any other UV lamp/emitter will result in losing more than half the UV intensity.

### CAN A UV LAMP ON A COIL ALSO TREAT THE AIRSTREAM?

No. Because these UV Lamp(s) are installed perpendicular to the air, there is insufficient dwell time between the lamp(s) and the airstream - meaning that the effect on the air is minimal. For a UV lamp to be effective as

an air purifier, the lamp(s) must be parallel to the airstream. If lamp(s) are to be installed perpendicularly, many more lamps would be required in order to achieve the necessary dwell time.



# UV Bio-Wall Series Ultraviolet Air Purifiers

**UV Bio-Wall**  
with a single multi-split  
lamp for severe chemical  
and odor applications.



## UV BIO-WALL

UV Bio-Wall is an in-duct system that is mounted parallel to the airstream to allow the proper dwell time for surface and air purification. UV Bio-Wall utilizes five high-intensity UV lamps to provide 360° coverage. EPA and Homeland Security testing showed UV Bio-Wall to have a greater than 99.97% destruction on one-pass airborne bacteria, 99% on viral and 93% on spores.

UV Bio-Wall also uses proprietary electronics and software to connect with building maintenance systems to monitor each purifier.



## UV BIO-WALL QUATTRO

Inspired by the UV Bio-Wall, the Quattro in-duct purifier is designed for light commercial applications. The Quattro features three high-intensity UVC lamps and one high-intensity UVC/UVV lamp – all attached to parabolic reflectors. These lamps are mounted parallel to the airstream.

The Quattro system will treat the entire duct at one time, destroying up to 99.99% of the biological and chemical contaminants in the airstream\*.



## STAND ALONE SYSTEMS

The S1000FX Filter/UV System (above right) utilizes both filtration and UV light. This purification system is ideal for use in healthcare, cleanroom and biological-treatment applications. The S1000FX provides 1000 CFM of air under load and with filters in place.

## UV OBJECT PURIFIERS

**CoilClean IL** – is installed facing the return side (or supply side) of a commercial evaporator coil or fan coil to destroy and prevent mold and other microbial growth.

A combination of CoilClean ILs can be used to accommodate any size coil. Lamps only need to be replaced after an impressive 17,000 hours of operation. Warranty is two years from installation.



# UV Bio-Wall Series

## Technical Data

	UV Bio-Wall	UV Quattro
Purifying capacity	Sized according to application	Sized according to application
Dimensions	Diameter: 5.25", overall length is lamp length + 6.5"	24 x 8 - lamp can extend up to 15" from backplate
Weight	Depending on model	21 lbs
Power	120 to 270 V	120 V - can be wired 110 V to 240 V
Watts/Amperage	Up to 750 W	180 W / 1.5 A
Starting	Hardwire to air handler	Air pressure switch
Line cord	No	Yes
UV lamp type	Proprietary, high intensity 19 mm mercury vapor lamp	Proprietary, high intensity 19 mm mercury vapor lamp
UV wavelength	UVC 254 nm	UVC 254 nm
UV light configuration	(5) straight	(4) x straight
UV lamp length (in)	18, 24, 30, 40, 50, 60" available	18"
Internal lumina lamp coating	Yes	Yes
Reflector	Anodized aluminum parabolic	Anodized aluminum parabolic
Lamp change out time	17,000 hours	17,000 hours
Lamp warranty	2 years	2 years
Purifier warranty	Ballast 15 years, electronics 1 year	3 years
Construction	Aluminum, steel, ss parts	Aluminum/steel

\* Percentage of biological destruction will depend upon: size of duct, velocity of air where the QUATTRO is installed, contaminants to be destroyed and the percentage of outside make-up air.

Tri-Dim Filter Corporation is committed to continual product development - all descriptions, specifications and performance data are subject to change without notice. Tri-Dim products are manufactured to exacting criteria - there can be a ±5% variance in filter performance.

### LOCAL REPRESENTATIVE