Compact Air Purifer: UV-FAN-XS

UV-FAN-XS

UV FAN-XS is compact yet stylish air purification device that can be ceiling or wall mounted. This unit comes in either a stainless steel or white epoxy coating finish.

A quiet internal fan draws air into the UV-FAN-XS internal chamber and over the UV-C lamps. The airborne contaminants are then exposed to a high dosage of UVC light of 253.7 nanometres wavelength that renders it inactive. This process creates a UV-C barrier that inhibits the proliferation of viruses, bacteria, moulds and spores, which commonly recirculate within the room environment.

Validation

Germicidal Ultraviolet irradiation has a proven, strong germicidal effect against micro-organisms (moulds, bacteria, and viruses).

WHAT ARE UV-C RAYS?

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Ultraviolet Germicidal Irradiation is known since the 60's as a good physical method to control growth and distribution of microbial organisms, pathogens, spores, moulds, etc.

Light in a broad sense can be divided into the following, visible, infra-red 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)

In controlled testing environments, UVC usage has shown reductions of over 99.9% on live bacteria strains such as Bacillus, Coli, Clostridium, Legionella, Vibrio, Salmonella, Pseudomonas, Staphylococcus etc.

The concept and the effectiveness of it has been well documented by ASHRAE and others.

Traditional air purification methods

With air purification, filtration has been the standard approach. This may remove the larger dust particles but will be inadequate against these pathogens given that the pathogens tend to be smaller than $0.3\mu m$ in size. These pathogens will simply keep recirculating within the room until it lands on a surface or gets inhaled by a person.

Using Ultraviolet UVC light for air disinfection allows for a constant high level of disinfection that reduces the pathogen load within the room.

Operation of UV-FAN-XS

The UV-FAN-XS is designed to be either ceiling or wall mounted. As all the UVC light is contained within the housing, the UV-FAN-XS can operate whilst occupants are in the room.

It is also designed to operate 24/7 if necessary.

No Ozone

The use of UVC light in the 253.7 nanometres wavelength means there is no ozone produced. This is particularly important as ozone is hazardous to humans.

Applications

Thanks to its small size and stylish Italian design UV-FAN-XS is a versatile air purifier that can be used in many applications such as:

- · Residences.
- · Aged Care.
- Hospitals, ICUs, maternity wards, surgical units.
- · Medical and dental clinics.
- · Offices, restaurants, and hospitality venues.
- Schools.
- · Laboratories.
- Inside elevators, train carriages.









Key Benefits

PHYSICAL ACTION AND ENVIRONMENTAL PROTECTION.

- Treatment by UV-C rays is purely physical without the use of any chemicals.
- No residual effects, therefore, no long-term contamination.
- Results are consistent as microorganisms do not develop resistant to UV light.

TOTAL SAFETY

- Safety micro switch in place to switch off the lamps if the cover is opened and lamp exposed.
- The UV-C light is totally contained within the housing. This means the unit can be operated whilst people are present in the room.

EASE OF USE

• Simple to operate and designed to run 24/7 to achieve a continuous disinfection.

PRACTICABILITY AND SAVINGS.

- A high level of disinfection can be achieved within a short period of time.
- The maintenance is minimal with low costs of both energy consumption and maintenance.
- Unit can be ceiling or wall mounted.

UV-FAN-XS	
Average Lamp Lifetime (hour)*	≤ 18,000
UV Lamps Power (W)	60W
Total Consumption (W)	240V 70W
Dimensions	690 X 152 X h162 mm
Air Flow Rate	70 m3/h
C.M.T. REDUCTION (total microbial load)	>99.9%
Spare Parts	
Replacement Lamp	GHP-60WH

- * continuous operation
- Selective UV-C lamp (at 253.7 nm.) with high efficiency and high UVC power, ozone-free for use in the presence of people 24/7.
- Internal germicidal chamber made of ultra-pure mirror bright special aluminium with high UV-C 253.7nm reflectivity.
- Available in either epoxy coated white or stainless steel 304 finish.
- Special photocatalytic titanium dioxide TiOx® technology (Registered Trademark of Light Progress Srl) for the elimination of organic and inorganic pollutants VOCs and NOXs.
- Porthole for visual inspection of the lamps, transparent to visible light but preventing the passage of UV-C rays.
- 24/7 Treatment continuity: use in the presence of people. ISO 15858 standard for safety of devices with UV-C lamps.
- Complies with ISO 15714 standard that certifies the UV-C dose emitted and required to perform disinfection.
- Meets the noise standards of Directive 2006/42/EC < 36db at 1m.
- Long cable with plug (2m).
- Safety microswitch: that switches off the lamps if the cover is opened and lamp exposed, to perform maintenance in safety.
- CE marking (LVD 73/23 EMC 89/336 MD 93/42), ISO 60335-1-2.
- Power supply with specific electronic ballast for UV-C lamps.
- All materials used are tested to withstand intense UV-C radiation.
- Suitable for installation in class 1 protected areas.

Why choose LAF Technologies?

LAF Technologies (Laftech) is an Australian owned and operated company that has been in the forefront of contamination control since 1987. Laftech has now teamed up with Light Progress of Italy to bring into Australia a high quality, tested and proven solution. We offer the widest product range of UVGI Devices on the market with renown Italian quality.

Benefits to the client:

- Widest range of UV products providing the most appropriate solution.
- Products validated through University testing.
- · Local team to assist in presales and aftersales.
- · Service and Spares support.



