



UV-C Light Disinfection Technology

Advanced
Disinfection
Shopping Trolleys

Non-contact
surface disinfection

Confidence

Speed & Precision



EcoLight
CLEAN TECHNOLOGY

 led-uk



HYPER TUBE UV
UV-C disinfection platform

SAFE SHOPPING FOR ALL OF US



The outbreak of COVID-19 in early 2020 created a new way of thinking about biological safety. Perception of new reality by customers and employees also strongly affect shopping industry. We all wonder what level of security is associated with the usual shopping. Our UV-C disinfection products help secure shopping trolleys of all kind.

Extremely large and precisely calculated dose of UV-C light deactivates the ability of pathogens to perform their important functions. Viruses, bacteria and fungi on the surface of trolleys are destroyed within minutes.

FAST DISINFECTION

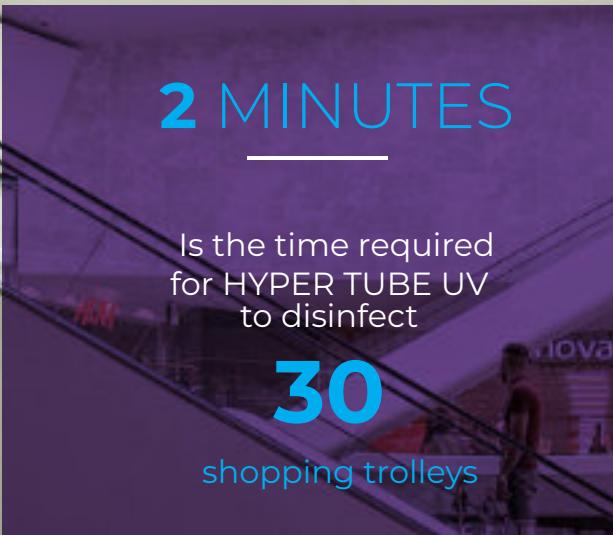
ELIMINATION OF 99.9% PATHOGENS

2 MINUTES

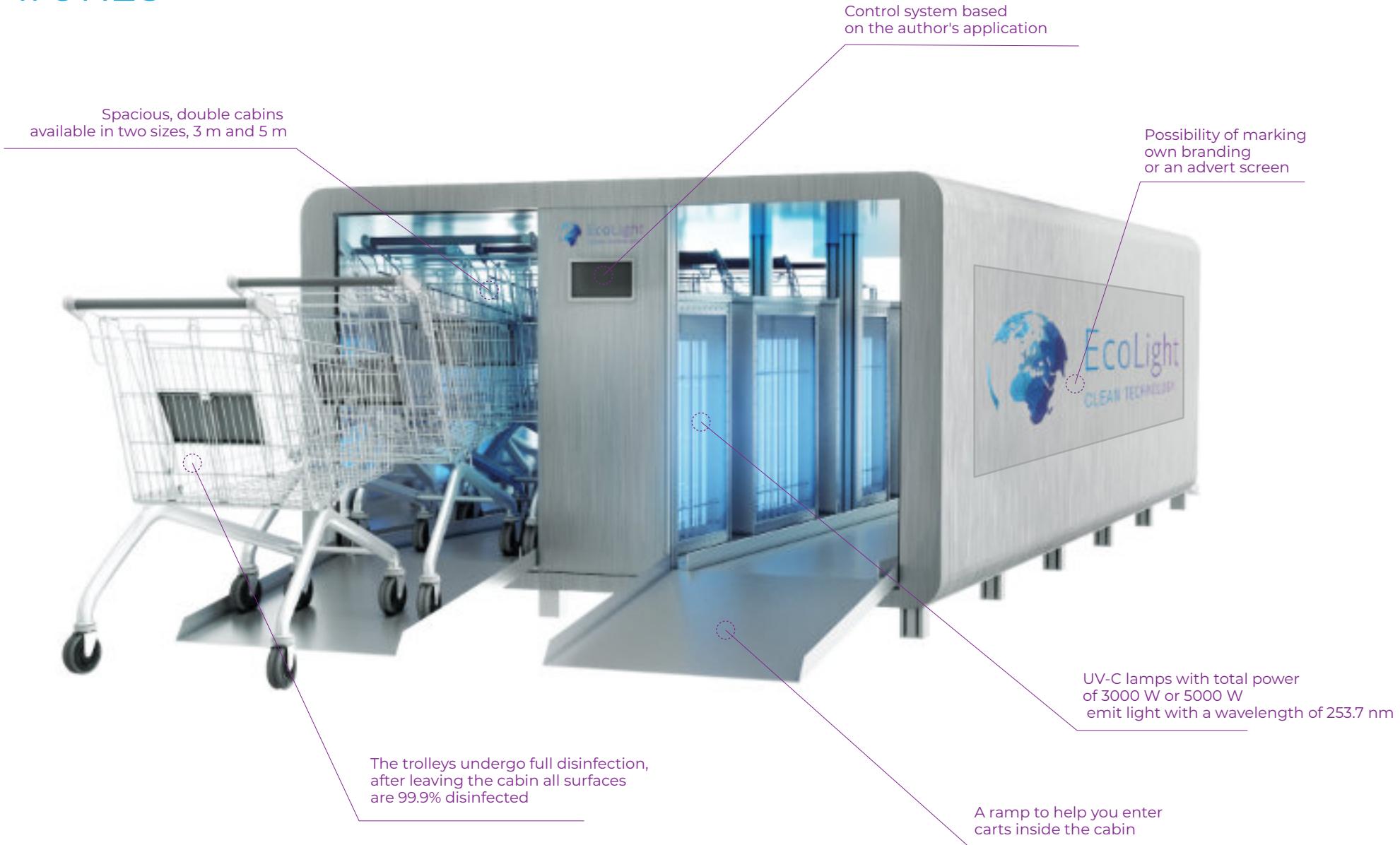
Is the time required
for HYPER TUBE UV
to disinfect

30

shopping trolleys



HYPERTUBE FEATURES



WHY HYPER TUBE



NEW WAY SHOPPING TROLLEY MANAGEMENT



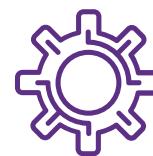
FULL PROTECTION

Clinical studies prove that HYPER TUBE UV removes 99.9% of microorganisms, including viruses, bacteria and fungi from surface of the trolleys within just 2 min.



SAVINGS

Speed of operation and a short decontamination cycle mean that HYPER TUBE UV requires a small consumption of energy, reducing the impact on the environment.



RELIABILITY

The HYPER TUBE UV is designed to serve reliably for years. The construction is made of extremely durable materials, and UV-C radiators have a lifetime of 30.000 h. In addition, the units are equipped with motion and presence sensors guaranteeing the deactivation of the UV source when a movement is detected within the sensor field.



SECURITY

HYPER TUBE UV does not emit ozone or other hazardous substances, making it completely ecological. The device has a neutral impact on the environment.

By using HYPER TUBE UV you have the opportunity to define and introduce a new quality in the management of shopping trolleys. As studies show, only 50% of all rolling stock is in continuous circulation. 1/2 of shopping trolleys are used very rarely or not at all.

