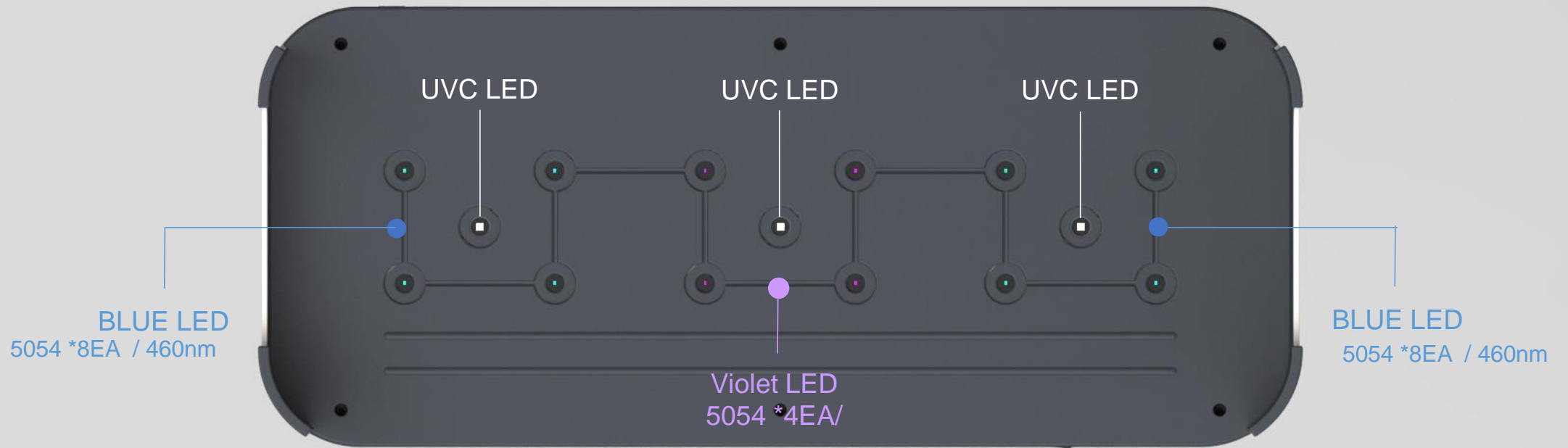ULTRAWAVE
Keyboard Sterilizer

UVC-LED with strong sterilizing power is needed to sterilize curved keyboard.
By Applying three of 30mW UV-C LEDs, it is 10 times stronger than other companies' sterilizers.
Complete sterilization in 5 minutes.

UVC LED　　　　UVC LED　　　　UVC LED

BLUE LED
5054 *8EA / 460nm

BLUE LED
5054 *8EA / 460nm

Violet LED
5054 *4EA/

UVC LED 90mW (30mW *3EA) / 260nm~280nm/ Angle 160°
BLUE LED 5054 *8EA / 460nm
Violet LED 5054 *4EA/　R:620nm　G:520nm　B:490nm

Optimized BASIC MODE to sterilizer keyboard
90mW high-power UVC-LED

effectively sterilizes viruses and germs in 5 minutes.

Exclusive QUICK MODE for easy sterilizing care

Concentrated sterilization in the center

features

99.9% quick sterilizing within a minute.

It is the QUICK sterilizing mode using

express sterilizing technology under patent

pending.

*It sterilizes viruses and germs on smartphones and tablets.

Exclusive QUICK MODE for easy sterilizing care

● Mode and Function

MODE	Motion	UV LED	Operation time	Performance LED	
BASIC	Short Press	3EA	5 mins	All B-LEDs on (Including Middle BLUE LED)	Short press during operation - OFF
Quick	Long Press	Middle 1EA	1 min	Middle R+B LED ON (Violet ON)	
Safety sensor during sterilization	Lift up or Upside down of body	Finish sterilizing using motion sensor., Auto OFF after middle R-LED blinks 3 times			

Application of **PD** adapter

Applied PD adapter charges various office devices with 4 charging USB ports., not only sterilization.

Unlike other company's, the simultaneous charging with **MAX 100W** high-volume electricity support method without loss of efficiency

overcomes demerits of existing One By One Serial charging.

* One By One Serial : Charges next port after complete charging of previous one, the charging term is longer..

It keeps its charging efficiency while connecting all adapters due to electricity support .
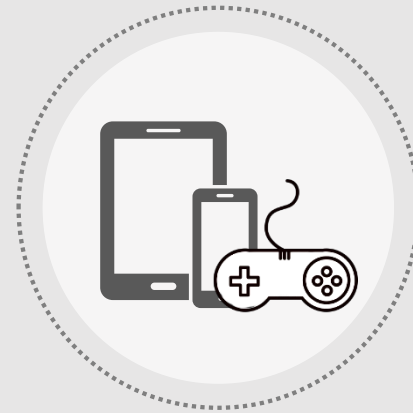
USB-A(1)

Smartphone,
multimedia device, etc.

