



A CONCENTRATED FORM OF UV-C IS NOW BEING USED IN THE WAR AGAINST COVID-19



What is UV-C?

Ultraviolet (UV) light is a component of the electromagnetic spectrum that falls in the region between visible light and X-Rays.

There are different types of UV-C and one type which is a relatively obscure part of the spectrum consists of a shorter, more energetic wavelength of light. This type of UV-C is particularly good at destroying genetic material.

Scientists first discovered they could harness UV-C to kill harmful organisms in 1878.

Studies have shown that UV-C is effective in the fight against other Coronaviruses such as SARS and it is now being used on the front line in the fight against Covid-19.



How does UV-C work?

UV-C works to kill microorganisms, such as fungi, viruses and bacteria, through a specific light. The power of UV is in its ability to destroy the proteins within these microorganisms, rendering them entirely harmless.

The concept of UV-C isn't new for many medical, lab and hospital settings, where high-end UV-C technology is already used in concentrated form for sanitising tools and materials.





Sterilight Robot specification?



Fully Autonomous

Disinfects, moves and avoids obstacles fully autonomously



Plug and Play operation

The robot can be set up for use within minutes



Disinfection Time

10-15 min average cleaning time for a 25sqm room



Wireless Connectivity

Wi-Fi based



360 Degree Disinfection

Our robot is able to project UV-C across 360 degrees



Operational For 4 Hours

Our robot offers a long 4 hour operating capacity for UV-C



Full Charge in 1-3 Hours

It takes 1 hour to charge the robot from 25% to 100%.



15m Safety Sensor Range

Ultra-precision sensors ensure unexpected obstacles are avoided









Advantage of UV-C light

- It is safe to use.
- Its bulbs have comprehensive safety and health guidance for usage.
- >> Each UV bulb is reliable, produced by a leading manufacturer.
- Its UV treatment is efficient and effective. It provides a fast disinfection speed with minimal downtime and a low cost.
- It's rapid in operation and can be ready for last-minute or unexpected disinfection tasks within minutes.





Technical specification Sterilight Robots

TYPE

UVC Autonomous Cleaning Robot

COLOUR OF PRODUCT

Silver upper part, White on the lower part, Blue Branding

POWER

Battery Type: DC24 V, 100 ampH

Charging of Unit: With Docking Station or Manual Charger **Charging Time:** around 1-3 hours depending of battery volume

Battery Cycle Times: approx. of 1000-1500 cycles

COMMUNICATIONS

Wi-Fi: Dual Band Wireless

Frequencies: 2.4 GHz to 5 GHz, 802.11

b/q/n

I/Os: USB and Ethernet Pier to Pier to

connect to Wifi

Processor Intel: J1900 Quad-core

2.0Hz

SENSORS

Light Detection and Ranging Sensors, Infrared Sensors and Ultrasonic Sensors

Camera and LED Touch Screen Display, Anti Collision Sensors, and Lidars

UVC LAMPS

Type: UV Lamps and Ballarts (powered by Phillips)

CE

UVC Wavelength: 254nm Depreciation of Useful lifetime:

Lamp Current: 2.1 A Lifetime: 9000 hours

SPEED OF ROBOT

Movement: 10mm to 40mm

p/second

Positioning Accuracy: +/- 50mm

Turing Radius: 520mm

Motor Torque: 8.1nm (high load,

low consumption)

EXTERNAL CHARGER

Input: 100-240V, AC 50-60Hz **Output:** 24V, DC Max 15A

RoHS





MODEL X PRICE ON APPLICATION

PRICE INCLUDES

- **⊘** Warranty from Sterilight Robots Ltd.
- Marketing support and access to a library of UV-C marketing materials.
- **⊘** Remote software/firmware updates.
- **⊘ Price valid for September 2020**



