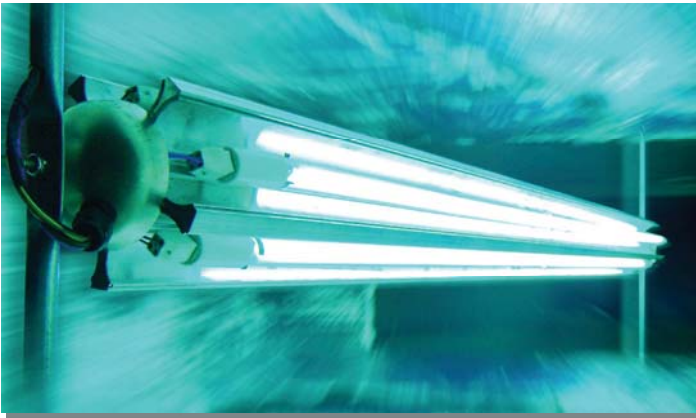


# ULTRAVIOLET AIR PURIFIERS

**IN-DUCT AND  
STAND-ALONE APPLICATIONS**

## UV Bio-Wall Series

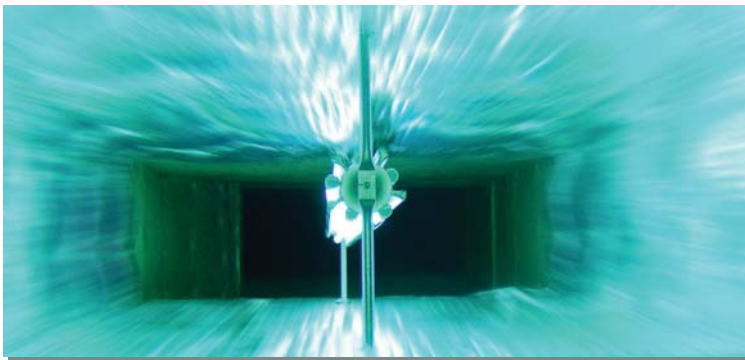
Tri-Dim is proud to offer state-of-the-art UV Air purification systems from Sanuvox. UV Bio-Wall provides a 'barrier wall' of UV Energy destroying biological and chemical contaminants passing through it. The UV Bio-Wall is mounted parallel to the air-stream to purify the air and interior duct surface. 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.

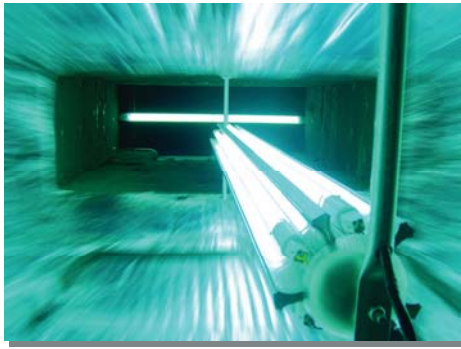
The UV Bio-Wall Series utilizes 19mm UVC Germicidal wavelength (254nm) Quartz Lamps mounted parallel to the air-stream. These lamps incorporate the latest in UV Lamp technologies, guaranteeing longest Lamp life, low mercury content, with features such as anti-solarization coatings, proprietary gas mixtures, 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. The Parabolic Reflectors direct virtually all of the UV Energy from the UV Lamps.

The principle of light reflection increasing and directing light intensity is a principle we are all familiar with in a common flashlight. This same principle works on UV light as well – reflection is needed 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.



## UV Bio-Wall

The UV Bio-Wall is an in-duct system that is mounted parallel in the air-stream. This allows for the proper 'dwell time' to provide surface and air purification. The photo above shows a single Multi-Split Lamp in front of the UV Bio-Wall for severe chemical and odor applications. The UV Bio-Wall utilizes five high intensity UV Lamps to provide 360° coverage.

EPA and Homeland Security testing showed the UV Bio-Wall to have a greater than 99.97% destruction on one pass airborne bacteria, 99% on viral and 93% on spores.

Contact your local representative to have a unit sized for your system.



