# AMTEK UV-C SERIES UV-C NANOTECHNOLOGY AIR SANITIZATION SYSTEM



+ LED Light Panel

- **✓ KILLS BACTERIA**
- **✓** KILLS VIRUSES
- KILLS FUNGI

• LED light panel

Operating 24/7 in occupied spaces

 No chemicals, not harmful for humans, animals, or plants

2'x 2' (600 x 600 mm)

### **FAST & CONTINUOUS AIR DISINFECTION**

**Air Cleaning** 

24 x 7

Non-Stop Air Purification E. Coli & Staphylococcus

99.99%

Antiseptic Rate after 2 hrs.

H1N1

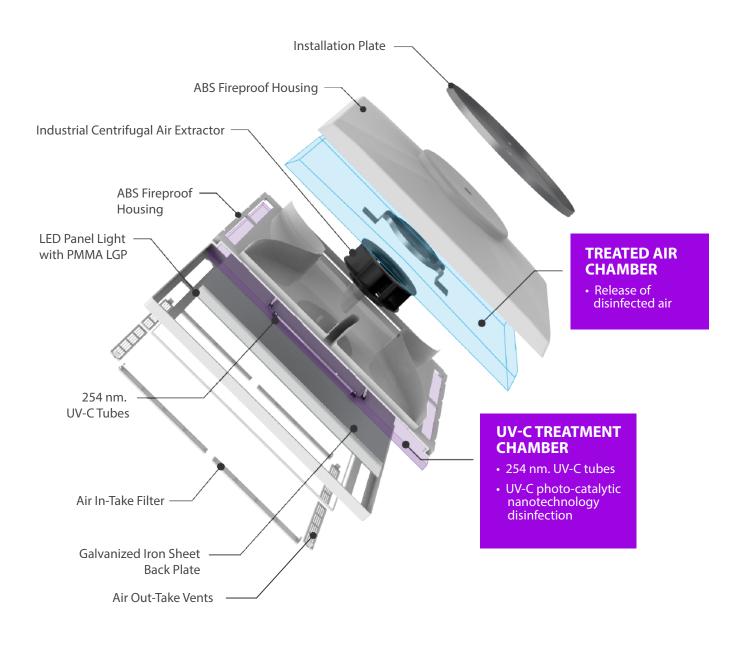
99.99%

Antiseptic Rate after 2 hrs.





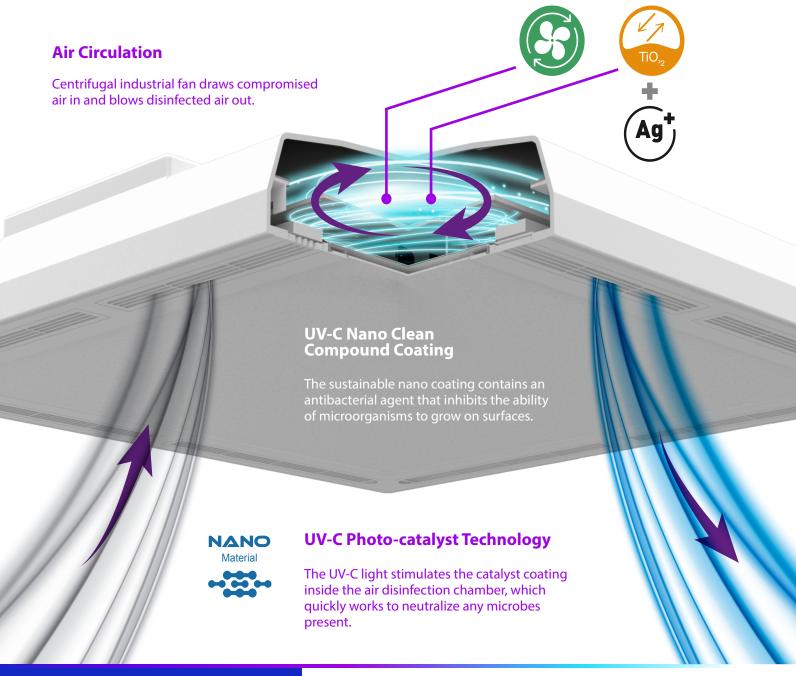
### **Scientifically Engineered**





#### **Product Features**

24 hr. air disinfection protection through:





### **Proven by Science**

Independent laboratory tests validate UV-C photo-catalytic oxidation's effectiveness to eradicate pathogens as shown on the charts below.

