

Light is protecting AirZing™ UV-C light purifier

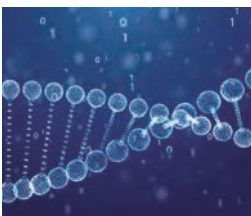
- Generates 253.7nm UV light, which is ideal for highly effective sterilization and purification
- Proven technology destroying up to 99.9% of the microorganisms
- Specially designed OSRAM ballasts to optimize performance of OSRAM HNS UV-C lamps
- Equipped with IR sensor to shut system down when people are detected entering the UV workspace
- 30-second-delayed start to enhance operational safety
- Ozone-free emissions
- 360 degrees coverage area

Light is OSRAM

OSRAM

UV-C: A proven technology for sterilization and purification

Globalization and increased travel brings more attention to global public health. Many scientific research institutions and pharmaceutical enterprises are working hard on providing solutions for tackling such challenges. UV-C radiation generated by high-energy UV-C lamps moves at a wavelength range between 200 – 280nm, which is very versatile and can be used for disinfecting water, destroying harmful micro-organisms in other liquids, on surfaces, on food products and in air. With UV-C technology it is possible to destroy more than 99.99% of all pathogens within seconds, without adding chemicals, without harmful side effects and an inexpensive solution that is highly efficient and reliable.



UV-C can destroy most of microorganisms

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

- UV-C (253.7nm) penetrates the cell wall of the microorganisms
- 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
- Because microorganisms are now unable to metabolize or replicate, the UV-C light has effectively and safely sanitized the UV-C workspace area.

Safety warning

- This product emits UV-C light during operation. Always avoid direct or reflected UV-C light exposure to eyes or skins of humans and animals.
- Keep humans and animals out of the operation space when this product is in service.
- This product is intended for indoor air purification purposes only and may not be used for any general lighting application.
- The product is not suitable for cleaning, disinfection or sterilization of medical devices.

For further details please observe the user manual.



AirZing™ UV-C light purifier

OSRAM HNS® UV lamp

- Made in Europe
- Premium quality
- 253.7nm UV-C light output
- Ozone-free emissions

Integrated Ballast

- Specially designed OSRAM ballasts to optimize performance of OSRAM HNS UV-C lamps

IR Sensor – Safety Kit

- 30s delayed start
- IR sensor switches off the lighting system immediately when it detects people coming into the UV workspace
- Coverage area between 80-150m², depending on installation height



Metal Screw

- UV-C resistant coating

Lamp Holder

- Easy for lamp installation

Special Plastic Housing

- UV-C resistant coating

Application guidelines

This linear fixture can be ceiling or wall mounted with an installation height measured from the floor between 2.5 and 4m. Cycle time to run fixture if the workspace is:

PRO 5040

The coverage area of one set of fixture is 15-20m²

- <10m², 30 mins is recommended
- 10 - 15m², 45 mins is recommended
- 15 - 20m², 60 mins is recommended

PRO 5030

The coverage area of one set of fixture is 12-15m²

- <8m², 30 mins is recommended
- 8 - 12m², 45 mins is recommended
- 12 - 15m², 60 mins is recommended

If the space is larger than above mentioned area, we suggest to use multiple fixtures, The layout can be adjusted according to interior design.

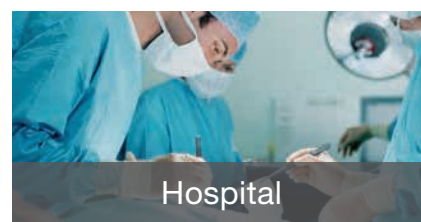
UV-C technology can be used in ...