## UV Bio-Wall QUATTRO

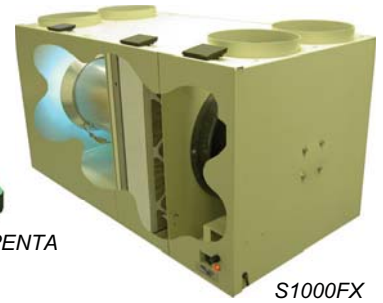
Inspired by the UV Bio-Wall the QUATTRO In-Duct Purifier is designed for light commercial applications. The QUATTRO features three high intensity UVC Lamps and one high intensity UVC/UVV Lamp that are all attached to the Parabolic Reflectors. These lamps are mounted parallel to the air-stream.

The QUATTRO system will treat the entire duct at one time destroying up to 99.99% of the biological and chemical contaminants in the air-stream\*.

\* 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.



UV Bio-Wall PENTA



S1000FX

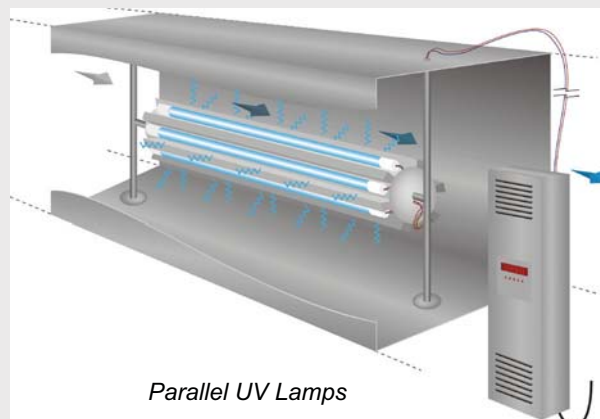
## Stand Alone Systems

The UV Bio-Wall PENTA Mobile (*photo above left*) is a self-contained fully mobile decontamination unit. The PENTA is for use in unoccupied areas and is equipped with a pre-timer and operational timer.

The S1000FX Filter/UV System (*photo above right*) utilizes both filtration and UV Light technology to provide a purification system for use in healthcare, clean room, and biological treatment applications to smoking environments. The S1000FX provides 1000 CFM of air – under load with filters in place.

## Can a UV Lamp on a Coil also treat the air-stream? **NO**

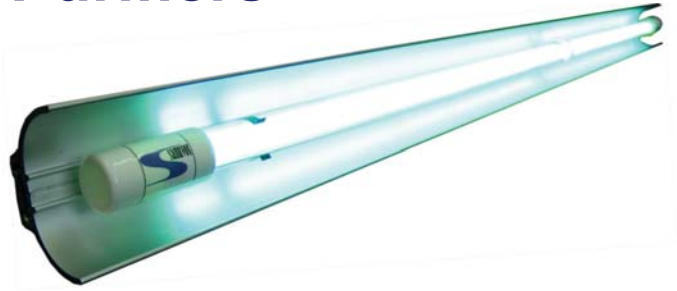
Because these UV Lamp(s) are installed perpendicular to the air, there is not sufficient amount of "Dwell Time" between the Lamp(s) and the air-stream, consequently the effect on the air is minimal. For a UV Lamp to be effective as an air purifier, the Lamp(s) must be parallel to the air-stream. If Lamp(s) are to be installed perpendicular, many more Lamps would be required in order to achieve the necessary "Dwell Time".



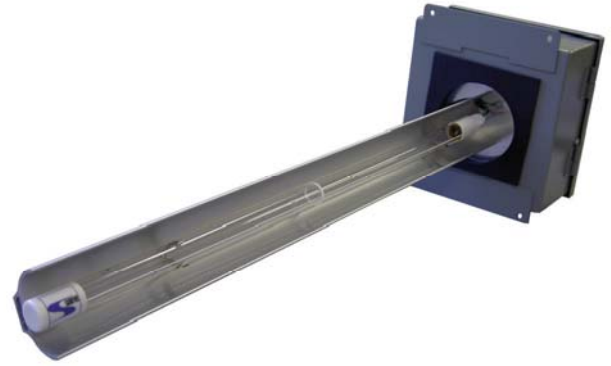
Parallel UV Lamps

# UV Object Purifiers

**CoilClean IL** – (top right) is designed to be installed facing the return side (or supply side) of a commercial evaporator coil or fan coil, destroying and preventing mold and other microbial growth. A combination of CoilClean IL's can be used to accommodate any size coil. Lamp Change-out: Replace Lamps after 17,000 hours of operation. Warranty is 12,000 hours from installation.



