



gako UV-C Air Sterilizer

Frequently Asked Questions

Frequently Asked Question - FAQ

What kind of installation is required?

There's no need for technical installation. The machine must be plugged in an electrical source (220v). Just turn on the Power switch, and the device is working.

When the device should be turned on?

The user must have a disinfection or cleaning plan in place. According to your that plan, the **gako UV-C Air Sterilizer** can operate continuously, in cycles, or overnight.

Which is the noise level of the device?

The noise level of the device is max 55db. This is similar to a common room dehumidifier.

Which is the applicable room space?

The applicable room space for one device is 80m³. That means approximately 30m² with 2.70m height, to reach 10 circulations per hour.

How long does it need to disinfect the room?

The device continuously disinfects the air passing through the UV-C lamps. The circulating air can reach 800m³/h, which means that the air in an 80m³ room passes through the device 10 times per hour. The time of disinfection can vary according to disinfection or cleaning plan, considering contamination load, human circulation and room size.

If i have a bigger room, how should the device be operated?

The **gako UV-C Air Sterilizer** is designed to perform a full cleanse of rooms with 80m³. The disinfection of bigger spaces must be evaluated individually, considering how bigger it is and what other parameters are in place. For example, if you have a 100m³ room, with low human circulation, a longer operation cycle or positioning the device in different corners of the room during disinfection might be enough to perform a full cleanse. Depending on the size of the room, human circulation or contamination load, more than one device should be in place.

Can the device be used in cleanroom area?

Yes.

Is disinfection guaranteed by using gako UV-C Air Sterilizer?

The literature background imposes that UV-C light in 254nm can effectively disinfect wherever it is applied. Additionally, the air sterilizer has been tested by the manufacturer and had killing rates of *Staphylococcus albus* in the air of a designed aerosol chamber of more than 99.90% in one hour. In another test, the device has been able to disinfect more then 90% of airborne bacteria in the air. According to the manufacturer, the test results meet the requirements of the 2002 edition of the Disinfection Technical Specifications of the Ministry of Health of China and will be available through a relevant report (Shandong Provincial Center for Disease Control and Prevention Inspection Report Acceptance). In addition, many literature have already proven the efficacy of the UVC lights for disinfection and inactivation of wide range of microorganisms such as virus, bacteria and protozoa.

Is it harmful for people, to be near the device while it is in function?

The UV-C lamps are located inside the device, so there is no direct eye or skin contact. The leakage of the UV radiation is $\leq 5\mu\text{m}/\text{cm}^2$ and that makes the device safe for use in areas with human circulation. Special coated lamps are used according to the manufacturer.



Are there any safety recommendations?

The machine should be in safe and dry place. The air ducts (inlets and outlet) should not be obstructed. Any unnecessary action to look inside the machine should be avoided. Don't split liquids inside the device.

What kind of service is required?

Electric equipment inside the device must be replaced every 5 years due to UV-C corrosion. UV-C lamps must be changed periodically.

What is the lifetime of the device?

Each UV-C lamp has more than 5000 hours of lifetime. They must be replaced after that period. The change must be done by an electrical specialized technician. The time of usage must be calculated according to disinfection plan adopted for the device.

Where can I find spare UV-C lamps for the device?

Spare lamps are available for customer's needs in Fagron Hellas. You can contact your local supplier for spare lamps.

How many UV-C lamps are included in the device?

There are 5 UVC lamps.

Does it have HEPA filters?

There's no need for the device to use HEPA filters. Device uses ozone-free UVC lamps for air disinfection.

Does it have a carbon filter?

A carbon filter is used to remove contaminants and impurities, so the manufacturer is not using them.

Does it have a prefilter?

The role of prefilters is to remove unwanted large particles from air. We are working on a second edition of the machine including a prefilter.

Which is the competition of gako UV-C Air Sterilizer?

Currently, the machine should not be compared with other home appliances that might be effective. The device should be evaluated according to its competitive advantages which are the following:

- Air circulation volume (800m³/h);
- 10 circulations per hour for every 80m³;
- 5 UV-C disinfecting lamps;
- Test reports available.

Is the machine CE certified?

The technical file of the company has been observed and audit has been completed successfully. 2006/42/EC Machinery Directive and 2014/35EU Low Voltage Directive have been taken as references for these process. The related standards are the following:

EN ISO 12100:2010; EN 60204-1:2010

The device is CE certified.