Event/Backstage



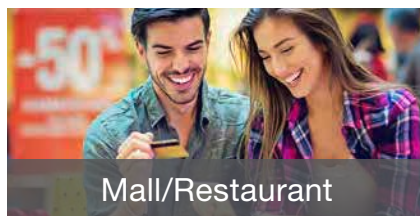
Office/School



Hospital



Gym/Fitness Center



Mall/Restaurant



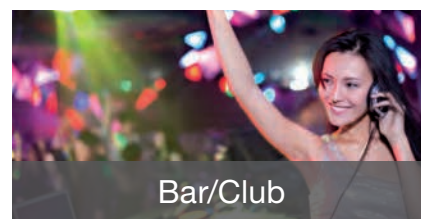
Cinema



Factory/Plant



Bus/Train Station



Bar/Club

AirZing™ PRO



Product Name	AirZing™ PRO 5030	AirZing™ PRO 5040
Input Voltage	220 V~240 V, 50/60 Hz	220 V~240 V, 50/60 Hz
Input Current	0.16 A	0.19 A
Output Current	360 mA	430 mA
Power Consumption	34 W	40 W
lamp Wattage	30 W	36 W
Power Factor	> 0.9	> 0.9
THD	< 20%	< 20%
UV-C Output (253.7nm)	11-12 W	14-15 W
Initial UV-C Irradiance	>1.2 W/m ² @1m	1.4 W/m ² @1m
UV-C Irradiance @ 9000 h	>0.96 W/m ² @1m	1.10 W/m ² @1m
Lamp Lifetime	9,000 h	9,000 h
Relative Humidity	≤80%	≤80%
Dimension	L1058mm/W54mm/H78mm	L1363mm/W54mm/H78mm
Weight	1.3 kg (net)/1.9 kg(package)	1.5 kg (net)/2.2 kg(package)
Operational Temperature	-10 °C ~ 40 °C	-10 °C ~ 40 °C
Storage Temperature	-20 °C ~ 60 °C	-20 °C ~ 60 °C

Efficient 99.9% Sterilization efficiency	Precise 253.7nm UV Wavelength	Premium 0 Ozone-free Emission	Powerful 360° Coverage Area	Smart IR Sensor
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More of PURITEC® HNS® UV-C lamps

The core of AirZing™ are OSRAM PURITEC® HNS® germicidal lamps which are powerful components that may be used in a wide range of applications, such as:

Water purification and cleansing

- Private households
- Water dispensers
- Community water works
- Mobile stations (camping, outdoor activities)
- Swimming pools
- Ultra-pure water systems
- Ponds and aquariums
- Fish farms
- Food processing factories
- Sewage systems
- Designed to perform best within the fixtures of all major manufacturers

Air purification

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

Surface sterilization

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



Find out more information about AirZing™ and our UV-C lamps

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OSRAM

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, including coronavirus (COVID-19).



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



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

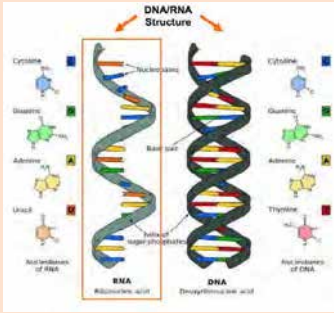
Surface cleaning

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

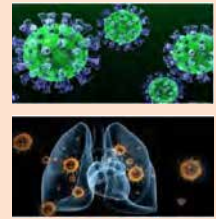


Beijing XTS hospital



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.

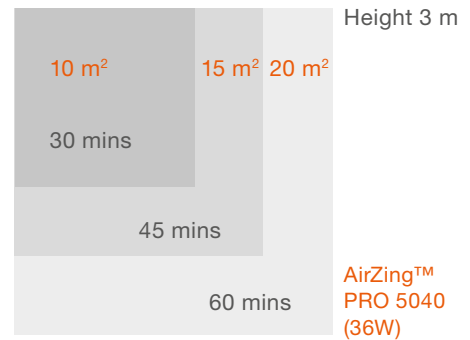
- UV-C (253.7nm) penetrates the cell wall of the micro-organism
- The high energy photons of the UV-C are absorbed by the cell proteins and DNA / RNA
- UV-C damages the protein structure causing metabolic disruption
- DNA/RNA is chemically altered so organisms can no longer replicate
- Organisms are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



How to use AirZing™

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

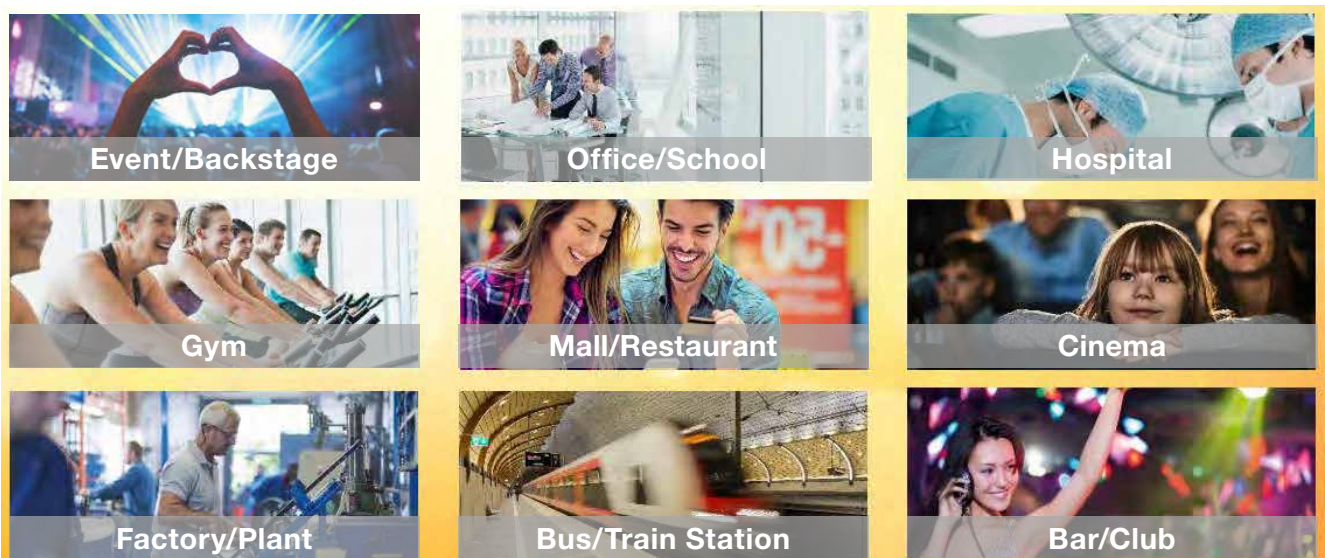
It is therefore necessary to prevent unwanted radiation of persons, animals and plants!

