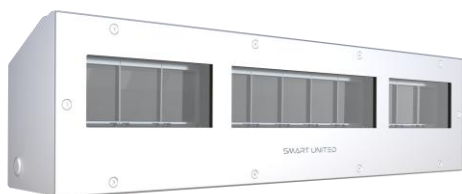
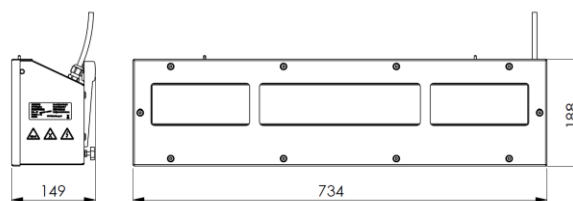


## UV Smart Ceiling Endurance IP69 – Technical data

Professional air disinfection in indoor spaces with high humidity and corrosive conditions – safe in the upper airspace. By using modern, highly focused LED technology, the UV-C is effective deep into the room without emitting uncontrolled radiation into the room.



- Hygienic air in harsh environments
- Dust- and water-protected system (IP69)
- Extremely fast disinfection
- Effective throughout the entire room
- Use of state-of-the-art LED technology
- Effectiveness confirmed by independent institutes



### Type

Designation	UV Smart Ceiling Endurance IP69
Article no.	1101031112

### Mechanical data

Housing material	Stainless steel 1.4404
Color	Brushed stainless steel
Measurements (L x W x H)	734 x 149 x 188 mm
Weight	11 kg
Mounting type	Wall mounting
Minimum installation height	2.2 m / 2.4 m (bottom edge)*

### Optical data

Radiation source	UV-C-LED
Wavelength	280 nm (+/- 5 nm)
Irradiance Ø	2,5 mW / cm <sup>2</sup>
Photobiological safety	Risk class 3
Active optical area	Open, 660 mm

\* Minimum recommended mounting height 2.20 m (lower edge of the unit): for room width up to 4 m.  
 Minimum recommended mounting height 2.40 m (lower edge of the unit): for room width up to 7 m.  
 A higher installation of the unit allows for greater room depth.

### Electrical data

Connected load	33 W
Supply voltage	220 – 240 V / 50 Hz
Control unit	mains voltage switch (On/Off)
Connection	Connection cable, 2 m, 3 x 1,5 mm <sup>2</sup>
Protection class	I
Maintenance interval	10,000 operating hours

### Environmental conditions

Ingress prot.	IP 69
Ambient temperature	-10 to +35°C
Recommended room depth	1-7 m

### Labeling and certificates

License plate	CE
Applied standards	EN ISO 12100 DIN EN 60335-1 DIN EN 62471-6 DIN EN ISO 15858 EMV2014/30/EU DIN EN IEC 55014 DIN EN 62471-1 EU 2023/826
Proof of effectiveness	LMU, Fraunhofer IBP

## UV Smart Ceiling Endurance IP69 – Technical data

### Safety instructions

The disinfection device works with open UV-C radiation and is a device in photobiological risk class 3. It works in the upper part of the room. UV-C radiation can potentially be harmful to the skin or eyes. Therefore, direct exposure to UV radiation must be avoided. UV-C radiation is not visible. Objects in the beam path can also be damaged and reflect radiation into the room in an uncontrolled manner. Therefore, UV-C devices may only be sold by trained partners and installed and maintained in accordance with strict safety rules. After installation, no changes may be made to the system or the radiation area.

As an additional protection against unwanted exposure of persons, a lidar sensor is integrated which monitors the area below the radiation level and switches off the UV-C radiation when persons or objects are in the radiation area.

### Areas of application

- Stables in livestock farming
- Food production
- Pharmaceutical production
- Catering/hospitality industry
- Washrooms and toilets

### Proof of effectiveness

The system was validated by LMU staff. It was able to eliminate 99.8% of coronavirus particles in a single pass through the beam path. Depending on the design and installation, the air is circulated once every 30 seconds, allowing the system to take effect quickly in the room and effectively minimize the risk of infection and severe illness.

In another elaborate experiment, a meeting simulation was conducted at the Fraunhofer Institute for Building Physics in Valley in 2023 to demonstrate the effect in the room. Even in a realistic scenario with continuous addition of viruses, hardly any viruses were detectable in the room. The system works extremely quickly and effectively protects against infection through high equivalent room air exchange rates. Corresponding test reports are available on request.