# Light is protecting
# AirZing™ PRO

The special **AirZing™ PRO** luminaire is powered by OSRAM germicidal fluorescent lamp (HNS 36W or HNS 30W), which emits shortwave ultraviolet UV-C radiation with a wavelength of 253,7 nm. This radiation is used to disinfect air, water and surfaces and is then fully absorbed by oxygen and ozone in the atmosphere. It effectively destroys bacteria and viruses.

*Application in hospitals: Hospital and Office building in Wuhan Pulmonary Hospital*

Designed in GERMANY

AirZing™ PRO 5040

**AirZing™ PRO** is equipped with a delay starting (switched on after 30 seconds when the serving staff is out of reach radiation range) and the motion sensor. This means that the luminaire switches off safely in case of undesired movement of persons in the irradiated area.

| Efficient | Precise | Premium | Powerful | Smart |
|---|---|---|---|---|
| **99,9%** Sterilization efficiency | **253,7 nm** UV wave length | **Ozone Free** | **360°** Coverage Area | **IR Sensor** |

## AREA OF APPLICATIONS:

### Air purification

Ultraviolet (UV) purification is a very effective method to clean the air of biological pollutants such as bacteria, viruses and fungal spores. UV germicidal lamps can be installed in ventilation ducts to clean the air passing through them. UV air purification is more economical and efficient than other air filtration and cleaning methods.

- **Hospitals**
- **Doctors' practices**
- **Clean rooms**
- **Offices with or without AC systems**
- Cars
- **Storage rooms**
- Food processing
- **Rooms with frequent public access**
- Animal stalls

### Surface cleaning

For packaging pharmaceuticals and food, in aseptic zones in hospitals and for surface cleaning of equipment and instruments objects are exposed directly to UV radiation.

- **Hospitals and other aseptic zones**
- **Health care**
- Food and pharmaceutical industry

*Beijing XTS hospital*

**Light is OSRAM**

OSRAM

ILS INTELLIGENT LED SOLUTIONS

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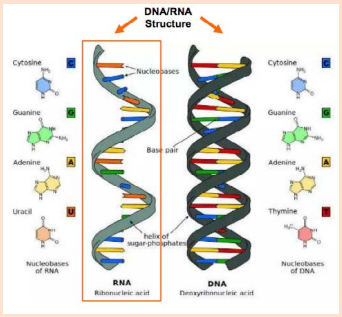
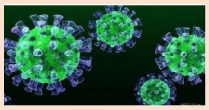



*The cell nucleus of micro-organisms(bacteria and virus) contains thymine, a chemical element of the DNA / RNA. This element absorbs UV-C at a specific wavelength of 253.7 nm and changes to such an extent (formation of thymine dimers) that the cell is no longer capable of multiplying and surviving.*

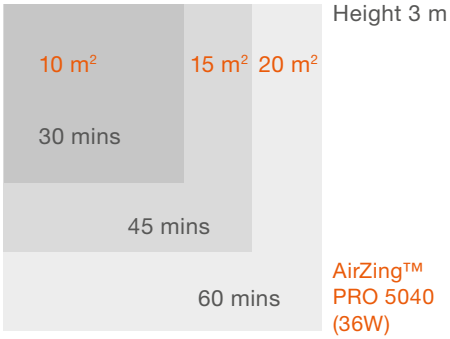
- *UV-C (253.7nm) penetrates the cell wall of the micro-organism*
- *The high energy photons of the UV-C are absorbed by the cell proteins and DNA / RNA*
- *UV-C damages the protein structure causing metabolic disruption*
- *DNA/RNA is chemically altered so organisms can no longer replicate*
- *Organisms are unable to metabolize and replicate, CAN'T cause disease or spoilage*



## How to use AirZing™

AirZingTM can be ceiling mounted or wall mounted, the installation height of general space is between 2.5m-4m. The coverage area of one set of fixture is 15-20m² (36W)

- <10m², 30 mins is recommended;
- 10 - 15m², 45 mins is recommended;
- 15 - 20m², 60 mins is recommended;
- >20m², multiple fixtures are recommended.




## UV-C impacts on Human

### Exposure to UV can cause injury to the eyes and skin

Overexposure to UV- C can result in transient conjunctival irritation (photoconjunctivitis) and skin irritation (erythema), which disappear within a 24-48 hour period without lasting biological damage (CIE, 2002).

*Source: CIE 155:2003 ULTRAVIOLET AIR DISINFECTION 8.1*

**For example:**

- 36W AirZing is installated at **2.5m**
- UV-C irradiation is **0.22w/m²**
- UV Index is **8.8** = 0.22 x 40 – very high

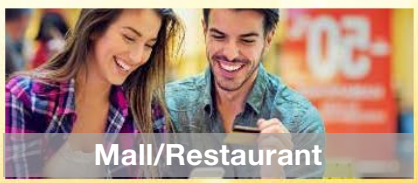
It is therefore necessary to prevent unwanted radiation of persons, animals and plants!

## AirZing™ PRO

| Product Reference | Product Number | V | Hz | W | A input | A output | Power Factor | THD [%] | UV-C output [W] | Initial UV-C irradiance W/m² @1M | Lamp life time [h] | Warranty [years] | L/W/H [mm] | g | Operation Temperature [°C] | Storage Temperature [°C] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AirZing™ PRO 5030 | 4062172156622 | 220-240 | 50/60 | 34 | 0.16 | 360 | > 0,9 | < 20 | 11-12 | 1.2 | 9,000 | 3 | 1058/54/78 | 1.3 | -10~40 | -20~60 |
| AirZing™ PRO 5040 | 4062172152655 | 220-240 | 50/60 | 40 | 0.19 | 430 | > 0,9 | < 20 | 14-15 | 1.4 | 9,000 | 3 | 1363/54/78 | 1.5 | -10~40 | -20~60 |

* 253.7 nm

## AirZing™ can be used in ...



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