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/m ² @1m]	Lamp life time [h]	Warranty [years]	L/W/H [mm]	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 ...



SAFETY WARNING

- This product is intended for indoor air purification and surface purification (non-medical devices) purposes only.
- The product is not suitable for cleaning, disinfection or sterilization of medical devices.
- The product shall not be equipped with general lighting lamps, nor shall the UV-C lamp be installed in general lighting luminaires.
- This product is meant for professional use only. Installation must be carried out by a qualified professional. By purchasing this product, you declare that you are purchasing this for professional use and are/will engage qualified persons to properly install, operate and maintain this product.
- This product shall not be energized during installation, maintenance or replacement of the lamp.
- It is strictly prohibited to use the product in places with inflammable and explosive materials
- This product emits UV-C light during operation. Always avoid direct or reflected UV-C light exposure to humans and animals.
- UV-C radiation produced by this product during operation may cause serious damage to eyes and skin after relatively short exposure times. No humans or animals are allowed to stay nearby. See following table for information about irradiance E_s and exposure time t_{exp} depending on the distance d :

d [m]	0.2	1	2	3
E_s [W/m ²]	4.0	0.54	0.17	0.079
t_{exp} [s]	7	50	180	370

- Ensure that humans and animals are out of the operation space when this product is in service! Start purification process only if the room has been cleared. Following is an unexhaustive list of recommendations to achieve this goal. More than one option may be chosen.
 - Lock the room during operation;
 - Warning sign, warning lamp or warning sound may be used;
 - Product should be switched on by trained, delegated people only;
 - Switch should be outside the room;
 - Switch should not be easily confused with normal light switches;
 - Switch may be mounted not less than 2m from the ground;
 - Switch may be equipped with a locking device which can only be operated by dedicated operators;
 - A door switch may be used that switches off the product if any door is opened;
 - Operation of the product can be identified by a slight bluish glow of the lamp.
Training of personnel not to enter the room respectively leave the room immediately while the product is on. This is a second level measure if other methods like locking the room or entrance warning failed.
- The product is equipped with an IR sensor which switches off the lamp immediately if unexpected human beings are detected inside the UV-working space. Do not rely on the sensor alone. It is only a second level safety measure in case of misuse or violation of the safety precautions above.
- The sensitivity of the sensor decreases at room temperatures above 35°C.
- Do not cover IR sensor or block its view in any conditions.

NOTICES

- This product must be installed properly, please refer to installation instructions to prevent damage to the light source or other components.
- The product needs to be installed at certain height and space within specified temperature. IR sensor might be activated in case of unusual air convections.
- Insufficient UV-C dose may not achieve the intended purification effect.
- The UV intensity of this product is determined according to the service time. When the accumulative service time of the UV-C lamp exceeds its effective lifetime, please replace the lamp in time.
- UV-C can age non-metallic materials such as plastics, rubbers etc. Shield all non-metallic materials exposed under UV-C light when using the product.
- Never expose plants to UV-C light.
- When using this product, keep the germicidal space clean and dry, close the doors and windows, and avoid outdoor air circulation. Do not use wind speed regulator.
- This product is ozone free.
- The original design and testing of this product are based on OSRAM HNS T8 30W double-end UV lamp tube. It may perform in different ways if with any other light sources.
- OSRAM HNS tube contains mercury; please follow local regulations when disposing of used light source.
- A 5-second break is required before switching on again right after switching off, due to 3 to 5-second systematic resetting.
- Once the product is switched off by IR sensor, it will not switch on automatically, it needs to be turned on manually.

