



# ILS UVC Handheld Sterilisation Device

LPUP-UVC-7540W004-V005.

Bacteria and viruses gone in 30 seconds.

Log3 is a portable device with 3 powerful UVC LEDs in the range of 250-280 nanometers (nm) - the wavelengths capable of deactivating bacteria and viruses. When used together with regular cleaning processes, it will achieve a greater than Log3 deactivation rate.

Log3 has been tested by accredited lab Food Industry Research and Development Institute (FIDRI) confirming 99.994% germicidal effectiveness against *Klebsiella pneumoniae*.



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## APPLICATIONS

- » Dishes, utensils, cups, place-mats
- » Electronics, mobile phones, keyboards, mouse, tablets
- » Door handles, keypads, keys, money, push buttons
- » Toilet seats, flushers, faucets, soap dispensers
- » Tables, baby chairs, desktops, counter tops
- » Bottles, pacifiers, children's toys, bibs
- » Shopping carts, handles, baskets, gym equipment
- » Toothbrushes, hairbrushes, makeup tools, grooming tools

## TECHNICAL FEATURES

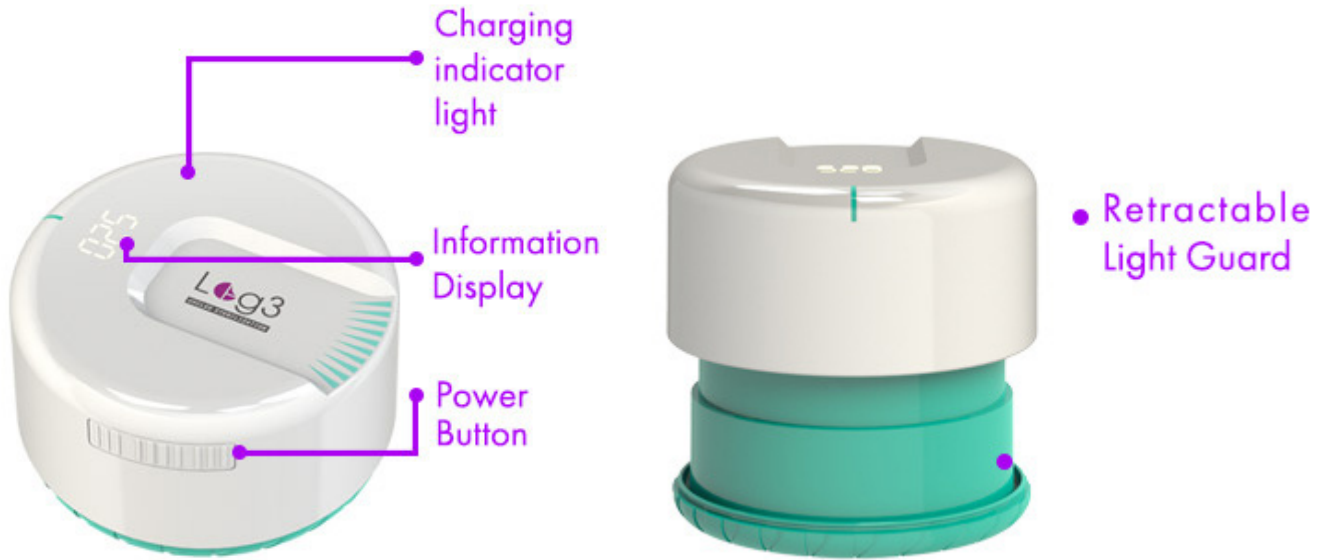
<b>LEDs</b>	3 x UVC LEDs (250-280nm) 1 x white LED (Indicator)
<b>Dimensions</b>	(L x W) Ø76 x 43 mm
<b>DC Input</b>	5V = 1.5A
<b>Power Consumption</b>	3.5W
<b>Battery</b>	1150mAh
<b>Weight</b>	115 g
<b>Accessories</b>	Micro-USS charging cable Carrying pouch

- » Portable, compact ergonomic design
- » 3 high power and effective UVC LEDs for 99.99% germicidal efficiency.
- » Operation mode: On for 30 second timer, then off
- » Safety button cover to prevent accidental turn on.
- » Extendable front shield for added exposure protection and stationary use.
- » UVC light cannot be easily seen with the human eye, for added safety we have added a white light, so you can know and see the light is turned on.
- » Information display for easy to view countdown during every treatment.
- » "LO" will appear on the Information display when battery needs to be recharged
- » Rechargeable Li - ion battery, up to 80 treatments per charge.
- » CE/FCC/RCM certified {In Progress}

## PRODUCT OPTIONS

ILS Part Number
LPUP-UVC-7540W004-V005.