Let us disinfect your premises - Rate card Sep 2020

MONDAY-FRIDAY *excluding UK Bank Holidays	PRICE
Standard shift pattern 09:00 - 17:00	ON
Or 8hr shift between 07:00 - 19:00	APPLICATION
BANK HOLIDAY MONDAY	PRICE
Standard shift pattern 09:00 - 17:00	ON
Or 8hr shift between 07:00 - 19:00	APPLICATION
SATURDAY - SUNDAY Standard shift pattern 09:00 - 17:00 Or 8hr shift between 07:00 - 19:00	PRICE ON APPLICATION

MONDAY-FRIDAY *excluding UK Bank Holidays Non-standard 8hr shift pattern between 19:00-07:00	PRICE ON APPLICATION	
BANK HOLIDAY MONDAY Non-standard 8hr shift pattern between 19:00-07:00	PRICE ON APPLICATION	
SATURDAY - SUNDAY Non-standard 8hr shift	PRICE ON APPLICATION	

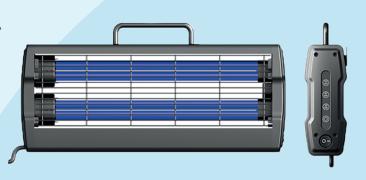


Compact & High Power

The SR72 offers a compact solution to UV-C disinfection.

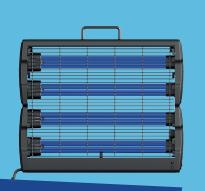
20m² - 80m² Coverage

The SR72 can disinfect a 20m² area in 30 minutes of activation.



SR72

PRICE ON APPLICATION



SR150



Mid-range & Versatile

The SR150offers a mid-sized solution to UV-C disinfection in larger areas.

40m² - 160m² Coverage

The SR150 can disinfect a 40m² area in 30 minutes of activation.

PRICE ON APPLICATION



Static, UV-C Tower

The SR220 offers a resilient solution to UV-C disinfection in larger areas.

60m² - 240m² Coverage

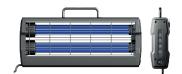
The SR220 can disinfect a 60m² area in 30 minutes of activation.

Easily Setup & Moved

The SR220 can be moved with ease, and activated within minutes.













	SR72	SR150	SR216		
Product description	2- tube ultraviolet disinfection light (72W)	4- tube ultraviolet disinfection light (144W)	T8x6 Large moveable ultraviolet disinfection light		
Description on marketing material	STATIC ULTRAVIOLET DISINFECTION LAMPS FOR COMMERCIAL ENVIRONMENTS DISINFECTION UNIT FOR MEDIUM SPACES				
Product type	Industrial Ultraviolet disinfection light				
Applications	Disinfection of small to medium size rooms (up to 80 sqm): classroom, hotel, office, factory, public washroom etc.	Disinfection of medium size rooms (up to 160 sqm): hotel, office, classroom and other medium - sized places	Disinfection of large spaces (up to 240 sqm): hotels, schools, studios, small theater, gymnasium, workshop and other large public places.		
Features	2 mins delay to light up, mechanical switch, touch key and remote control, remote control through the wall, sensor detection , buzzer alarm, 3 options of disinfection time	2 mins delay to light up, mechanical switch and remote control, remote control through the wall, sensor detection, buzzer alarm, 3 options of disinfection time.	3 mins delay to light up, mechanical switch, touch keys and remote control, remote control through the wall, sensor detection, buzzer alarm, 3 options of disinfection time, falling power-off design		
Disinfection duration/ Disinfection area	30 mins/20m², 60 mins/40m², 120 mins/80m²	30 mins/20m², 60 mins/40m², 120 mins/80m²	30 mins/60m², 60 mins/120m², 120 mins/240m²		
Disinfection height range		0-4m			
IP Rating		IP20			
SOFTWARE					
Child safety lock		No			
Lamp on delay	2 mins dela	y to boot up	3 mins delay to boot up		
Sensor detection		Lamp immediately doused once detecting humans and animals			
Alarm Buzzer	Buzzer for 2 n	nins at startup	Buzzer for 3 mins at startup		
Tilt protection		Io	Luminaire turn off immediately once at tilt 45°		
Disinfection timing options					
CONTROL					
		Voc			
Remote control	Yes				
Switch/panel type	Mechanical switch and touch key				
Control		Mechanical switch, key switch and remote control			
ELECTRICAL					
PSU .:	2014	Electronic ballast	02014		
Power consumption Voltage	80W	150W 100V-240V, 50-60HZ	230W		
Power factor		>0.9			
Current	MAX 1A	MAX 2A	MAX 3A		
Battery operation		No			
DIMENSIONS & WEIGHT					
Product dimensions	490.8*76*240mm	490.8*76*437mm	1488*535*469mm		
Inner dimension		N/A	N/A		
Packing dimensions (Carton)	605*122*326mm	605*122*524mm	1605*450*435mm		
Net weight	2.3KG	3.8KG	13.86KG		
Gross Weight (Carton)	3.2KG	5KG	19.5KG		
Dimensional drawing					
OTHERS			I I		
Tube material		- Aluminium alloy+anti-UV ABS material			
Tube material Housing Material		- Aluminium alloy+anti-UV ABS material CE ETL ROHS REACH			
OTHERS Tube material Housing Material Compliance Mounting	Surface mou	·	Mounting Mobile placement		
Tube material Housing Material Compliance	Surface mou Reflector, feet, protective eyewear, remote control, warning board, bracket (with tripod)	CE ETL ROHS REACH	Mounting Mobile placement Protective eyewear, remote control, warning board		
Tube material Housing Material Compliance Mounting	Reflector, feet, protective eyewear, remote control,	CE ETL ROHS REACH nt or Wall mount Reflector, feet, protective eyewear, remote control,			



