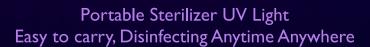


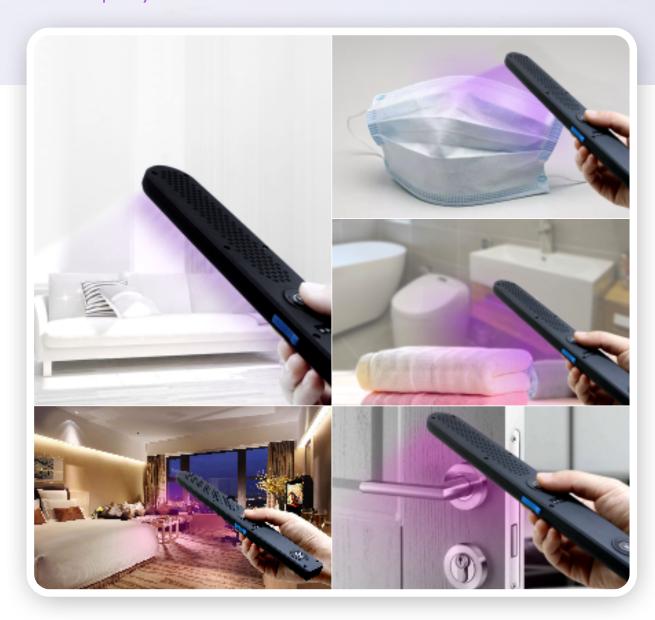
# Virus killer-Safety in Use

270-280nm Ultraviolet Disinfection Build a healthy defense





# Disinfect quickly in 5-30S



















#### Anti-germ 99.9%:

The  $U\bar{V}$  disinfection light destroys the molecular structure of DNA or RNA of viruses with light wavelength in the range of 270  $\sim$  280nm.

#### Portable, Sterilize Anytime:

with compact design and light weight super convenient to stored it in backpack or suitcase for use while traveling and outings. It's your personal health expert especially in the critical period.

#### **Disinfecting Quick and Effective:**

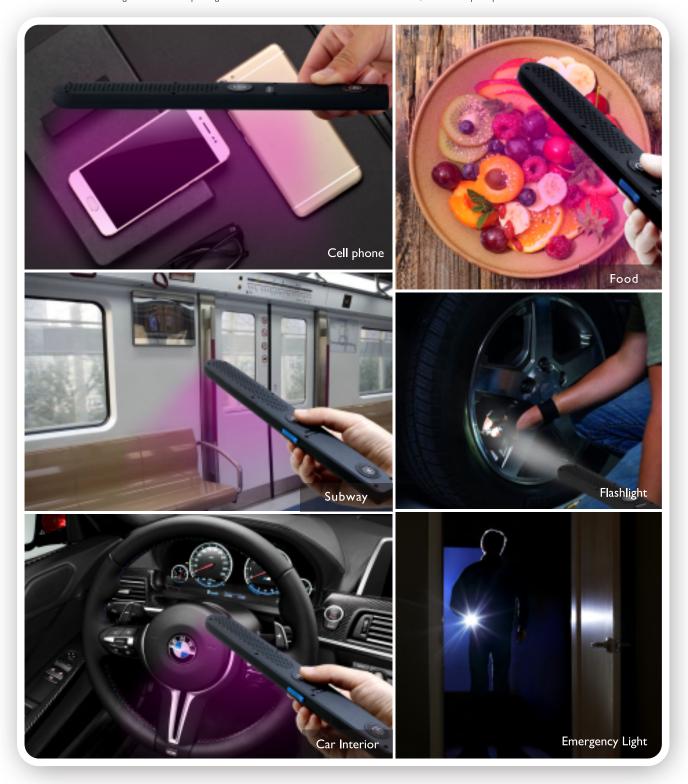
Turns on the UV sterilizer light, simply sweep the UV light sanitizer wand across the surface or stuff you desire to clean, it makes the environment safe and clean within 30 seconds. Please keep 3-5cm distance to the items need disinfecting, stay longer (30s-50s) and the effect better. More delighting news is it brings no damage to any surfaces, creates non-toxic, no residue, no odor or harsh chemical.

#### **One-button Start & Widely Used:**

With one button to control can't be more simple! Led sanitizer light tube equipped green indicator light on the back, no need checking if the UV lights working with your eyes, avoid any potential harmful. Very widely used to clean your daily stuff like phone, keyboard, kitchen, living room or baby items, deeply disinfecting your clothes, couh and beddings.