# TECHNICAL DRAWINGS

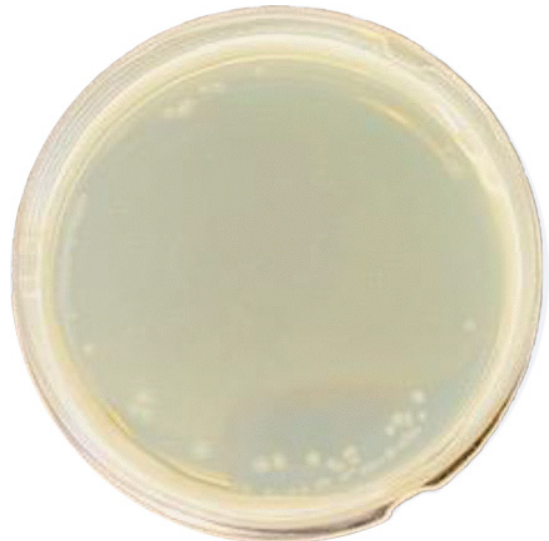


# TEST RESULTS

Control Sample  
No UVC light exposure



Test Sample  
After UVC light exposure



Taiwan's top leading test lab, Food Industry Research and Development Institute (FIRDI) test results confirm Log3 UVC Handheld Sanitizer Device kills >99.99% of pneumonia. This result was done with only 1 treatment (30 seconds exposure with LEDs 5.5cm from sample).

## GETTING STARTED

The Log3 UVC Handheld Sanitizer device comes with an embedded recharge-able Lithium (Li) ion battery.

To charge, insert USB charger into an AC outlet adapter and insert the micro USB into the port on the product. Red light means the battery is charging.

### With Light Guard Shield:

- » Hold the product securely from the top
- » Gently hold the rim of the light guard, then pull down and rotate counter-clockwise until the ring locks into position.
- » Cover the object to be sanitized under the light Guard Shield.
- » Slide the Safety Button Cover to reveal the Power Button
- » Press the Power Button for 1 .5 seconds to turn on the light. One treatment is 30 seconds
- » If you would like to turn off the lamp before the 30 seconds, press the power button for 1 .5s seconds.
- » To retract the Light Guard Shield, gently rotate the ring clockwise to unlock, then gently push the shield until it snaps into the top.

### Without Light Guard Shield:

- » Hold onto the product securely on the top
- » Face the bottom side (with the LEDs) toward the surface/item to be sanitized at a suggested maximum distance of up to 5 centimetres.
- » Slide the Safety Button Cover to reveal the Power Button
- » Press the Power Button for 1 .5 seconds to turn on the light. One treatment is 30 seconds
- » If you would like to turn off the lamp before the 30 seconds, press the power button for 1.5s seconds.

### Indicator Signals:

- » Red light on: Charging
- » Red light off: Charging complete.

## IMPORTANT INFORMATION AND PRECAUTIONS



During operation, the LED emits ultraviolet (UV) light which is harmful to skin and eyes. UV radiation can cause sunburn, conjunctivitis and cancer. Precautions **MUST** be taken to avoid looking directly at the UV light such as the use of UV light protective glasses.



Do not operate Sterilisation Device with a Power Supply with unlimited current. Connection to constant voltage Power Supplies that are not current limited may cause the LEDiL Selectors to consume current above the specified maximum and cause failure or irreparable damage.



If LEDs are embedded in devices, you must add warning labels to alert users of the safety precautions required when operating devices using UV LED lights. The module's LEDs, when powered up, are very powerful. Although the light may appear off, however UV is invisible to the human eye and can still damage eyes. Thus it is advised that you do not look directly at it. Turn the module away from you and do not shine into the eyes of others. The module's LEDs, when powered up, are very powerful. Although the light may appear off, however UV is invisible to the human eye and can still damage eyes. Thus it is advised that you do not look directly at it. Turn the module away from you and do not shine into the eyes of others.



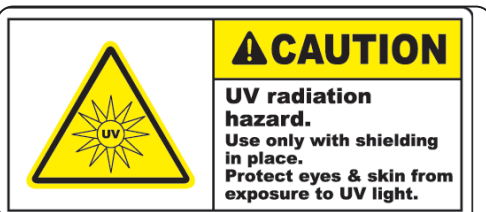
Sterilisation Device, when operated, can reach high temperatures thus there is risk of injury if they are touched.



DO NOT HOT PLUG ON LED SIDE OF POWER SUPPLY.



DO NOT TOUCH or PUSH on the LED as this can cause irreparable damage.



