

PHILIPS

UV-C disinfection chamber

4-log disinfection in minutes

An excellent combination of unique design and effective surface disinfection, for professional use



Absolute confidence, in a world of uncertainty

We are living in unprecedented times. In the face of a global pandemic, the world is demanding a proven and effective way to protect people from harmful micro-organisms.

Bacteria and viruses can cause a wide range of common infections. They can live in air, on surfaces and on objects, even after normal cleaning routines. That means any contamination left behind in the air we breathe and on the surfaces we touch can have a profound effect on our day-to-day health and wellbeing.

UV-C disinfection

UV-C lighting disinfects radiated air and surfaces which contain bacteria and viruses and helps to reduce them from spreading further. All micro-organisms tested to date respond to UV-C lighting¹

Philips UV-C disinfection luminaires

With 35 years of experience in UV-C lighting, we have built up strong application expertise. This has led us to develop a new range of UV-C disinfection luminaires and chambers, ideal for use in offices, retail outlets, factories; in hospitality areas, schools and public washrooms and even on modes of transport such as aircraft, buses and trains.

¹ Fluence (UV Dose) Required to Achieve Incremental Log Inactivation of Bacteria, Protozoa, Viruses and Algae Revised, updated and expanded by Adel Haji Malayeri, Madjid Mohseni, Bill Cairns and James R. Bolton. With earlier contributions by Gabriel Chevretils (2006) and Eric Caron (2006) With peer review by Benoit Barbeau, Harold Wright (1999) and Karl G. Linden.





Shining a light on UV technology

UV-C radiation is a known disinfectant for air, surfaces and objects that can help mitigate the risk of acquiring an infection.

What is UV technology?

Ultra-Violet (UV) light is invisible to the human eye and is divided into UV-A, UV-B and UV-C.

UV-C is found within 100–280 nm range. The germicidal action is maximized at 265 nm. Philips Low pressure UV-C lamps have their main emission at 254 nm where the action on DNA is 85% of the peak value. As a result, our germicidal lamps are extremely effective in breaking

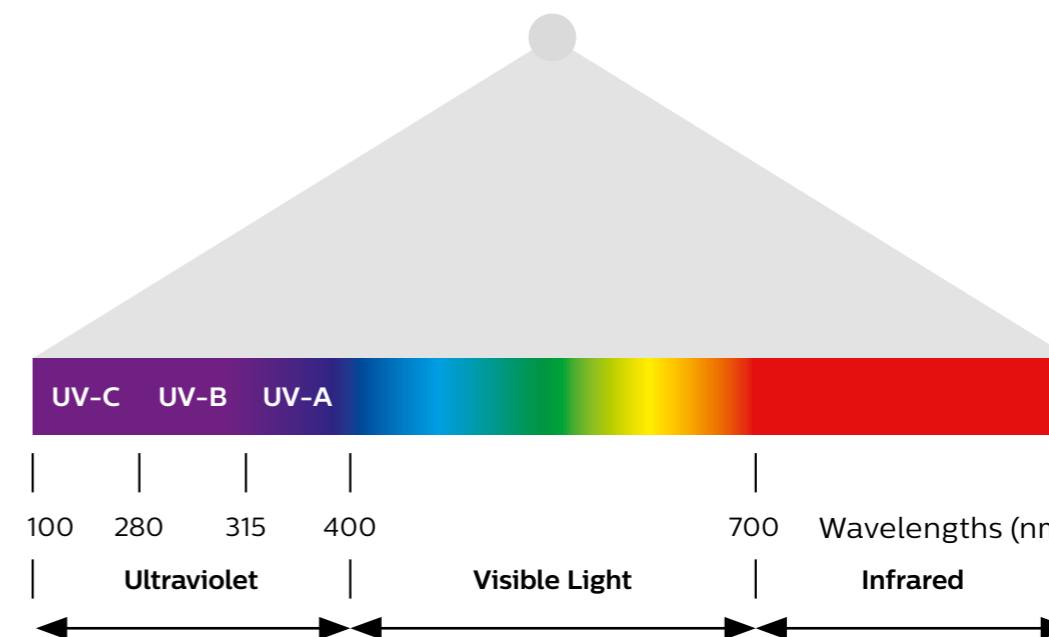
down the DNA and RNA of micro-organisms. This means that they cannot replicate and cause disease².

The technology has primarily been used in areas where there is a risk of microbiological contamination, and has been used safely and effectively for more than 40 years³.

“

Our test results show that above a specific dose of UV-C radiation, viruses were completely inactivated: in a matter of seconds we could no longer detect any virus.”