**CoilClean RT** – (bottom right) The CoilClean RT Series is an Ultraviolet Light Objects Purifier specifically designed for exterior rooftop HVAC units. The CoilClean RT employs patented technology to keep the A/C coil free from biological contaminants including mold and fungus. The UV Purifier uses a weatherproof NEMA 4X Housing and a patent pending Reflector locking and alignment mechanism.



## Product Specifications

	UV Bio-Wall QUATTRO	UV Bio-Wall	UV Bio-Wall PENTA
<b>Purifying Capacity</b>	Sized According to Application	Sized According to Application	Air & Surface Sterilizer, Depends upon area.
<b>Dimensions</b>	24x8. Lamp Assembly can extend up to 15" from back-plate.	Diameter: 5.25" Overall length is Lamp Length + 6.5 inches	47" x 28"
<b>Weight (lbs)</b>	28 lbs.	Depending upon model - Bio60 = 11lbs.	30 lbs.
<b>Power</b>	110/220 V 50-60 Hz	110/220 V 50-60 Hz	110/220 V 50-60 Hz
<b>Watts/amperage</b>	170 Watts, 2.5A	Depending upon model Up to 750 Watts, 7.5A	500 Watts, 5A
<b>Starting</b>	Air Pressure Switch	Hardwire to Air Handler	Pre-Timer, Operational Timer
<b>Line Cord</b>	Yes	No	Yes
<b>UV Lamp Type</b>	Proprietary High Intensity 19mm Mercury Vapor Lamp	Proprietary High Intensity 19mm Mercury Vapor Lamp	Proprietary High Intensity 19mm Mercury Vapor Lamp
<b>UV Wavelength</b>	UVC 254nm / UVV 187nm	UVC 254nm / UVV 187nm	UVC 254nm
<b>UV Light Configuration</b>	(4) x Straight	(5) Straight	(5) Straight
<b>UV Lamp Length (in)</b>	18"	18", 24", 30", 40", 50", 60" available	40", 50", 60"
<b>Internal Lumina Lamp Coating to prevent solarization</b>	Yes	Yes	Yes
<b>Reflector</b>	Anodized Aluminum Parabolic Reflector	Anodized Aluminum Parabolic Reflector	Anodized Aluminum Parabolic Reflector
<b>Average Microwave intensity at 36"</b>	1,600	Up to 3,300uw depending on Bio-Wall Purifier	2,000 uw
<b>Lamp Change out Time</b>	17,000 hours	17,000 hours	17,000 hours
<b>Lamp Warranty</b>	12,000 hours	12,000 hours	12,000 hours
<b>Purifier Warranty</b>	17,000 hours	17,000 hours	17,000 hours
<b>Construction</b>	3 Year Ballast, 5 Year Other	3 Year Ballast, 5 Year Other	3 Year Ballast, 5 Year Other
<b>Options</b>	Ultra-High Intensity Amalgam Lamps	277 V option available Ultra-High Intensity Amalgam Lamps	277 V option available Ultra-High Intensity Amalgam Lamps
<b>Software</b>	N/A	Proprietary electronics & software to monitor each purifier via building computer maintenance	N/A

Tri-Dim Filter Corporation is committed to continual product development – all descriptions, specifications and performance data are subject to change without notice. Tri-Dim® and Tri-Dek® are Registered Trademarks of Tri-Dim Filter Corporation. CoilClean, UV Bio-Wall and Sanuvox are Trade Names of Sanuvox Technologies.



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## Local Representation: