# AIR Disinfection: Upper Air UVC Germicidal Treatment

### **UV-FLOW**

UV-FLOW is a high output UV-C ultraviolet germicidal device with unidirectional flow.

The UV-FLOW is used to disrupt the transmission of airborne contamination within an indoor environment. It works by treating the upper air layers with a constant high dosage of UVC light of 253.7 nanometres wavelength and does not require a high air change rate within the room.

#### **Validation**

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

In controlled testing environments, UVC usage has shown a resultant negligible presence of microbial residue in the target room zone. With less airborne contamination in circulation, the possibility that these live micro-organisms may be transmitted or settle on high touch surfaces is greatly reduced.

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

#### **Traditional cleaning/filtration methods**

Traditional cleaning methods and facility air filtration alone are often not sufficient to ensure high levels of hygiene. UVC technology is a simple and cost-effective solution that can enhance facility hygiene, comfort and workplace sanitation regimes. The best part is there are no chemicals involved, providing a healthier environment for all.

#### **Operation of UV-FLOW**

UV-FLOW, air purification device can be safely operated 24/7 without contraindications. Germicidal rays are emitted at high level, across room zone ceiling spaces and as air circulates within the room an overall reduction in contaminated air is achieved. It is generally mounted from a minimum height of 2.1m from the ground. It is non-intrusive and safety to the occupants in the room is assured.

#### 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**

UV-FLOW is a versatile Upper Air Germicidal Device that is cost effective, simple to install and operate within just about any indoor environment. Applications include:

- Aged Care Facilities
- · Hospitals, ICUs, Maternity wards, Surgical units
- Medical & Dental clinics, Pharmacies
- Offices, Shopping centres
- Restaurants and Hospitality venues
- Educational facilities, Laboratories
- Abattoirs, food processing centres
- Gyms, hairdressing salons, lunchrooms, corridors

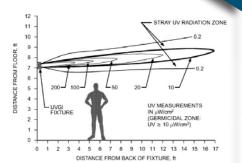
## **WHAT ARE UV-C RAYS?**

Light in a broad sense can be divided. 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)

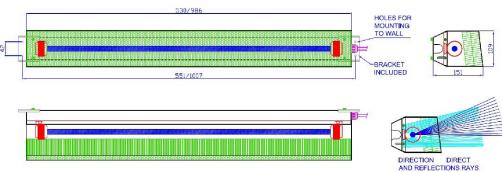
UV-C technology is a physic disinfection method with an optimal cost/benefit ratio, it's ecological and unlike chemicals it works against every micro organism without creating any resistance. No nasty chemicals.











UV	E40H-C-NX	E75H-C-NX
LAMP LIFETIME (hour)*	≤ 18,000	≤ 18,000
POWER (W)	40	75
DIMENSIONS LxSxH (mm)	530 x 109 x 151	986 x 109 x 151
WEIGHT (Kg)	3	5
TREATED AIR (m³) (horizontal flow)	20 to 25	35 to 50
TREATED SURFACE (m²) (horizontal flow)	6 to 8	12 to 15
SPARE PART		
UV LAMP Code	n°1 CHS-40WH	n°1 CHS-90WH
SUPPLY CHANNEL Code (complete)	n°1 CpE-40H	n°1 CpE-75H

- Highly efficient selective UV-C lamp (at 253.7 nm), pure quartz.
- Stainless steel AISI 304 body.
- All used materials are tested to resist to intense UV-C radiation
- Specific electronic ballast for UV-C rays lamps.
- Protected against dust and water (IP55).
- Pure bright mirror aluminum reflector.
- CE trademark (LVD 73/23 EMC 89/336 MD 93/42).
- Complies with the noise standards of Directive 2006/42/EC
- Values measured according to UNI EN ISO 3746
- Non-detectable and non-transmissible vibration values
- Suitable for class 1 installations protected areas





Disinfection of air upper layers

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