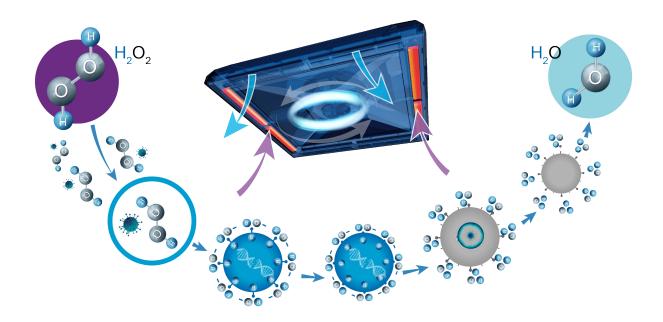


TEST AND VERIFICATION FOR NANO UV-CLEAN PANEL				
CLASSIFICATION	ТҮРЕ	EFFECT	TESTED BY	ELIMINATION RATE
NANO	E. Coli	Antiseptic rate after 2 hrs.	Gmicro Testing, China	99.99%
UV-CLEAN PANEL	Staphylococcus Aureus	Antiseptic rate after 2 hrs.	Gmicro Testing, China	99.99%
	H1N1	Antiseptic rate after 1 hr.	Gmicro Testing, China	99.3%
	Formaldehyde	Antiseptic rate after 1 hr.	SGS, China	76.61%

TEST AND VERIFICATION FOR ANTI-VIRAL EFFECT OF NANOMETER COMPOUND MATERIAL				
CLASSIFICATION	ТҮРЕ	EFFECT	TESTED BY	ELIMINATION RATE
VIRUS	H1N1	Virus is eliminated after 20 mins.	MicroBAC, USA	99.99%
VINOS	Enterovirus (EV)	Virus is eliminated after 20 mins.	MicroBAC, USA	99.99%
ENVIRONMENT	Formaldehyde	Antiseptic rate after 24 hrs.	Gmicro Testing, China	99.99%
	TVOC	Antiseptic rate after 24 hrs.	Gmicro Testing, China	99.99%
BACTERIA	E. Coli	Antiseptic rate after 2 hrs.	Gmicro Testing, China	99.99%
	Staphylococcus Aureus	Antiseptic rate after 2 hrs.	Gmicro Testing, China	99.99%



## How Does the AMTEK UV-C Nanotechnology Process Work?



### 1. UV-C Light and Catalyst

The UV-C light stimulates the catalyst coating  $(TiO_2 + Ag)^*$  inside the air disinfection chamber. The silver reacts with any microbes in the incoming air to inhibit their reproduction.

\*Titanium Oxide (TiO<sub>2</sub>) + Silver (Ag)

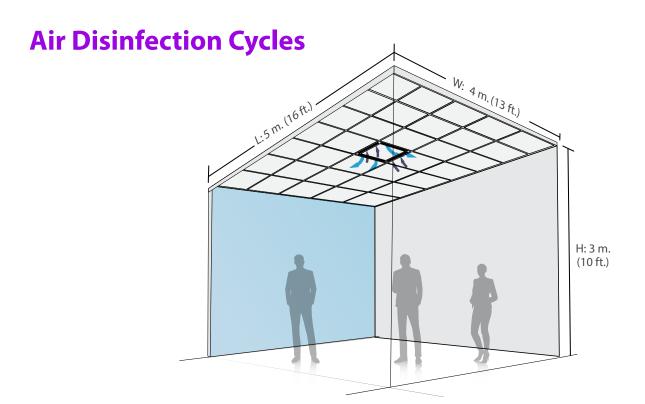
### 2. Deactivation of Viruses

On exposure to UV-C light, O<sub>2</sub> and water vapour, the TiO<sub>2</sub> in the catalyst coating creates hydroxyl radicals (OH•), affecting the viruses' lipid membrane or proteins. These radicals then damage the DNA of the viruses and deactivate them in the air.

#### 3. The Virus Dies

As a result, the  ${\rm TiO}_2$  + Ag catalyst ruptures the viruses' cell membranes, causing death. The air exiting the device is now disinfected.