Dr. Anthony Griffiths, Associate Professor of Microbiology at Boston University School of Medicine



² A comparison of pulsed and continuous ultraviolet light sources for the decontamination of surfaces. McDonald K.F., Curry R.D., Clevenger T.E., Unklesbay K., Eisenstark A., Golden J., Morgan R.D. IEEE Trans. Plasma Sci. 2000;28:1581–1587. doi: 10.1109/27.901237.

³ EPA Report, "Building Retrofits for Increased Protection Against Airborne Chemical and Biological Releases" Pg. 56.

Professional air, surfaces and objects disinfection

Everywhere it's needed

Philips UV-C disinfection luminaires can be used to disinfect air, surfaces and objects in a wide range of applications. These include hospitality areas, schools and public washrooms. In offices, retail outlets and factories. Even on modes of transport such as aircraft, buses and trains.

For more information on the benefits of Philips UV-C disinfection luminaires in your chosen application, please contact your local Signify representative.

The power to protect in real-world applications



Retail

Disinfecting shopping carts, shelves and counters



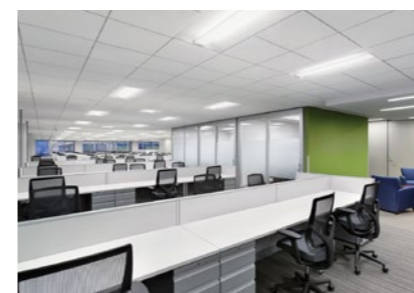
Hair and beauty salons

Disinfect client rooms, floor, mirror, chair, counter surfaces and other sensitive areas



Schools

Disinfect classroom walls, floors, desks and surfaces



Offices

Disinfect work rooms, meeting spaces and corridors



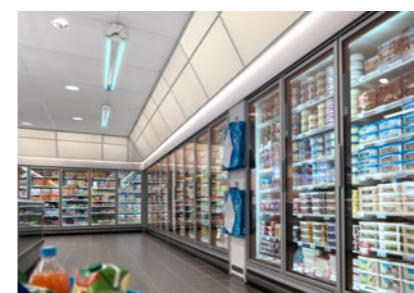
Banking

Disinfect counters, cash machines and work surfaces



Hospitality

Disinfect guest rooms, reception areas and health club facilities



Food outlets

Disinfect preparation surfaces and equipment



Washrooms

Disinfect vanity units, basins and mirrors



Transport

Disinfect interior and exterior surfaces of different vehicles and passengers' waiting spaces

Philips UV-C disinfection luminaires

The power to protect

We have more than 35 years of experience and expertise in developing and manufacturing UV-C products. Our Philips UV-C disinfection luminaires portfolio with UV-C lamps deliver on all the promises of UV technology.



Designed for efficacy

All viruses and bacteria tested to date effectively respond to UV-C disinfection.¹



A lifetime of reliability

Made from durable, UV-C resistant materials, our UV-C solutions are designed to provide reliable disinfection over the useful long lifetime of the lamp and luminaire. This is supported by our stringent manufacturing and testing processes to guarantee the highest quality.



Environmentally friendly

For added peace of mind, all our UV-C solutions are also environmentally friendly. We guarantee that no ozone gases will be emitted during or after use.



Safety in mind

Philips UV-C products are delivered with a range of safeguards and instructions. They come with physically integrated equipment or time safeguards, such as presence or motion detection sensors or timers, or otherwise they are to be installed with containment safeguards to enable correct operation. In addition, we provide extensive training and certification programs to help ensure correct installation, usage and maintenance of our UV-C products.



A wide range of applications

The Philips UV-C disinfection luminaires and components are innovative, high-quality solutions that are suitable for a wide range of applications. This includes upper air systems that disinfect passing air, as well as cabinets that are used to disinfect specific objects.

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Philips UV-C disinfection chamber

An effective disinfection chamber with UV-C for fast and environment friendly disinfection of versatile objects. Its application areas are all professional indoor applications for bacteria & viruses disinfection.

Benefits:

- In laboratory testing, Signify's UV-C light sources inactivated 99% of SARS-CoV-2 virus on a surface with an exposure time of 6 seconds¹.