Please refer to the below QR code for product warranty policy. The OSRAM warranty policy would only apply to products that has been installed, used, repaired and maintained properly according to this manual. Failure to observe this requirement shall void any warranty, stated or implied.

REMARK



This product emits UV-C light during operation



Avoid direct or reflected UV-C light exposure to eyes or skins of humans and animals



The installation and maintenance need to be handled by professional technicians



This product is not suitable for any general lighting application



RoHS certificate



OSRAM HNS® UV-C lamp contains mercury; follow local regulations when disposing of used lighting source

SICHERHEITSWARNUNG

- Dieses Produkt ist ausschließlich für die Luftreinigung von Innenräumen und die Reinigung von Oberflächen (von nicht-medizinischen Geräten) bestimmt.
- Das Produkt eignet sich nicht zur Reinigung, Desinfektion oder Sterilisation von medizinischen Geräten.
- In dem Produkt dürfen keine Leuchtmittel für allgemeine Beleuchtungszwecke verwendet werden. Das UV-C-Leuchtmittel darf auch nicht in Leuchten für allgemeine Beleuchtungszwecke installiert werden.
- Dieses Produkt ist nur für die gewerbliche Verwendung bestimmt. Die Installation muss von einer fachkundigen Person durchgeführt werden. Durch den Kauf dieses Produktes erklären Sie sich damit einverstanden, dieses nur für den gewerblichen Gebrauch zu erwerben und es ausschließlich von einer fachkundigen Person installieren, betreiben und warten zu lassen.
- Dieses Produkt darf während der Installation, Wartung und Auswechslung des Leuchtmittels nicht eingeschaltet sein.
- Es ist strengstens verboten, das Produkt an Orten mit brennbaren und explosiven Materialien zu verwenden.
- Dieses Produkt gibt während des Betriebs UV-C-Licht ab. Vermeiden Sie bei Mensch und Tier stets direkte oder indirekte UV-C-Strahlung.
- Die von diesem Produkt während des Betriebs ausgehende UV-C-Strahlung kann bereits nach relativ kurzer Expositionszeit schwere Schäden an Augen und Haut verursachen. Menschen und Tiere dürfen sich nicht in der Nähe aufhalten. In der folgenden Tabelle finden Sie Informationen zur Bestrahlungsstärke E_s und Expositionsdauer t_{exp} in Abhängigkeit von der Entfernung d :

d [m]	0.2	1	2	3
E_s [W/m ²]	4.0	0.54	0.17	0.079
t_{exp} [s]	7	50	180	370

- Stellen Sie sicher, dass sich Menschen und Tiere nicht im Raum aufhalten, während das Produkt in Betrieb ist! Starten Sie den Reinigungsprozess erst, wenn sich niemand mehr im Raum aufhält. Nachfolgend finden Sie eine unvollständige Auflistung an Maßnahmen, wie Sie dies erreichen können. Es kann mehr als eine Maßnahme ergriffen werden.
 - Schließen Sie den Raum während des Betriebs ab;
 - Verwenden Sie ein Warnschild, eine Warnleuchte oder einen Warnton;
 - Das Produkt sollte nur durch eingewiesenes, zuständiges Fachpersonal eingeschaltet werden;
 - Der Schalter sollte sich außerhalb des Raums befinden;
 - Der Schalter sollte nicht mit normalen Lichtschaltern verwechselt werden können;
 - Der Schalter darf nicht unterhalb von 2 Metern über dem Boden angebracht werden;
 - Der Schalter sollte mit einer Sperrvorrichtung ausgestattet sein, die nur von einem zuständigen Mitarbeiter bedient werden kann;
 - Es sollte ein Türschalter verwendet werden, der das Produkt ausschaltet, sobald eine Tür geöffnet wird;
 - Ein leicht bläuliches Leuchten des Leuchtmittels weist darauf hin, dass sich das Produkt in Betrieb befindet. Das Personal sollte geschult werden, sich nicht im Raum aufzuhalten bzw. den Raum sofort zu verlassen, wenn das Produkt in Betrieb ist. Dies ist eine Sekundärmaßnahme für den Fall, dass andere Maßnahmen wie das Abschießen des Raums oder die Eintrittswarnung nicht ergriffen haben.
- Das Produkt ist mit einem IR-Sensor ausgestattet, der die Lampe sofort abschaltet, falls er unerwartet Menschen innerhalb des UV-Betriebsbereichs identifiziert. Verlassen Sie sich jedoch nicht alleine auf den Sensor. Er stellt nur eine sekundäre Sicherheitsmaßnahme dar, falls es zu einer Fehlbedienung oder einer Missachtung der oben aufgeführten Sicherheitsvorkehrungen kommt.
- Die Empfindlichkeit des Sensors nimmt bei Raumtemperaturen von über 35° C ab.
- Decken Sie den IR-Sensor nicht ab und stellen Sie sicher, dass sein Sichtbereich unter keinen Umständen blockiert wird.