#### **Quality & Safety Guarantee:**

UVA+UVC LED comes with high transmittance quartz glass to ensure obvious sterilization effect and durable, Led UV Lamp lifespan more than 10000+ hours.



# **LED Ultraviolet Sterilizer**





## Button switch:

Press one time to turn on/off UVA/UVC Sterilizer Hold 3s to turn on/off flashlight



## **UVC+UVA LED**

UVC 270-280nm & UVA 390-410nm Led lifespan more than 10000+ hours.



DC charging port

DC5V IA



**G-Sensor** 

Turns off automatically when flipped up



Flashlight

120lm high brightness flashlight for urgent use



# Magnet

Free your hand with the magnet.

# **LED-UVC** Disinfection



# **Mercury lamp**

Saved 95%

Power

High

Mercury-free 

✓

Environmental

With Mercury

instant on

Start time

**⊗** Warm Up

5-30 S

Disinfecting time

**⊗** 15-30mins

No 🗸

Ozone

**⊗** With

Compact 🔗

Big

Low 🗸

**Temperature** 

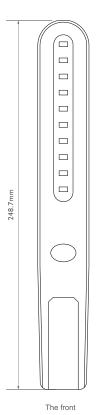
High

Durable 🐼

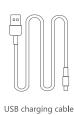
Damaged

Fragile









(€ RoHS F© 🗵

Portable Sterilizer UV Light Item:

248.7×34.5×13mm Size:

3W Power: LED QTY: 10PCS UVA: 390-410nm UVC: 270-280nm Working time: >2500S Flashlight: >7000S 3.7V/600mA Battery capacity:

Battery life: ≥80% after 300 cycles

Charging time: I 20min Flashlight: I 20lm UVC Radiant Flux  $\phi e(mW)$ : 30-40mW UVA Radiant Flux  $\phi e(mW)$ : 1200-1600mW

120° Viewing angle: LED Life: 10000 hours Charging / working temperature: 0-30°C Storage temperature: -10-40°C

#### **INSTRUCTIONS**



Do not use the lamp to irradiate eyes or skin, and keep out of children.

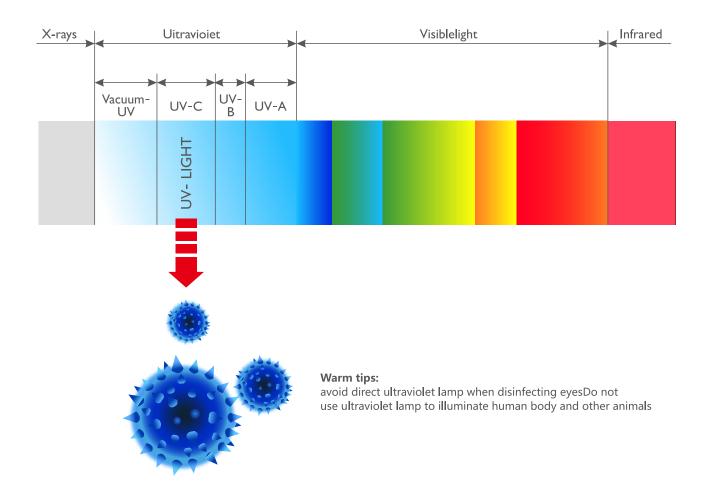
- I. Press the button to turn ON/OFF and the four indicator lights on the back flash at the same time for 3S to display the current power, then it start to the working mode. The working duration of each time of the lamp is 99S, and the indicator lights goes off from right to left.

  2. Sterilization effect: 10-30S scanning back and forth, keep 3-5CM away from the articles, the closer the scan, the longer the sterilization effect is better.

  3. This lamp is equipped with a gravity protection switch, which can automatically turn on to work when tilted downward or 45 degrees, can also automatically turn off when
- the lamp towards the side or upward.

  4. Press and hold the button for 3S to turn ON/OFF the flashlight.
- 5. Indicator lights: charging indication, power indication, sterilization time indication;

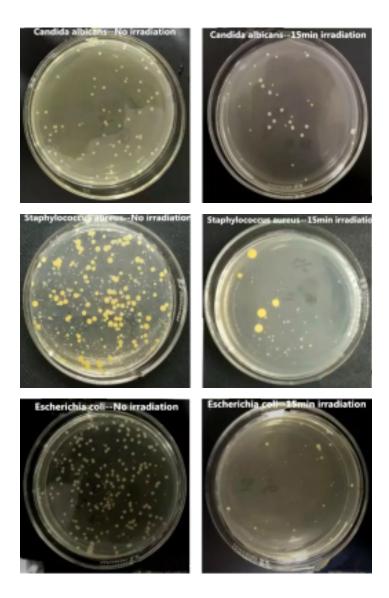
# Ultraviolet comes with A/B/C/D wavelength, UV-C Radiation is the best for disinfection