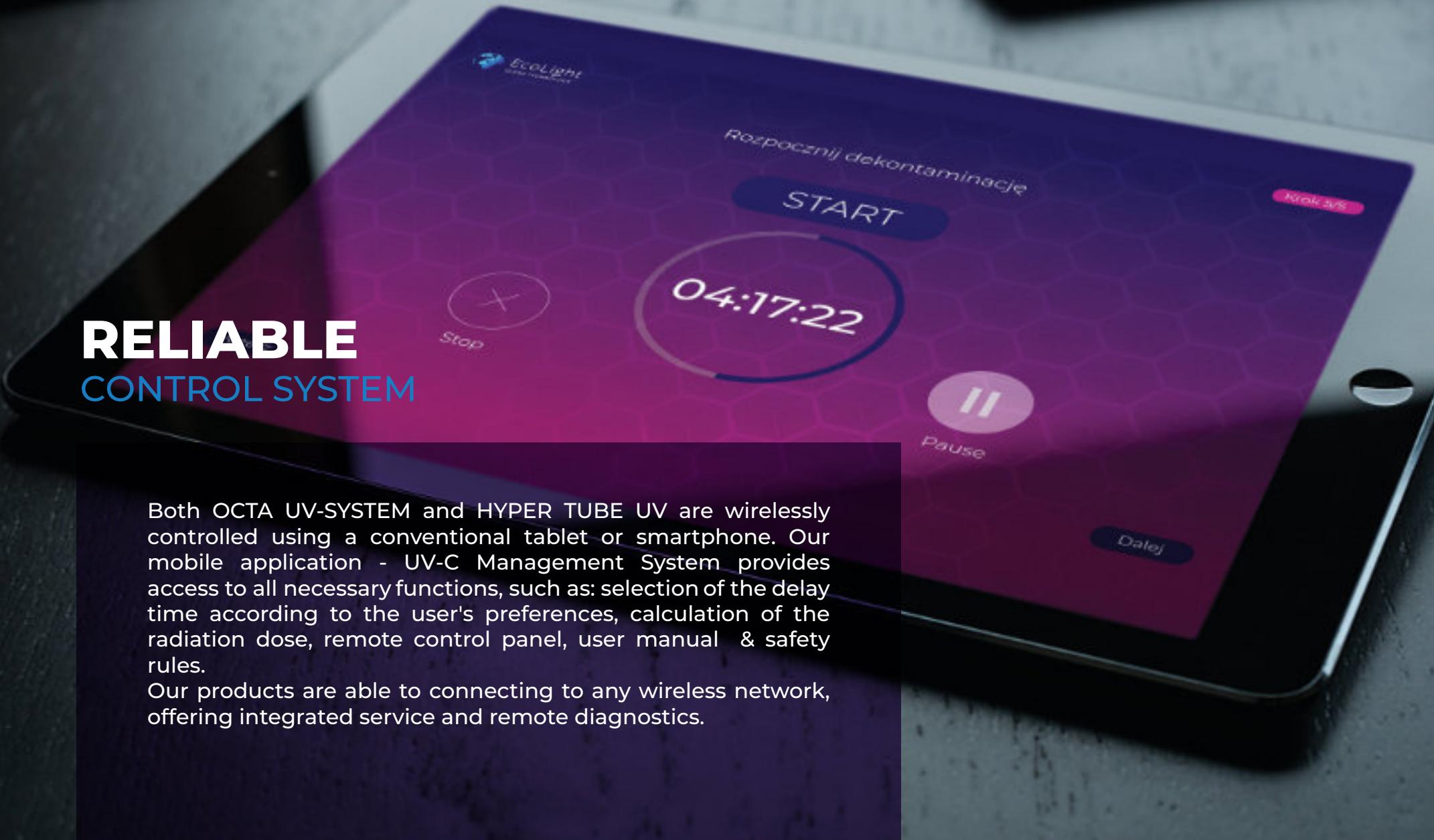
Constant contact with the same trolleys exposes customers to increased contact with pathogens.

Thanks to HYPER TUBE UV, your customers will appreciate the possibility of using the entire fleet of clean, disinfected shopping trolleys.

RELIABLE CONTROL SYSTEM

Both OCTA UV-SYSTEM and HYPER TUBE UV are wirelessly controlled using a conventional tablet or smartphone. Our mobile application - UV-C Management System provides access to all necessary functions, such as: selection of the delay time according to the user's preferences, calculation of the radiation dose, remote control panel, user manual & safety rules.

Our products are able to connecting to any wireless network, offering integrated service and remote diagnostics.