Summary of UV light studies on coronaviruses

Microbe	D90 dose (exposure) required	Source
Coronavirus	7 J/m2	Walker 2007
Berne Virus (Coronaviridae)	7 J/m2	Weiss 1986
Murine Coronavirus (MHV)	15 J/m2	Hirano 1978
Canine Coronavirus (CCV)	29 J/m2	Saknimit 1988
Murine Coronavirus (MHV)	29 J/m2	Saknimit 1988
SARS Coronavirus CoV-P9	40 J/m2	Duan 2003
Murine Coronavirus (MHV)	103 J/m2	Liu 2003
SARS Coronavirus (Hanoi)	134 J/m2	Kariwa 2004
SARS Coronavirus (Urbani)	241 J/m2	Darnell 2004
Average	67 J/m2	

The table summarises the results of studies that have been performed on Coronaviruses under ultraviolet light exposure, with the specific species indicated in each case. The D90 value indicates the ultraviolet dose for 90% inactivation.

Although there is a wide range of variation in the D90 values, this is typical of laboratory studies on ultraviolet susceptibility. The range of D90 values for coronaviruses is 7-241 J/m2, the mean of which is 67 J/m2. This gives an indication of the ultraviolet susceptibility of the SARS-CoV-2 (Covid-19) virus.



Boston University School of Medicine

Since the start of the Covid-19 pandemic, Dr Anthony Griffiths, Associate Professor of Microbiology at Boston University School of Medicine have researched the most effective ways of killing Covid-19. Using Phillips 35w, 254nm UV-C bulbs they reduced Covid-19 by 99.9% in 6 seconds. Based on this data, it was determined that a dose of 22Mj/cm2 will result in a reduction of 99.9999% in 25 seconds.









It is imperative to note that UV-C Light may cause acute harm to users' skin and eyes, thus the need to wear UV face shields as well as protective clothing and gloves. This will help the user to not be in contact with the unit. Skin exposure to UV Light germicidal wavelengths can lead to rapid sunburn as well as skin cancer. Besides, when one exposes his or her eyes to UV radiation, it can cause painful inflammation of the cornea and this can lead to permanent or temporary vision impairment that can result in blindness due to retina damage.

Fight the War Against Covid-19 with Autonomous UVC Robots.





- **** 0333 444 1968
- sterilightrobots.co.uk
- info@sterilightrobots.co.uk
- Unit 24 Reddicap Trading Estate Sutton Coldfield B75 7BU