





# Wherever Water is Applied We are There



To View Website



Manufacturers & Exporters of **UV Sterilization Systems for Water & Air Application** 













### **About Us**

### Who Recognize Us

We are an ISO accredited company that has been rendering its valuable service to humanity by applying UV system for water purification. So far it has earned numerous certifications to its credit such as c∈ (Conformite Europeene), Water Quality Association (USA), Indian Water Works Association (India) etc.

### **Our History**

We took up the challenge of using UV Water Purification System in 1984. Initially we began the manufacture of UV Disinfection System based on Teflon Technology which was new to Indian Industries during that period. In 1995, we started the production of Quartz-based UV system. In 2000, we further started the production of UV Air Disinfection / Room Sterilizer / UV Surface Purifier / UV Sterilization Box and UV Wand Sterilizer as well.

#### What we Achieved

In a period of more than 40 years, Hitech Ultraviolet gained a good reputation due to its quality UV Systems, and this is the reason, why it is widely accepted by diverse industries not only in India but abroad as well. We have more than 70,000 customers spread across 42 countries.

### From Where We Function

Our company and the manufacturing unit is situated at an Industrial location in Mumbai city limits. All our technical activities are conducted out of this unit.

### Why Choose Us?

UV System is the ultimate solution to prevent contamination of water. The expertise in the proper application of our product line, the uncompromising dedication to quality and services, the innovative solution to the problems related to water and environment – all make us "Masters in UV".















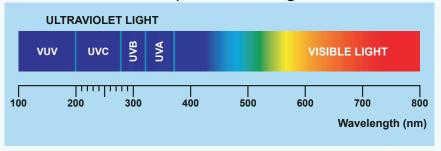


### What is UV

### **Meaning of Ultraviolet (UV)**

The electromagnetic system contains ultraviolet (UV) rays lying between x-rays and visible light. Though it is invisible, the moment we step out into the sun, we are exposed to it. These rays are responsible for causing sunburns.





In the bactericidal UV-C range (200-280 mm) the \*DNA absoption curve has been plotted. It shows that the wave -length of 254 nm is extremely favourable for disinfection. The emission of the UV lamp is at its best at this wave-length.

▲ CAUTION: UV light can be harmful for eyes and Skin, hence it is recommended to Never Look directly or Go near a 'Lit' UV Lamp.

### **How Do UV Rays Destroy Microbes?**

Special lamps or bulbs that emit UV light of a particular wavelength are used in Ultraviolet Disinfection Systems. The energy from UV light attacks the genetic core of the micro-organism and rearranges the DNA/RNA eliminating the micro-organisms ability to perform metabolic functions and specially to reproduce. Thus, the micro-organism can no longer replicate, thus preventing it from infecting other organisms with which it comes in contact. Though the process looks simple, it is very effective in killing 99.99% of harmful microbes. But the taste of water remains the same as no chemicals are added to the water.

### Comparision of Ultraviolet v/s Chlorine & Ozone

METHODS	ULTRAVIOLET	CHLORINATION	OZONE
Destruction	Physical	Chemical	Chemical
Capital Cost	Low	Medium	High
Operating Cost	Low	Medium	High
Maintenence Cost	Low	Medium	High
Maintenence Frequency	Low	Medium	High
Disinfection Performance	Excellent	Very Good	Unpredicted
Contact Time	1-5 sec	25-45 min	5-10 min
Personal Hazards	Low	Medium	High
Toxic Chemicals	No	Yes	Yes
Water Chemistry change	No	Yes	Yes
Residual Effect	No	Yes	Yes











# **UV Systems**

#### Precautions to be taken

For effective accomplishment of disinfection, it is crucial to see the quality of the UV Light and the application. The exact dosage of UV has to be used. It is equally important to use a good pre-filter in order to remove any dirt or debris that may be present in the raw water supply. This dirt and debris can interfere with the effectiveness of the UV rays, virtually giving the micro-organisms a shield to protect themselves when UV rays pass through. Manufacturers strongly recommend replacing the UV lamp at specified time.



### Some of the Industrial segments using our UV System

- Cosmetics
- Hatcheries
- Aqua Cultures
- Food Industries
- Paint Industries
- **Swimming Pools**
- Chemical Industries
- Electronic Industries
- Algae and Slime Control
- Bottling Mineral Water
- Water Treatment
- **Pharmaceuticals**

- **Distilleries**
- **Breweries**
- **Dairies**
- Hotels
- Gelatin
- Hospitals

















# **Products**

### **UV Water Disinfection System**



Our UV Water Disinfection Systems are designed in a way that suits diverse industrial environments. The systems are categorized on the basis of the capacity of water that needs to be sterilized per hour, ranging from 350 LPH and above. We also design customized units according to client's requirements.

The compression nut and lamp holders are easy to use, simplifying the installation and replacement process. These systems are used for water purification in most industries, majorly production of food and beverages, cosmetics, paint industries, hotels, spas, aqua culture, hospitals, clinics, pharmaceuticals etc.

