

VENTILATING AIR DISINFECTION UNIT UV-CAD

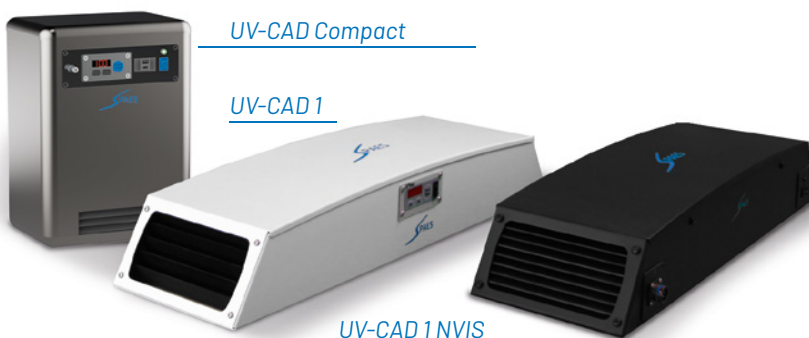


Description

The UV-CAD (ultraviolet circulation air disinfection) is a cleaning system that sterilizes the air with the proven UVC cleaning method. This has been successfully used for many years in different areas like the medicine and the food industry. By using the UV-CAD, the room air is purified several times per hour destroying the viruses and bacteria i.e. **SARS-CoV-2**. The UV-CAD was developed especially for aircraft and has been tested according to aviation standards. The dangerous aerosols in the air are greatly reduced with the UVC technology, which significantly reduces the transmission of pathogens via the air in the aircraft.

Benefits

- Quick and easy disinfection of the air through proven UVC process
- Variable air volume settings
- Proven process from the medical and food industry
- No health risks from the UVC cleaning process for passengers
- Light weight and small dimensions
- Variable power supply according to customer requirements
- Easy cleaning of surfaces through powder coating
- Individual, quick and easy installation on wall, floor or ceiling
- Aviation certification as Minor Change
- NVIS certification available
- Effective use **against COVID-19**



UV-CAD Compact

UV-CAD 1

UV-CAD 1 NVIS



Variants and Options

Properties	UV-CAD 1	UV-CAD Compact
Dimensions:	685 x 150 x 115 mm	262 x 357 x 192 mm
Weight:	5 kg	5 – 6 kg
Power Consumption:	50 Watt	60 Watt
Air Volume:	0 – 90 m ³ /h (adjustable)	0 – 100 m ³ /h (adjustable)
Supply Voltage:	14 VDC, 28 VDC 114 VAC, 230 VAC	
Operating Temperature:	- 20°C to + 60° C	
Optional:	HEPA Filter (H13/14)	
Testing:	DO-160/ED-14 (Vibration, Temperature, Altitude)	
Aviation Approval:	Minor Change (NVIS Approval)	

Further variants and options are available on customer request.

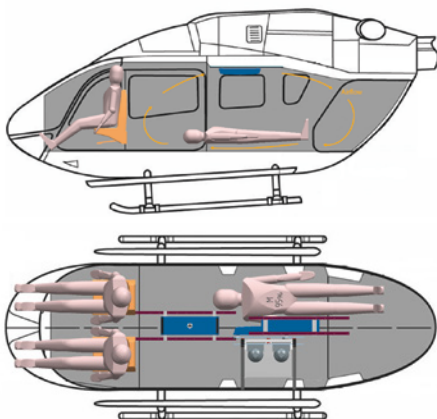
The Effect of UVC

In contrast to visible light, UV radiation is more short-waved and more energetic. UV radiation is divided into UVA, UVB and UVC. UVC has a wavelength of 100 – 300 nm. With a wavelength of 250 – 280 nm, the genetic information contained in the virus can be destroyed. This means that the information for reproduction is lost, the virus is no longer virulent (contagious) and the infection cycle is broken. Depending on the virus, a certain radiation power is required, which means the energy emitted by the radiator per time unit. For influenza viruses, a power of 2,1 mJ/cm² is required. With **CORONA VIRUSES**, there are no exact values yet. Most experts assume a power of 4 mJ/cm² according to the current state of knowledge.

Virus Type*	(mJ/cm ²)
PRRS Virus	1,8
Influenza A Virus	2,1
SARS-CoV-2	4
Herpes Virus	4,3
Hepatitis A Virus	6,7
Rota Virus SA11	7,5

*Exemplary values from the literature without guarantee and claim to completeness.

Examples of Placement in a Helicopter



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