







## **WHAT ARE UV-C RAYS?**

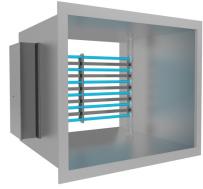
Light in a broad sense can be divided in visible, infrared and ultraviolet rays.

Ultra-violet rays (invisible) can be classified in:

- UV A (with tanning properties)
- UV B (with therapeutic properties)
- UV C (with germicidal properties)

The germicidal effects of the UV-C radiation destroy DNA of Bacteria, Viruses, Spores, Fungi, Moulds and Mites avoiding their growth and proliferation.

UVGI technology is a physic disinfection method with a great costs/benefits ratio, it's ecological, and, unlike chemicals, it works against every microorganisms without creating any resistance.



In-duct application

## **UV - RACK**disinfection system for HVAC

Applied inside ducts, or in the final section of AHU (Air Handling Unit) UV-RACK creates an UVGI barrier that inhibits the proliferation of viruses, bacteria, moulds and spores settling inside Air Conditioning Systems and very dangerous for health.

UV-RACK purifies homogeneously the airflow running through its powerful lamps, eliminating the microbial load and the spreading and distribution of dangerous and annoying pathogens inside buildings.

In AC systems an unpleasant biofilm covers usually all inner surfaces as the result of microorganisms combination and favourable conditions for their proliferation, such as temperature changes, high humidity and darkness. UV-RACK inhibits the creation of this biofilm increasing Indoor Air Quality and comfort.

More specifically, the use of UV-RACK eliminate important issues related to AC Systems and deadly illnesses (such as Legionella Pneumophila, Tuberculosis, Flu, etc.) but also "Sick Building Syndrome", "Monday Fever", Asthma and Allergies. UV-RACK allows also the control of Hygiene high standards in Food industry and fights against Healthcare Associated Infections (HAI) in hospitals.

UV-RACK application is important not only for IAQ and health, but a cleaner AC system is also more efficient from an economic point of view, with less operative and maintenance costs. As a matter of fact, using UVGI the need of filters replacement and clean of inner surfaces is less necessary than usual.

With UV-RACK you obtain a deep and continuous disinfection and cleaning of your AC system, without the use of expensive and polluting chemicals, , in few words with UV-RACK you have better comfort for people in the building, saving money.



Model with synoptic LED



## **TECHNICAL FEATURES**

- Selective UV-C Light Progress lamps (emission peak at 253.7 nm.) high efficiency, ozone free, pure quartz.
- Body in STAINLESS STEEL AISI 304
- All materials are tested for resistance to intense UV-C rays.
- Waterproof and dust-proof (IP 55).
- Powered by electronic ballasts specific for Light Progress UV-C rays lamps.
- Synoptic LED with Hour counter and Alarms.
- CE mark (LVD EMC MD RoHS).
- III Listed

## UV - RACKUVGI disinfection barrier





UV-RACK family includes several modules, of different sizes and wattages, all in stainless steel AISI 304. UV-C lamps are equispaced and positioned in a grid through which airflow in the duct is forced to move.

UV-RACK has been designed to adapt to different sizes and ducts sections, it is very compact, and its installation requires just a few simple steps: insert the lamps within the air duct through a cut and screw UV-RACK case on the external channel wall, and you're done!

Ballasts are inserted directly inside the case, IP55 insulated, and they are specific for Light Progress UV-C lamps, optimizing their performance and durability.

UV-RACK is made with high quality and extremely durable components, and works perfectly in difficult operating conditions (high humidity, low temperature, etc.).