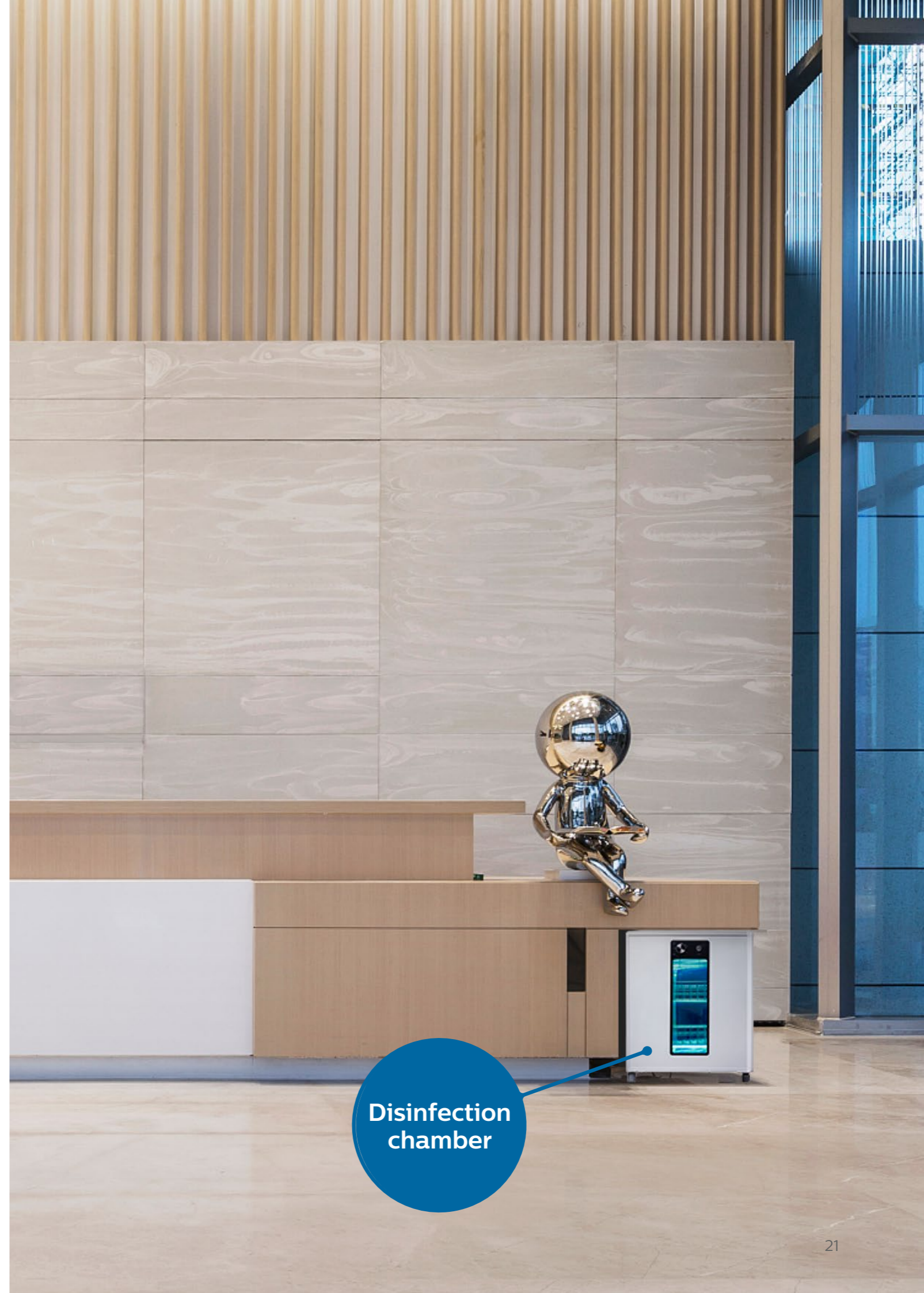
Features:

- Heavy-duty stainless-steel chamber
- Auto power off when the chamber is open ensuring no UV-C exposure to user
- Prefixed step timer for disinfection, easy to use, one touch operation
- Available in 3 sizes:
 - Small: height of 510 mm, 77 liters
 - Medium: height of 660 mm, 110 liters
 - Large: height of 1700 mm, 323 liters²



¹ Tests performed in a lab setting by Boston University using a Signify UV-C light source revealed that a dose of 5mJ/cm² reduced 99% of SARS-CoV-2, the virus causing COVID-19, in just 6 seconds. Based on the data, it was determined that a dose of 22mJ/cm² will result in a reduction of 99.9999% in 25 seconds. Research variables available upon request.

² To be confirmed.