#### Features:

- High Quality UV-C Lamps
- High Transparency Quartz Sleeves resistant to temperature fluctuation
- UV Radiation Chamber is SS 316 L electro-polished, remains unaffected by toxic environments.
- Compact designs, saving significant amount of space.
- Long lasting and Energy saving electronic ballasts.









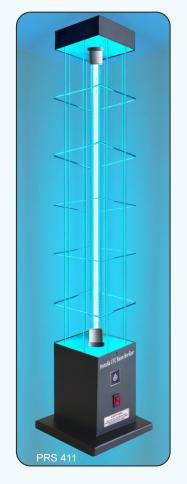


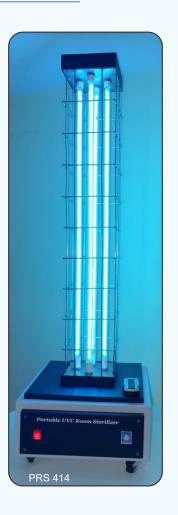






# **UV Room Sterlizer**





#### HITECH UV-C PORTABLE ROOM STERILIZER:

It is the most efficient and time saving tool to sterilize the room from all contagious and harmful microorganisms like bacteria, virus, fungus, spores, moulds, allergen, protozoa etc by efficiently disinfecting the surface wherever the UV-C Light falls.

#### **Uses and Benefits:**

UV-C Portable Room Sterilizer can be used in Hospitals, Office spaces, Hospitality centres, Day care centres, Public Transports like Airplanes, Railways, Buses and many more such places where there are possibilities of contamination by various microbes.

UV-C sterilization is considered as Efficient and Eco-friendly as it is non-toxic, non-polluting and contains no harmful chemicals or Odours.

The sterilizer unit is mobile and therefore can be moved to any corner of the room to guarantee sterilization covering the entire area and all the objects placed in the room. It is operated with a remote which has time delay circuit for safety purpose.

How to Use: To get the maximum effects it is best recommended to place the unit in the centre of the room. Power ON the Unit, using the remote. Switch ON the Room Sterilizer. Once it is switched ON, it produces an audible warning alarm sound after 3 seconds, then the Lamp will be turned ON for 3 Minutes and the Lamp will automatically go OFF and the entire surface area is completely sterilized.

















# **UV Sterilizer Box**



**HSS 600** 



#### **HSS BOX**:

100% SAFE, Kills Microbes & Environment friendly.

It uses UV-C Radiation (253.7nm) for sterilization which has the peak germicidal wave length in killing micro-organisms such as bacteria, viruses, protozoa etc. Our HSS Box sterilizes the entire surface in 360 Degree wherever placed.

Two Model Available HSS Box 450 and HSS Box 600.

**Uses:** Provides an effective disinfection of multiple objects like masks, laptop, phones, books, currency and coins, gloves, groceries, milk packets, bottles, baby clothes, toys, stationaries, vegetable and fruits, watch, jewellery and much more within few seconds.

#### FAQ • How to Operate?

Switch the ON/OFF Switch to the "ON" Mode. Pull the door completely, keep the object inside the tray and close it.

Allow the object to be sterilized for maximum 5 seconds.

### Can I Open the door when switched ON? Yes. the UV Light will be ON when the trav is pulled OUT but it won't har

Yes, the UV Light will be ON when the tray is pulled OUT but it won't harm us, as the UV rays is not coming in Direct Human Contact.

• How safe is the UV Box for Electronics and Medicinal Products?

Yes, It is safe as the UV Rays does not heat the objects, it only destroys the micro organisms.







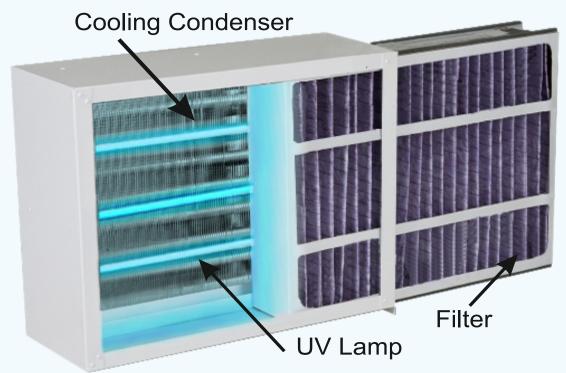








### UV Air Purifier (Air Handling Unit)

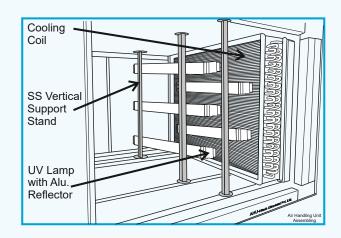


**UV for Air Handling Unit-AHU** 

It maintain its purity with methods that can be integrated with the existing set up of centralized Air handling units or HVAC systems.

