



Smart library is part of the Government's Smart City blueprint. Library is intelligent through self-renewing, flexible, functional, integrated, efficient, resilient, autonomous and sensitive (Smart Library and Smart Campus (scirp.org)). With our commitment in the development of a smart library system, Libra over the years, HKC has been awarded to design, supply, deliver, install, and implement all hardware and software for the RFID equipment and related systems and provide system support, maintenance, and other related services for the Smart Library System of the Leisure and Cultural Services Department.

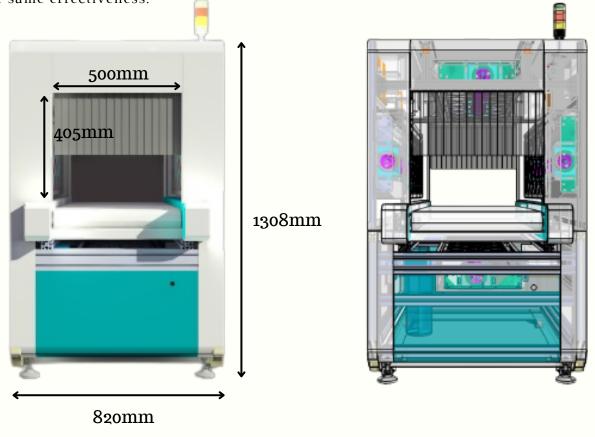
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Development of HKC Mini UVC Tunnel (Kill 99% virus and bacteria in 6 seconds)

Our Mini FAR-UVC Disinfection Tunnel has incorporated the latest in 222nm Ultraviolet-C Excimer Lamp technology which uses the formation of excited dimers (excimers). The excimers spontaneously transit from the excited state to the ground state result in the emission of UV-photons at the desired wavelength.

Any objects which pass through the tunnel at a speed of 0.2m/s carried by our custom made conveyor system. Inside the gantry, there are four modules of FAR-UVC 222nm lamp modules with a combined capacity of 4 x 600W output that enables the system to inactivate 99% of SARS-CoV-2 virus in 6 seconds on all surface of the items passing through the tunnel. Compared with other sterilizers using traditional 254nm UVC lights, which mainly requires 20-30 seconds to reach the same effectiveness.





4pcs of 222nm ultra violet lamps which can remotely kill 99% virus and bacteria in 6 seconds on pass through objects 222nm far UV-C is considered to be eye and skin safe for humans

Modular design and we provic professional on-site installatio service



Major benefits Benefit to the Food Industry

Recently, there are several cases in which coronavirus was found on the package of food transported in the cold chain from abroad. In a case at Qingdao harbor, two stevedores who live remotely from each other were infected at the same time; SARS-CoV-2 RNA was found positive on a package of imported seafood later.

Cases like this are warning us that cold chain food storage and transport could be a hotbed for the coronavirus or other pathogens.

When it comes to the food industry, Our mini UVC disinfection tunnel is adopted to eradicate microorganisms or viruses on food products' packaging. Base on our own research, *dosage of 25mJ/cm2 is emitted by 600W X4 222nm UVC lamps in 6 seconds proof the effectiveness to inactive the COVID-19 viruses.



Benefit to Airports, Bus Stations, Subway Stations



Public Transit companies are trying their best to fight with the present corona virus crises, by developing efficient cleaning methods, use of disinfection liquids, moping, water jet cleaning wiping etc. But even after some many useful methods there is a 50 percent chance that resistant virus and bacteria still remain on the transport surfaces, plus other newer pathogens enter the transport system through the luggage, plastic bags, cloth bags etc therefore it is a must that at subway stations, airports, bus stations all incoming bags should pass through UVC disinfection tunnel, so that in minutes of time bags can be disinfected.

Mini UVC Tunnel sterilizes all kinds of bags without any use of chemical or liquids , keeping the bags outermost layers intact without any damage. MAY, 2022 NEWSLETTER



Benefit to Residential Buildings

Present experience on the pandemic, we keep ourselves clean by constant sanitizing, washing our hands, take bath regularly at home, put clothes for washing & cleaning etc. But we tend to forget our personal belongings such as laptop bags etc for the only reason that whether chemical sanitizing would harm our costly bags or electronic stuff or we just dump them in the closet, making it vulnerable to other closet items.

Therefore we recommend residential buildings to have a Mini UVC Tunnel at their main lobby which can take care of any bags passing through. Bags of owners, bags of maids & drivers, courier boxes, food parcels etc can have a quick sanitization in dry way without harming the bag cloth or stuff inside.





Benefit to Schools

Presently schools are making their best efforts to keep the children away from school building or transport buses by online study zoom sessions. As we know that the online study process can be only a temporary way of study, plus sports and other routine activities are totally skipped. As and when the school reopens and the students start to resume there would be always a doubt in minds of the parents and children whether the school bags, water bottles are carrier of bacteria or covid 19 due to sick children coming in contact with the healthy ones or belongings of the healthy ones.

To solve these doubts we feel that every school must have a Mini UVC Tunnel at the school entrance so that bags and other student belongings are disinfected during entry and exit.



MAY, 2022 NEWSLETTER

Successful POC Project : Sterilizer Tunnel



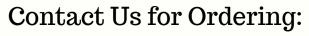
The 222nm ultraviolet light luggage disinfection tunnel developed by HKC is to protect passengers and staff from COVID-19 infection from arrival cargo and luggages.

Arrival baggages and cargos will pass through an enclosed speed of 0.7m/s sanitizing tunnel. The interior surface of the tunnel is equipped with 8pcs of 222nm ultra violet lamps which can remotely kill 99% virus and bacteria in 2 seconds on baggages and cargos surface that is considered to be eye and skin safe for humans. Currently, the facility is designated to disinfect all arrival baggages and cargos avoiding potential sources of exposure which could include surfaces touched or handled by a person with COVID-19.









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