## Comparison of bactericidal effect of the same product on different strains

Testing sample : UV LED\*3 275nm, at I meter irradiation distance, the radiation intensity is  $98\mu$ W/cm 2. After irradiating for I5minutes, the comparison of bactericidal effect of Candida albicans, Staphylococcus aureus, Escherichia coli

Sample	Bacterial Strains	LEDs current	Testing Condition		Total number of colonies in the	Colony counts in experimental	Sterilizing rate
			irradiation distance	irradiation time	control group ( CFU/mL )	group ( CFU/mL )	(%)
* ( ) ( ) ( )	Candida albicans	3*330mA	I. 0m	I5min	3.55×10⁵	3.2×10⁴	I5min
	Staphylococcus aureus	3*330mA	I. 0m	I5min	3.35×10⁵	5.0×10 <sup>1</sup>	I5min
	Escherichia coli	3*330mA	I. 0m	I5min	8.2×10 <sup>5</sup>	2.4×10 <sup>2</sup>	I5min

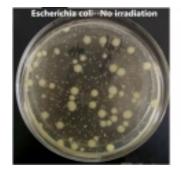


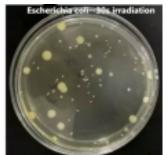
## Comparison of bactericidal effect of the same product in different duration time

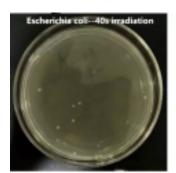
Testing sample: UV LED 280nm, at 5cm irradiation distance

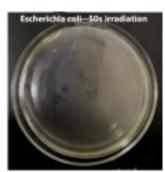
After irradiating for 15minutes, the comparison of bactericidal effect of Candida albicans, Staphylococcus aureus, Escherichia coli

Same la	Bacterial Strains	LEDs current	Testing Condition		Colony counts	Sterilizing rate
Sample			irradiation distance	irradiation time	after testing ( CFU/mL )	(%)
0		-	No irradiation		4.8×10^4	-
2 5 4 5 9 7 8 1		350mA	5cm	30S	7.5×10^2	98.44%
	Escherichia coli	350mA	5cm	40S	1.4×10^2	99.74%
		350mA	5cm	50S	<i< td=""><td>&gt;99.99%</td></i<>	>99.99%





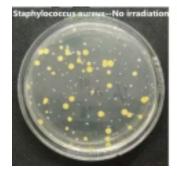




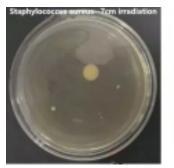
## Comparison of bactericidal effect of the same product on different strains

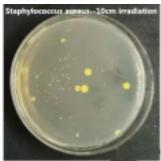
Testing sample: UV LED 275nm,irradiation height with 5cm,7cm,10cm different height After irradiating for 60s,the comparison of bactericidal effect oftaphylococcus aureus

Sample	Bacterial Strains	LEDs current	Testing Condition		Colony counts	Sterilizing rate
Sample			irradiation distance	irradiation time	after testing ( CFU/mL )	(%)
ママママママママママママママママママママママママママママママママママママ		-	No irradiation		1.5×10⁴	-
	Staphylococcus aureus	300mA	5cm	60s	<	>99.99%
		300mA	7cm	60s	8×10 <sup>2</sup>	94.66%
		300mA	I0cm	60s	4×10³	46.66%









#### Deep UV UV sterilization advantages:

- 1. High-efficiency sterilization: The sterilization and inactivation of bacteria and germs is generally completed within a few seconds, which occurs almost instantaneously.
- 2. Broad-spectrum sterilization: It can kill almost all bacterial viruses with high efficiency.
- 3. No secondary pollution: no other chemical pollutants are generated.