#### BASED ON CLEAN AIR DELIVERY RATE (CADR)\* 1 m<sup>3</sup>/min. (36 ft<sup>3</sup>/min.)

#### **RECOMMENDED SPACE**

AREA	NUMBER OF LUMINAIRES	TIME REQUIRED FOR DISINFECTION 99.99%	AREA	NUMBER OF LUMINAIRES	TIME REQUIRED FOR DISINFECTION 99.99%
60.0 m³ (2110 ft³)	1	1 hr.	480.0 m³	1	8 hrs.
120.0 m³ (4237 ft³)	2	1 hr.	960.0 m³	2	8 hrs.
180.0 m³ (6356 ft³)	3	1 hr.	1440.0 m³	3	8 hrs.
240.0 m³ (8475 ft³)	4	1 hr.	1920.0 m <sup>3</sup>	4	8 hrs.

<sup>\*</sup>CADR - Clean Air Delivery Rate





#### 1st Layer:

30 g/m<sup>2</sup> Thin, non-woven fabric

#### 2nd Layer:

300 g/m<sup>2</sup> Antibacterial decomposition of organic gases

#### **3rd Layer:**

180 g/m<sup>2</sup> Activated carbon deodorization

#### 4th Layer:

30 g/m<sup>2</sup> Dust removal

### **Easy Maintenance**

2160

Working hours for filter screen

8 hrs./day - 9 months

12 hrs./day - 6 months

24 hrs./day - 3 months

## How to Easily Replace the Filter

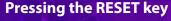
### Proceed during non-working hours

- 1. The LED indicator light blinks when filter is expired.
- 2. Fan power must be turned off.
- 3. Power supply of lighting system remains in normal use.



### Replacement of filters

 Follow user manual instructions to open the filter cover, remove the old filter, and insert the new one.



- 1. Press the button on the left side of the LED light for 4 seconds.
- 2. Light is switched off, and circulatory system power restarts.
- 3. Timer resets for next filter change.







### **Cleaner Air, Better Light, Safer Spaces**

The AMTEK Air Sanitization UV-C
Nanotechnology System is ideal for
the disinfection of the breathing air anywhere where people congregate. Having
in place a sanitization protocol for spaces
where people gather for work, study,
healthcare, exchanging goods and
services, or simply for the joy of each
other's company helps to keep our communities healthy, nurtured, and strong.
Some of our typical applications:



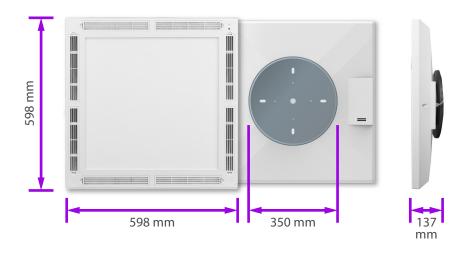
## Meeting rooms, general office space, VIP lounges, spas, gyms, sports centers, retail, restaurants, movie theaters.





**High-Standard Processing Areas**Pharmaceutical factories, hi-tech processing areas, food manufacturing factories.





AMTEK UV-C NANOTECHNOLOGY AIR SANITIZATION SYSTEM		
Power	15 W	
Centrifugal Fan Voltage	24 VDC	
Centrifugal Fan Noise	<40 dB.	
Centrifugal Fan Lifespan	Medical Gr.: 100,000 Continuous hrs.	
CADR Fan (Clean Air Delivery Rate)	5.72 m³/min	
Control	By Switch	
UV-C Disinfectant Tubes	254 nm.	
Air Filters	Eff. Working Time: 2,160 hrs.	

LED LIGHT PANEL		
Power	30 W	
Lumens @ 4000K	3300	
Efficacy	110 lm./W	
ССТ	3000, 4000 5000 Kelvin	
CRI	80 Ra.	
Dimming	0-10 VDC	
LED L70	50,000 hrs.	
LED Light Lifespan	50,000 hrs.	

AMTEK UV-C NANOTECHNOLOGY AIR SANITIZATION SYSTEM + LED PANEL		
Power	45 W	
Voltage	100-277 VAC	
Frequency	50/60 Hz.	
Power Factor	0.9	
Operating Temperature	-30°C + 50°C	
Nanotech Pathogen Testing	SGS	
Certifications	cETL us	
Warranty	3 Years	