TECHNICAL PARAMETERS

HYPER TUBE UV

HYPER TUBE UV is equipped with very efficient UV lamps with a total power of 3000 W or 5000 W. It emits UV-C radiation with a wavelength of 253.7 nm.

It is intended for disinfection of luggage carts and shopping trolleys.

Prevents and limits the spread of infectious microorganisms on all surfaces.

Includes an infrared sensor, an auto-off function, managed by the application using the control tablet.

Safe and reliable.

Electrical Data

Power	3000 W / 5000 W
Voltage	220 V
Lamp Type	Electromagnetic induction
Power Supply	Osram
Expected Life Span	30.000 h

Optical Data

UV Wavelength	253,7 nm
Disinfection Efficiency	99,99%*
Light Distribution	360°
Ozone Emission	0 - Ozone Free
Exposure Time	2 min.*

* The number of luminaires to be used and effective radiation depends on room requirements. The calculations include spatial dimensions and data on microbiological factors and physical parameters.

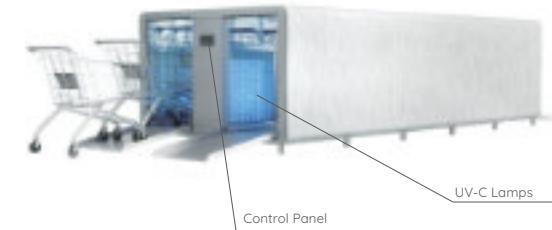
** All luminaire data are typical values. Individual parameters of the system may change as technical progress is expected.

Mechanical Data

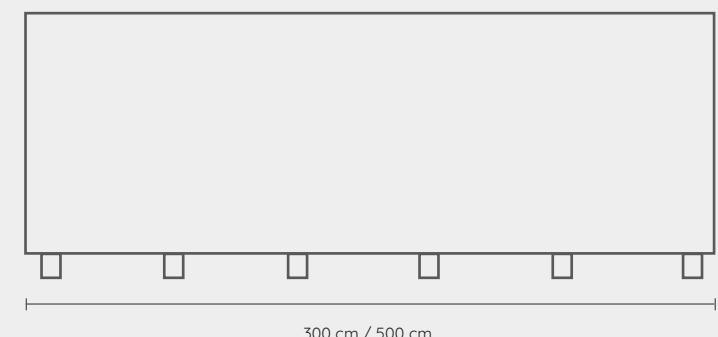
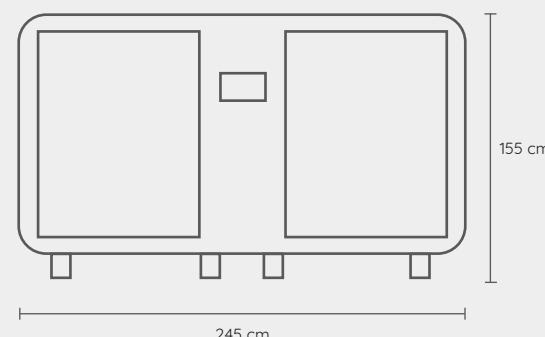
Length	300 cm / 500 cm
Height	155 cm
Width	245 cm
Housing Colour	Silver
Security	Motion sensor, Auto switch off, App
Warranty	2 years
Extras	Dosimetric Cards