USB-A(2)

Tablet, smartphone (including iPhone),
game device, multimedia device, etc.
*Support for Express charge

USB-A(3)

Tablet, smartphone (including iPhone),
game device, multimedia device, etc.
*Support for Express charge

USB-C

Laptop, tablet, game device,
Smartphone (including iPhone),
multimedia device, etc.
*Support for Express charge

Application of **PD** adapter

● Specification of charging part

INPUT	AC100~240V , 1.5A MAX		

	USB-A(1)	**DC5V/2A**	MAX10W (Basic charge)
OUTPUT	**USB-A(2)**	**DC5V/3A, DC9V/2A , DC12V/1.5A**	MAX18 (Qualcomm Quick charge)
	USB-A(3)	**DC5V/3A, DC9V/2A , DC12V/1.5A**	MAX18W (Qualcomm Quick charge)
	USB-C	**DC5V/3A, DC9V/3A , DC12V/3A , DC15V/3A , DC20V/3.25A**	MAX65W (PD charge)

▶ Smartphone, game device, Express charge for iPhone with 18w adapter

USB – C PD charging
▶ Laptop / Tablet / Express charging after iPhone 8

※ Automatic recognition according to the electronic volume of each devices, express various smart devices at the same time.
※ Body input - AC 110~220V / 60Hz

Application of **PD** adapter

Qualcomm 3.0 Support	**[LG]** G5[30], V20, Q8, G6 ThinQ, V30 ThinQ, V30S ThinQ, SIGNATURE Edition, Q7, Q8(2018), Q9, Q9 One
	[Mi] 5, 5s, 5s Plus, 6, MAX Pro, MIX / Xiaomi Pocophone POCO F1, LeTV Le MAX Pro, HTC - 10, One A9, Sharp Aquos S3 General Mobile GM5+[31], Elite x3, NuAns NEO, Asus ZenFone 3, Asus ZenFone 3 Deluxe, Asus ZenFone 3 Ultra Lenovo ZUK Z2 Pro, Nubia Z11, Nubia Z11 Max, TCL Idol4S, TCL Idol4S-VDF, Vodafone Smart platinum 7 ZTE Axon 7, Xperia XZ, Blackberry KEYone, Blackberry KEY2, Blackberry KEY2 LE
	[Galaxy] Galaxy A70, Galaxy A80, Galaxy A90 5G, Galaxy S10 5G, Galaxy Note10, Galaxy S20, Galaxy S20+, Galaxy A Queendom, Galaxy Note20, Galaxy Note20 Ultra[40], Galaxy Z Fold2, Galaxy S20 FE, Galaxy Note10+[41], Galaxy S20 Ultra[42], Galaxy Tap S7[43], Galaxy Tap S7+[44]

USB-PD Support	**[Nexus]** 6P, Nexus 5X **[Pixel]** XL 1, 2, 3, 3a,4[15], ChromeBook Pixel 2Generation
	[Microsoft] SurfaceBook 2, Surface Go
	[Apple] MacBook, MacBook Pro, iPhone 8, iPhone 8 Plus, iPhone X, iPhone XR, iPhone XS, iPhone XS Max, iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, iPhone SE(2Generation), iPhone 12 mini, iPhone 12, iPhone 12 Pro, iPhone 12 Pro Max, iPad Pro 12.9inch (1/2/3/4 Generation), 10.5inch, 11inch (1/2 Generation), iPad mini(5 Generation), iPad Air (3/4Generation)
	[Samsung] Notebook 9 Always[16], Galaxy Note 8[b], Galaxy S8, Galaxy S8+[b], Galaxy Note FE, Galaxy S9, Galaxy S9+, Galaxy Note 9, Galaxy S10e, Galaxy S10 5G, Galaxy A80, Galaxy A90[19], Galaxy Note 10, Galaxy Note 10+[20], Galaxy S20, Galaxy S20+[21], Galaxy S20 Ultra, Galaxy A Queendom, Galaxy A71, Galaxy Z Flip, Galaxy Z Fold2, Galaxy Note 20, Galaxy Note20 Ultra, Galaxy S20 FE, Galaxy A40
	[LG] PC All-Day gram[22], All-new gram[23], V30 ThinQ[24], V40, V50, VELVET, WING
	[Sony] Xperia XZ3, Xperia 1, GPD Pocket, Nintendo Switch, Mobile studio Pro