#### The sterilization efficiency of deep ultraviolet light on common bacterial viruses is as follows:

Туре	Name	Time required for 100% sterilization (s)	Туре	Name	Time required for 100% sterilization (s)
	Bacillus anthracis	0.3		Mycobacterium tuberculosis	0.41
	Diphtheria	0.25		Vibrio cholerae	0.64
	Tetanus	0.33		Pseudomonas	0.37
	Botox	0.8		Salmonella	0.51
Bacteria	Shigella	0.15	Bacteria	Intestinal fever	0.41
	E.coli	0.36		Typhoid	0.53
	Leptospira	0.2.		To Heiella	0.28
	Legionella pneumophila	0.2		Staphylococcus	1.23
	Microbacterium	0.4-1.53		Streptococcus	0.45
	Adenovirus	0.1		flu virus	0.23
	Phage virus	0.2		Poliovirus	0.8
Pathogens	Coxsackie virus	0.08	Pathogens	Rotavirus	0.52
	Aike virus	0.73		Tobacco mosaic virus	16
	Acovirus type I	0.75		Hepatitis B virus	0.73
	Aspergillus niger	6.67		Soft spores	0.33
	Aspergillus	0.73-8.80		Penicillium	2.93-0.87
Mold spores	Macrofaeces	8	Mold spores	Penicillium toxin	2.0-3.33
	Mycobacterium	0.23-4.67		Penicillium other fungi	0.87
Algae	Blue-green algae	10-40		Paramecium	7.3
	Chlorella	0.93	Algae	Chlorella	1.22
	Nematode eggs	3.4		Protozoa	4-6.70
Fish disease	Fungl disease	1.6	Fish disease	Infectious pancreatic necrosis	4
i isii disease	White spot	2.67	i isii disease	Viral hemorrhagic disease	1.6

#### Classification of UV bands

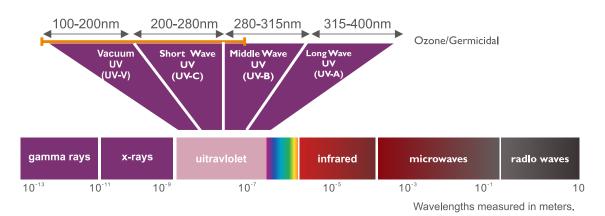
Divide the ultraviolet band according to the wavelength:

UVA: 315-400nm (near ultraviolet NUV365-400nm), applications include curing, photocatalytic purification, anti-counterfeiting and other fields.

UVB: 280-315nm, applications include light health / medicine, light regulation for plant growth, etc.

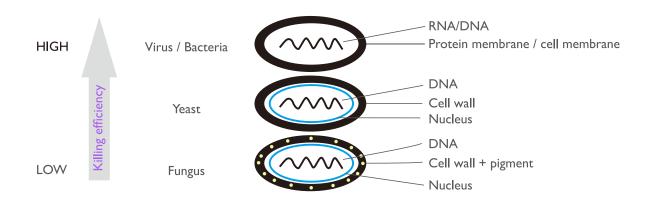
UVC: 200-280nm ("solar blind" ultraviolet light), used for disinfection and disinfection of water, air, etc.

# Electromagnetic Spectrum

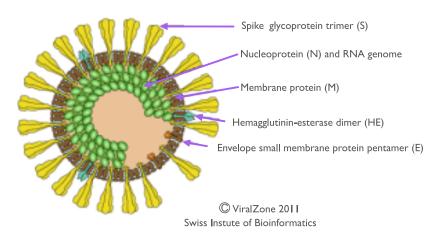


Third, the principle of ultraviolet disinfection

Ultraviolet disinfection technology is based on modern epidemiological, medical, and photodynamic research foundations, using specially designed high-efficiency, high-intensity and long-life UVC band ultraviolet lamps. Ultraviolet radiation damages microorganisms (pathogens such as bacteria, viruses, spores, etc.) and destroys nucleic acid functions, thereby killing microorganisms and achieving the purpose of disinfection and sterilization. The inactivation effect depends on the dose of ultraviolet radiation.

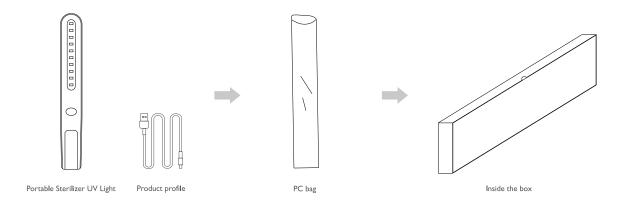


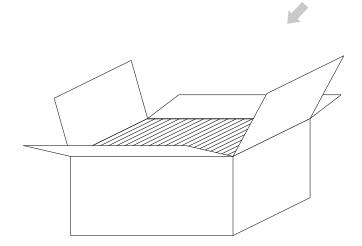
#### Murine Hepatitis Virus (MHV)



From the main structure of various microorganisms, the simpler the structure, the easier it is to be inactivated. The new coronavirus is a single-stranded positive-strand RNA virus. It has no complete cell structure and is easily killed by ultraviolet rays.

## Product packaging





Model Item	CR-GL03			
Box Size	281×84×30mm			
Qty / Box	Ipcs			
Carton Size	620x296x273mm			
Qty / Carton	60pcs			
G.W.	14.7Kg			

Note: there may be tolerance on weight, please check with us for details.