HINWEISE

- Dieses Produkt muss fachgerecht installiert werden; halten Sie sich bitte an die Installationsanweisungen, um eine Beschädigung der Lichtquelle oder anderer Komponenten zu verhindern.
- Das Produkt muss auf einer bestimmten Höhe und Fläche sowie innerhalb eines vorgeschriebenen Temperaturbereichs installiert werden. Der IR-Sensor könnte durch ungewöhnliche Luftkonvektionen aktiviert werden.
- Eine unzureichende UV-C-Dosis führt möglicherweise nicht zum beabsichtigten Reinigungseffekt.
- Die UV-Intensität dieses Produkts hängt von der Betriebszeit ab. Ersetzen Sie das UV-C-Leuchtmittel rechtzeitig, sobald seine akkumulierte Betriebszeit die zulässige Lebensdauer überschritten hat.
- UV-C kann nichtmetallische Materialien wie Kunststoffe, Gummi usw. altern lassen. Schützen Sie alle nichtmetallischen Materialien, die bei der Verwendung des Produkts UV-C-Licht ausgesetzt sind.
- Setzen Sie Pflanzen niemals UV-C-Licht aus.
- Halten Sie bei der Verwendung dieses Produkts den zu desinfizierenden Raum sauber und trocken, schließen Sie die Türen und Fenster und vermeiden Sie, dass Luft von außen eindringt. Verwenden Sie keinen Lüfter.
- Dieses Produkt ist ozonfrei.
- Das ursprüngliche Design und die Tests dieses Produkts beruhen auf der Doppelend-UV-Lampenröhre OSRAM HNS T8 30W. Die Funktionsweise kann sich durch die Verwendung anderer Lichtquellen verändern.
- Die OSRAM HNS-Röhre enthält Quecksilber; bitte befolgen Sie bei der Entsorgung gebrauchter Leuchtmittel die örtlichen Vorschriften.
- Warten Sie nach dem Ausschalten 5 Sekunden, bevor Sie das Gerät wieder einschalten, da das Zurücksetzen des Systems 3 bis 5 Sekunden dauert.
- Sobald das Produkt durch den IR-Sensor ausgeschaltet wurde, schaltet es sich nicht automatisch wieder ein; es muss manuell eingeschaltet werden.
- Bitte verwenden Sie den untenstehenden QR-Code für die Garantiebestimmungen der Produkte. Die Garantiebestimmungen von OSRAM gelten nur für Produkte, die gemäß dieser Gebrauchsanweisung ordnungsgemäß installiert, verwendet, repariert und gewartet wurden. Die Verletzung dieser Vorschrift führt zum Erlöschen jeglicher ausdrücklichen oder implizierten Garantie.

ANMERKUNG



Dieses Produkt gibt während des Betriebs UV-C-Licht ab



Vermeiden Sie bei Mensch und Tier direkte oder indirekte UV-C-Einstrahlung auf Haut und Augen



Die Installation und Wartung darf nur von einer professionellen Fachkraft durchgeführt werden



Dieses Produkt ist nicht für allgemeine Beleuchtungszwecke geeignet



RoHS-Zertifizierung



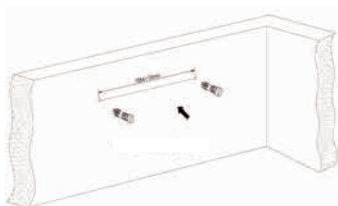
Die OSRAM HNS® UV-C-Lampe enthält Quecksilber; befolgen Sie bei der Entsorgung gebrauchter Leuchtmittel die örtlichen Vorschriften

INSTALLATION INSTRUCTIONS

Loose screws to remove the cover plate



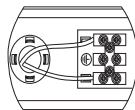
Relocate the lamp holders from the casing and fix them into grooves at both ends of the casing



Drill holes at the predefined mounting positions, and embed plastic plugs for M4 screws (prepared by customers)



Mount the cover plate on the casing and fix the cover plate with screws



Connect the power cable in terminals



Plug the grounding socket on the cover plate in the casing



Mount the cover plate on the casing and fix the cover plate with fastening screws



Mount the ultraviolet source into the lamp holder in the direction shown in the figure, rotate 90° and fix it



More information



English



中文

OSRAM