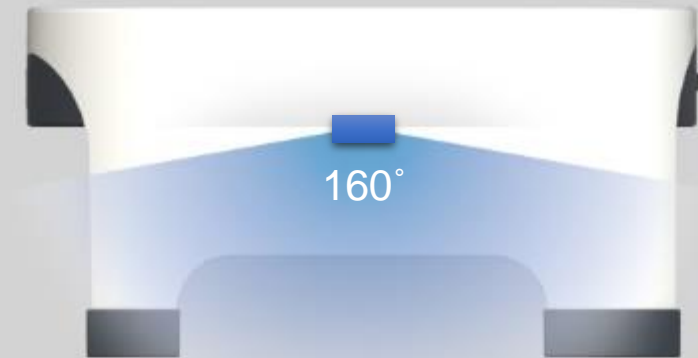Designed to sterilizer mechanical keyboards
with wide internal space

Internal wide sterilizing space
Available for high-quality mechanical keyboard

The major priority, **Safety**

Keyboard sterilizer automatically stops UV operating by motion sensor
in case of lifting up or turning over the device more than 60 degree.

During UVC LED sterilizing, UV only exposes inside of device
by considering angle of light..

The major priority, **Safety**

Safety of circuit design

1 **Safety circuit for overvoltage and overcurrent.**
Control unstable overvoltage/current to supply the electricity stably

2 **Anti-overheating**
Automatically cut the power in case of overheating during charge

3 **Safe structure for short circuit**
Automatically cut the power in case of shortage of charging device or inside of its body

SAFETY

Excellent design and **Changeable color**

With Light-weight and high-strength aluminum die-casting method, we can embody all-in-one metal body, well-made design.

It also features excellent durability to support the load more than 80kg, not comparable to existing assembled panel.

By using high-quality power coating ,similar to car painting,

it shows vivid color and strong to scratch, colors are changeable as you want.

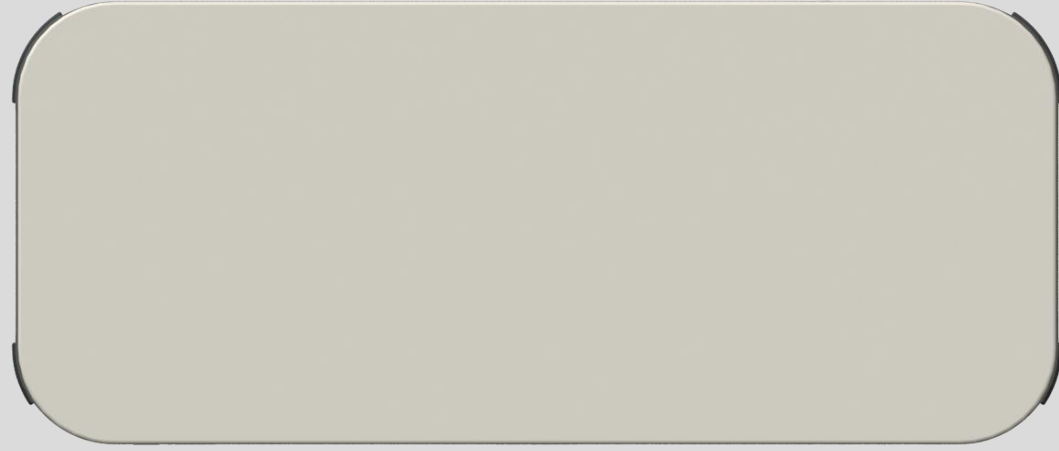# Keyboard Sterilizer **Patent Application list**

1. All-in-one body with light-weight and high-strength aluminum by die-casting technique.

2. UV-C LED Keyboard sterilizing device use PD (Power Delivery and simultaneous USB charging including quick and basic sterilizing mode.

3. Auto UV-C LED off by applying motion sensor when the device is out of inclination value.

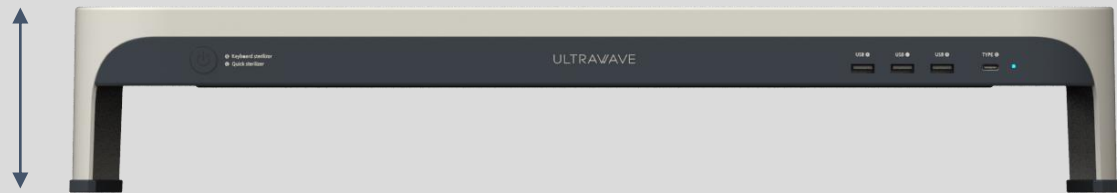**4.** QUICK ZONE LEDs turn on during quick sterilizing mode.

PRODUCT SIZE

552mm

234mm

Support for 80kg Load

98mm

ULTRAWAVE

Weight 2.8 kg

THANK YOU