infralia
Infrared Heating Solutions

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SALES | SERVICING | LOGISTICS

▶ Why do we need UV-C disinfection systems?

We humans are just one of the creatures on the earth, living in a microbial environment that counts in billions, and constantly exchanging matter and energy with the environment through our respiratory system.

Microorganisms are good for us and bad for us. As the guardian of our body: the immune system, launches an attack every moment, killing harmful microorganisms that enter our body system through the respiratory system, the mucous membrane of the mouth and nose.

We must admit that modern medicine is still largely a technical means to assist our immune system, rather than a direct cure.

Therefore, using technology to improve the environment in which we live, and work will greatly improve our quality of life and health.

OUR AERODYNAMIC UVC PURIFICATION KILLS 99.9%
OF CORONAVIRUSES, BACTERIA AND AIRBORNE PATHOGENS

▶ Why do we need UV-C disinfection systems, instead of a particle filter system?

As mentioned above, microorganisms are not derived from human beings, we are just the host of microorganisms, and even the perfect host of some microorganisms, providing an excellent breeding environment.

Microorganisms can completely separate from the human body and survive in the natural environment, especially in environments with good temperature and humidity, microorganisms can survive independently for a long time, or for a period of time.

For example, the current survival time of the new coronavirus in the room can be 3 hours in the air, 14 hours on the handrail of the stairs, and 24 hours on paper objects.

Other microorganisms, such as mould, can thrive in indoor environments for several years.

Because of its light weight and small size, microorganisms are easily blown up by indoor air circulation, enter the air flow, and float to other places in the indoor environment.

The working principle of the traditional particle filtration system is to generate a negative pressure on the back of the filter screen through an axial flow fan or a vortex fan, so that when the air flows through the filter screen, the particulate floating objects are blocked by the fibers of the filter screen, preventing them from continuing indoors. cycle.

For the convenience of understanding, we wear a mask to simulate such a system. When we breathe, the pressure difference is generated on the mask, so that the particles in the breathed air are blocked by the fiber (meltblown cloth) of the mask.

However, we all know that a mask is generally used for 2-4 hours and must be replaced. If it is not replaced, it will become the biggest source of pollution.

Particle Filtration Systems This technology can be very efficient in a short period of time, but there are two facts that are easily overlooked:

1. The filter has a short life and cannot be used for a long time, and the replacement cost is high.

The razor model has long been used in this air filter business model. The profit of the merchant comes from the replacement of the filter, and the hidden cost of the filter is easily ignored by users. If the filter is not replaced, the efficiency of the particle filtration system will decline exponentially due to the life of the filter, thus losing the function of air filtration.

2. Filter = perfect microbial breeding base.

This is the worst fact, and no business is willing to mention it, they will only emphasize that users must replace the filter regularly. In fact, when the filter screen filters the air flow, the microorganisms are blocked and deposited on the filter screen. As part of the indoor environment, the continuous negative pressure generated by the fan makes the temperature and humidity of the filter screen the best in the whole space. The environment makes the filter an excellent breeding environment for microorganisms.

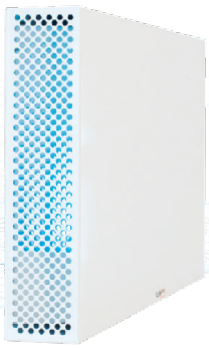
When the number of microorganisms is large enough, the filter screen is not a barrier. With the continuous use of the particle filter system, new microorganisms will be sprayed into the environment every time, causing secondary pollution, and the pollution level is much higher than the original state. Naturally reproducing the microbial flora.

We believe that only the active killing of microorganisms by an immune system similar to our body is a really good technical solution.

Looking at the market technology, UV-C is a man-made technical solution for reproducing sunlight. At present, we have the technology to restore ultraviolet rays to a high degree, and the wavelength of ultraviolet rays can be precisely controlled. In the past 100 years of experience, UV-C as an efficient and sustainable technical means, C is not an outdated technical means, but can continue to serve human beings and improve our living and working space environment and air environment.

New technologies do not represent efficient solutions.

The filter-free design of our units is a long-term mechanism. First, it greatly reduces the user's use cost and has no hidden costs. Secondly, in our system, the use of high-power and high-concentration UV matrix is enough to ensure "Kill in one single pass".



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