#### Features:

- Designed for centralized AHUs & HVACs
- Easily customized according to the needs of any existing set up
- UV Lamps are non-ozone producing, UV-C Lamps
- Easy lamp replacement



UV Air Sterilizers are a necessity in food industries, Malls, Theatres, Hotels, especially in conference rooms, guest rooms, lobbies, gym area & as well as the spa. It is ideal for hospitals which have an added responsibility of taking care of the health of the patients, visitors, doctors and other staff at the same time.















### UV Air Sterilizer for Duct (Moisture proof)



As dangerous microorganisms flow through your Air system, also known as germicidal air purifiers, may successfully sterilise almost 100% of germs, viruses, mould spores, bacteria, fungi, and other pathogens. The air in your house can be cleaned as it circulates through the Air Duct system by installing a UV System for Air Duct in your condensing (interior) unit.

#### Work of UV Air Duct Sterilizer (Moistureproof)

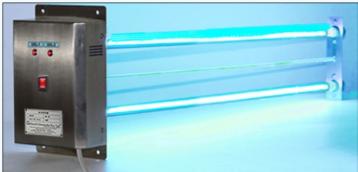
Germicidal The purpose of UV HVAC lights is to purify the air in your home. The DNA of bacteria is absorbed by UV-C light, which is used in UV air purifiers and has a wavelength of 254 nanometers. The organisms are not immediately destroyed by the UV radiation, but they are unable to synthesise the proteins required for survival and reproduction. This reduces their lifespan and stops them from doing harm.

#### The Benefits Of Ultraviolet (UV) Lights In Air Ducts

When we install ultraviolet (UV) lighting devices in your home's HVAC system, they provide a variety of health benefits. UV lighting should be added to your heating and cooling equipment. The following are some advantages of using UV lights in your duct system. If you have any additional questions, please contact Hitech UV.

- Improved Airflow
- Energy Efficiency
- Low-Cost Investment for Your System
- Reducing Illnesses and Diseases













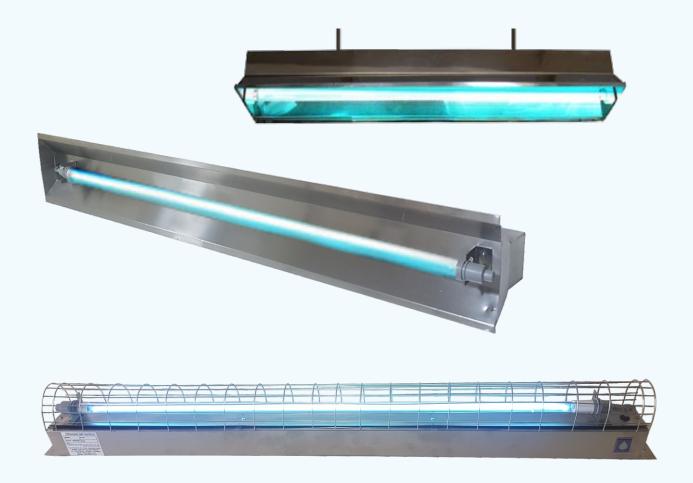








# **UV Surface Sterlizer**



- Surface purifiers/disinfectants are critical in the maintenance of purity & quality of the environment in which food is produced, processed & packed.
- Every single object that comes in contact with contents of the food/ beverages/drugs has to be 100% pure.
- Surface UV disinfectants take care of the purity of conveyors, slicing machines, blades, boxes, trays, caps, wrapping foils, lids etc. to avoid contamination of food stuff.
- Bakeries, cold stores, dairies, packaging and transportation can maintain the food safety & standard rules by using UV Surface purifiers.

Surface purifiers are also used for shoe racks, uniform cabinets (hospitals food industries, Laboratories), patients' bed, clothes etc.

















# SS Micron Filter Housing & Cartridges



Micron Filters are required in the pre-treatment process of water sterilization depending on the source of water and the industry environment.

- Micron Filters are used in the pre-UV sterilization stage of the water treatment, essentially helping in the removal of physical impurities and suspended particles ranging from sizes of 5 μ and above.
- For UV technology to be effective, it is necessary that the water passed over the Quartz sleeve is clear of sediments and other particles that affect its transparency.
- We manufacture SS Micron Filter Housing made with 316 L Stainless Steel and supply different types of PP Micron Filter Housing made of high-quality Polypropylene.
- Also, we manufacture SS cartridge which has a long life, is washable and reusable. It is available in different diameters and lengths.
- The types of cartridges we give are Spun, wound, pleated, carbon, ceramic etc.

SS Cartridges are comparatively better than spun cartridges as it is reusable, it can be easily washed & cleaned using an air compressor. Cartridges are available in different lengths & diameters to suit the needs of different units in different industries. We provide Spun Cartridge, Activated Carbon Filter Cartridge, Stainless Steel Filter Cartridge, Liquid Filter bags etc.

















# **UV** Systems Installation





# Submersible UV Systems Installation





















### **Our Clients**













# **UV Water Disinfection Systems UV Air Sterilizer UVC Surface Sterilizer UV Room Sterilizers** Submersible UV System **UV Solution for Duct SS Micron Filter Housing & Cartridges**



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