Disinfection chamber

Features



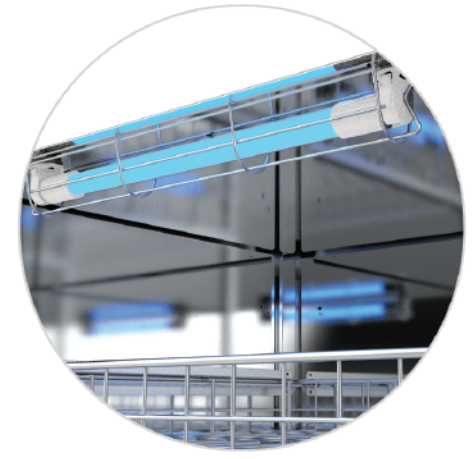
Prefixed time selector for duration of disinfection. Easy to use, one touch operation.



Optimized window size to maximize UV-C dosage. Blue glow from glass window is a visual indicator for the disinfection cycle in progress.



Two trays for accommodating multiple objects, upper tray is removable to fit bigger objects



Lamp safety cover, to ensure safety of lamp while accessing trays

Safety



Disinfection starts only when the door is firmly closed. In case of lamp failure, it can be easily detected through the window when lamps are working #



During the disinfection cycle, if the door is accidentally opened by someone the UV-C lamps will automatically turn off, to prevent UV-C exposure.

Applications

- Pharmacies
- Offices
- Banks
- Hotel
- Schools
- Universities
- Retail
- Hypermarket, supermarkets
- Food courts
- Restaurants
- Industrial kitchens etc
- Fitness centers
- Industries
- Barber shop | Spa
- E- commerce pick up points
- Courier services

Disinfection Time- Medium Size

Objects	Object size	Recommended disinfection time	Remark	Placement
2 Big objects	400mm*350mm*120mm	10 mins*	Minimum 50mm distance to lamp	
1 Small object	150mm*150mm*150mm	3 mins*	Minimum 50mm distance to lamp	
1 Big object	400mm*350mm*320mm	10 mins*	Minimum 50mm distance to lamp	
Multiple small objects	150mm*135mm*120mm	10 mins*	Minimum 50mm (object to objects)	

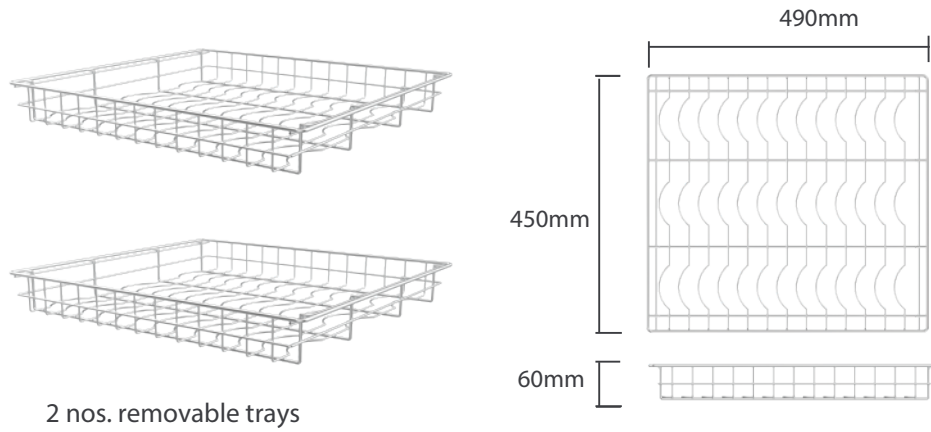
Material Safety

Degradation can be negligible for inorganic materials such as glass, glass fibers, and metal are not affected by UV-C exposure¹. For all organic material degradation refer to ASHRAE research project RP-1509 report. The device cannot be used to disinfect the surfaces of medical devices (such as medical devices in a room, surgical masks and/or surgical respirators)²; The device cannot be used for disinfection of human skin.

¹ Based on study from Kauffman 2011, 2012; Kauffman and Wolf 2012, 2013

Specifications

Tray details



Chamber dimensions



Technical specifications- medium -UVCC 200

S. No	Parameters	Medium -UVCC 200
1	Disinfection effect	4-log disinfection (mJ/cm ²)
2	Input voltage	220-240V , 50/60 Hz
3	Total power	80W
4	UV-C lamp wavelength	253.7nm
5	Time setting	Time set up level 3 min/5 min/10min/20min
6	Ozone free	Yes
7	Safety start	Yes (power ON when door is closed)
8	Door open protection	Yes (power OFF when door is open)
9	Operating temp	+10°C to +40°C
10	Dimensions	660 x 560 x 590 (in mm)
11	Front door	Tempered Glass (Small glass window)
12	Housing material	Stainless steel/ tempered glass
13	Warranty	1 year