Application

Shopping centres, airports, bus and train stations



Dimensions



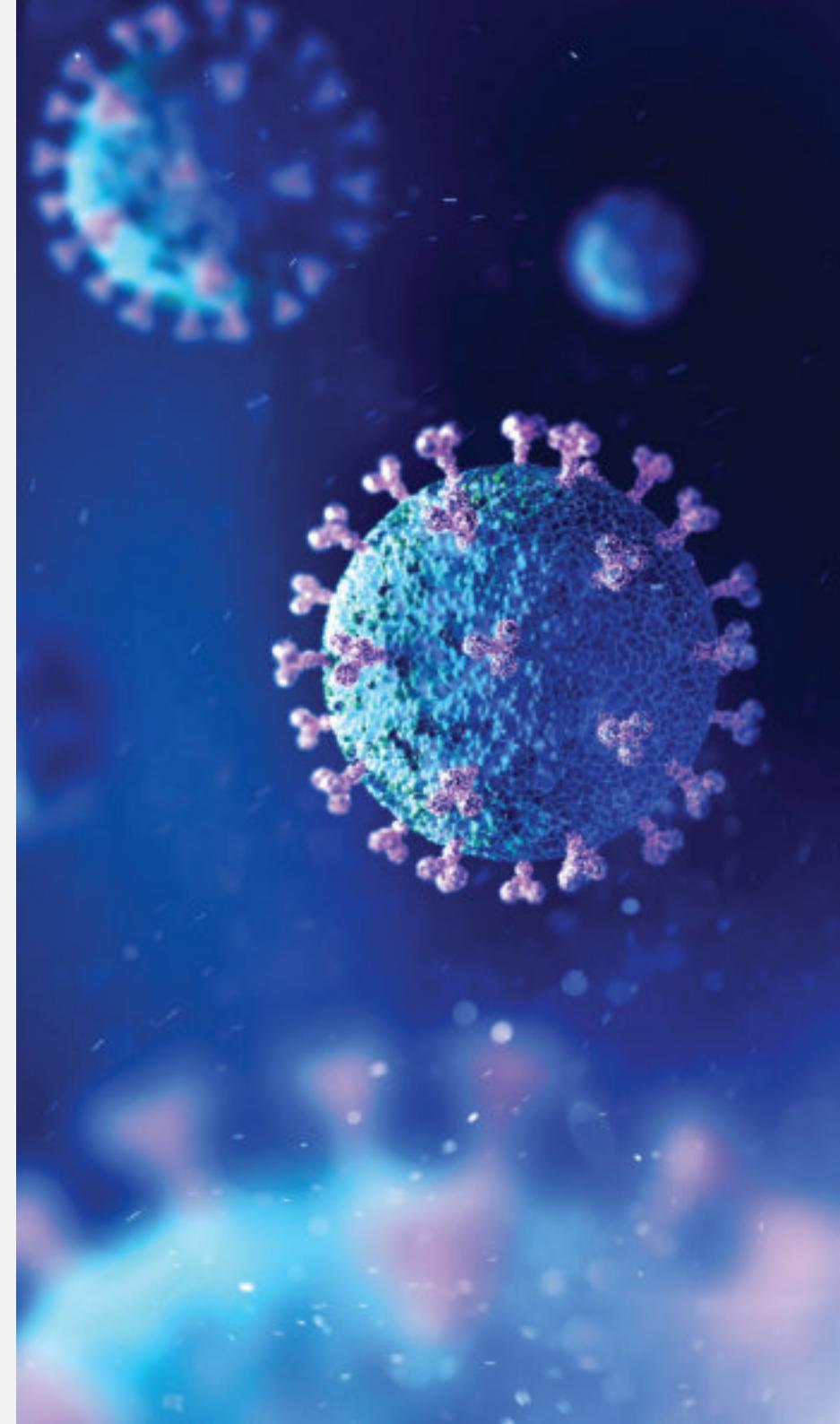
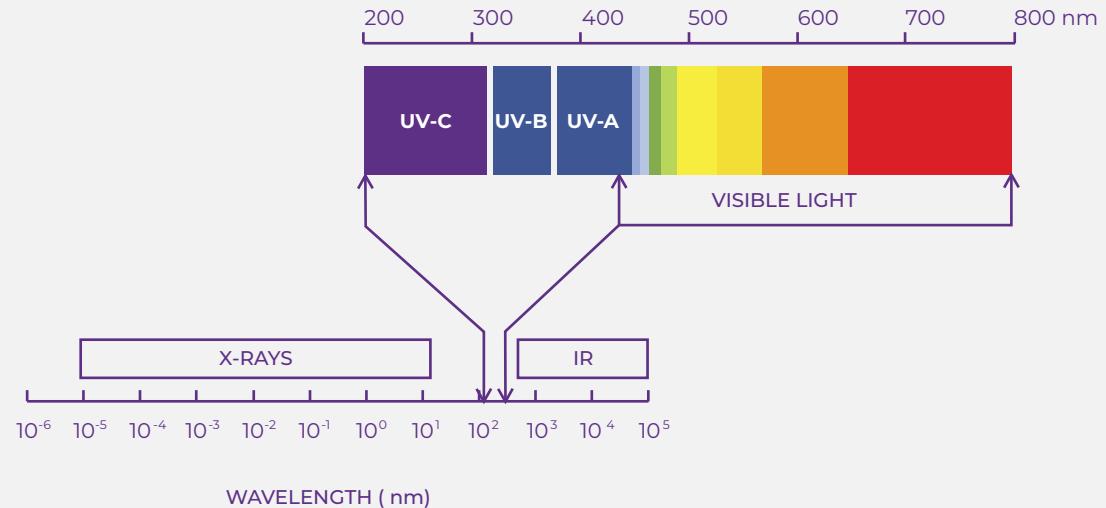
HOW UV-C DEACTIVATES VIRUSES?