These products generate UVC radiation which can cause skin damage and conjunctivitis to humans and animals within a short time. The skin and eyes must be fully protected against exposure. You should be aware that UVC radiation does not eliminate harmful non-degradable substances such as heavy metals or pesticides. Assume IEC62471 Risk Group 3

## SAFETY INFORMATION



The LED module itself and all its components must not be mechanically stressed.



Assembly must not damage or destroy conducting paths on the circuit board.



The mounting of the module is carried out by attaching it at the mounting holes. Metal mounting screws must be insulated with synthetic washers to prevent circuit board damage and possible short circuiting.



To avoid mechanical damage to the connecting cables, the boards should be attached securely to the intended substrate. Heavy vibration should be avoided.



Observe correct polarity! Depending on the product, incorrect polarity will lead to emission of red or no light. The module can be destroyed!



Pay attention to standard ESD precautions when installing the PowerStars.



The Sterilisation Device, as manufactured, have no conformal coating and therefore offer no inherent protection against corrosion. Damage by corrosion will not be accepted as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.



For outdoor usage, a housing is definitely required to protect the board against environmental influences. The design of the housing must correspond to the IP standards in the application. It is also the responsibility of the user to ensure any housings or modifications keep the Tc junction temperature to within stated ranges.



To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards: CE: EC 61374-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61374-2-13 and IEC/EN 62384.



The evaluation of eye safety occurs according to the standard IEC 62471:2006 ("photobiological safety of lamps and lamp systems"). Within the risk grouping system of this CIE standard, the LED specified in this datasheet falls into the class "moderate risk" (exposure time 0.25s). Under real circumstances (for exposure time, eye pupils, observation distance), it is assumed that no endangerment to the eye exists from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect. As is also true when viewing other bright light sources (e.g. headlights), temporary reduction in visual acuity and afterimages can occur, leading to irritation, annoyance, visual impairment and even accidents, depending on the situation.





## VERIFICATION OF COMPLIANCE

This is to certify that the product listed below was (were) tested in the BTL EMC Laboratory to comply with the required criteria levels of the follow-mentioned Generic Standards or Product Family Standard(s) and/or Basic Standard(s) based-on the essential conformity requirements of EMC Directive 2014/30/EU.

**Equipment** UVCLed Portable Device  
**Model Name** LPUP-UVC-7540W004-V005  
**Brand Name** Log3  
**Applicant** TSLC Corporation  
**Address** 1F., No. 11, Kezhong Rd., Zhunan Township, Miaoli County 350, Taiwan (R.O.C.)

**Standard(s)** EN 61000-6-3:2007+A1:2011+AC:2012  
 EN IEC 61000-3-2:2019 Class A  
 EN 61000-3-3:2013+A1:2019  
 EN IEC 61000-6-1:2019

**Report(s)** BTL-EMC-1-2009T115

The test data, data evaluation, and equipment configuration contained in our test report(s) above was (were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.

Pike Lee  
 Authorized Signatory



### BTL INC.

No.18, Ln. 171, Sec. 2, Jiuzong Rd.,  
 Neihu Dist., Taipei City 114, Taiwan  
 TEL:+886-2-2657-3299  
 FAX:+886-2-2657-3331



## FURTHER INFORMATION

The values contained in this overview can change due to technical innovation. Any such changes will be made without separate notification.

If you require further assistance or have a specific or custom enquiry, please contact the ILS team via email or phone. Alternatively please visit our website for more product information and to see our full ranges.



Unit 2, Berkshire Business Centre,  
Berkshire Drive, Thatcham,  
Berkshire, RG19 4EW  
+44 (0)1635 294606

[info@i-led.co.uk](mailto:info@i-led.co.uk)

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

## ABOUT ILS

ILS offers a high level of technical skill, professionalism and commercial understanding to companies requiring market-leading optoelectronics solutions. Offering conceptual advice, electronics design and manufacturing capability, we use high quality production resources both in-house and in Asia, providing project support from prototyping to mass production. We also understand the need to provide cost-effective solutions and we do so using high quality components to ensure that the end product's reliability and quality is uncompromised. Apart from LEDs in the visible spectrum, we have a wide range of Infrared, UV LEDs, UV tubes, and lasers.

ILS is a division of Intelligent Group Solutions Ltd (IGS) a well-established respected industry leading Optoelectronics solutions provider. Much of IGS' business comes from providing semi-custom or custom products both in component and sub-assembly form, and from providing design support and prototyping within the European market place. We can deliver production displays to wherever in the world that the customer's manufacturing or assembly is being undertaken.

## INTELLIGENT GROUP SOLUTIONS DIVISIONS