UV-C light is part of ultraviolet light with a wavelength of 200 to 280 nm (specified in PN-90 / E-01005).

It is a common method of conducting specialised disinfection mainly in medical facilities and food processing plants. It is used to disinfect surfaces, air and water. The disinfecting effect consists in the penetration of high-energy particles of UV-C rays through the cell membrane of the pathogen.

Then, as a result of the absorption of particles by DNA / RNA cellular proteins, their structure is permanently damaged. This process is irreversible, which means that from that moment the pathogen cannot survive or reproduce.

The process described above is responsible (with proper exposure to UV-C radiation) for the elimination and neutralisation of 99.99% of microorganisms, including the SARS-CoV-2 coronavirus.



EFFECTIVE SOLUTION

UV-C light is extremely effective in eliminating pathogens only when its dose, exposure time and distance from the device are calculated in detail.

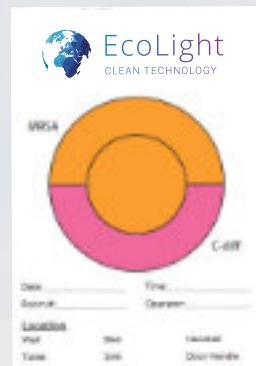
Based on research, we have determined the recommended exposure times for individual room sizes to achieve surface and air disinfection at 99.9%.

The basis for the calculation was the recommendations of the Central Institute for Labour Protection - National Research Institute, which, modelling on international recommendations, indicates a dose of 50 mJ/cm² as effective in deactivating 99.9% of pathogens, including SARS-CoV-2.

DOSIMETERS UV-C

Using UVC dosimeters we can, among others check the UV-C irradiance level to ensure that it is high enough to destroy pathogens.

The UV-C dosimeter is a UV radiation measurement tool dedicated for use wherever UV disinfection is used to check whether the surfaces subjected to disinfection have received the correct dose of radiation. According to the guidelines for effective radiation doses, it is 50 mJ/cm² for SARS-CoV-2 disinfection at the level of 99.9%.



50 mJ/cm²

The dose of UV-C LIGHT
guarantees deactivation

99.9 %

pathogens including SARS-CoV-2



**LET'S MAKE
SHOPPING
SAFE AGAIN**



Eco Clean Light's solutions are a response to the current global demand for services and products related to disinfection of all surfaces through UV light.

Our mission is to eliminate the threat to health and life by eliminating deadly microorganisms. We provide effective fight against pathogens, coronaviruses and bacteria, helping to minimising the risk of infection.

<https://led-uk.co.uk>

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