

clinell® UV-360

powered by **UVDI** technology

Only adds
20 mins
to your terminal clean
disinfection protocol!

Clinell UV-360 room sanitiser is the most cost effective ultraviolet device on the market. It is the ideal choice for terminal cleaning after patient discharge.

Clinically proven

Greater than 99.99% reduction in *C. difficile* spores and MRSA.

Light weight, durable and easy to move

Only weighs 40kg allowing for easy movement around the hospital. The unit has undergone extensive testing to ensure toughness and durability.

Simple and easy to operate

The intuitive touch screen operating system makes set up and operation easy, quick and efficient. The onboard computer retains and downloads room disinfection data.

Powerful 1.6m leading lamp technology

Uses four 1.6m maximum output polymer-encapsulated UV lamps which are 7 times more powerful than competing lamps. The aluminium reflector mast has been designed for optimum UV-C energy distribution.

Used in over 100 top US hospitals

The Clinell UV-360 room sanitiser utilises UVDI technology, the trusted leader in ultraviolet disinfection with over 60 years heritage.

Safe to use

Four infrared motion sensors prevent operation if movement is detected within the room. In addition the remote control has an operating range of approximately 50 feet (even through walls).



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HOW ULTRAVIOLET LIGHT WORKS

Clinell UV-360 room sanitiser uses germicidal wavelength ultraviolet radiation (UV-C) to kill microorganisms.



How it works

The sun emits three types of UV radiation:

UV-A (315nm-400nm):

Black light and tanning lamps, can be harmful to eyes.

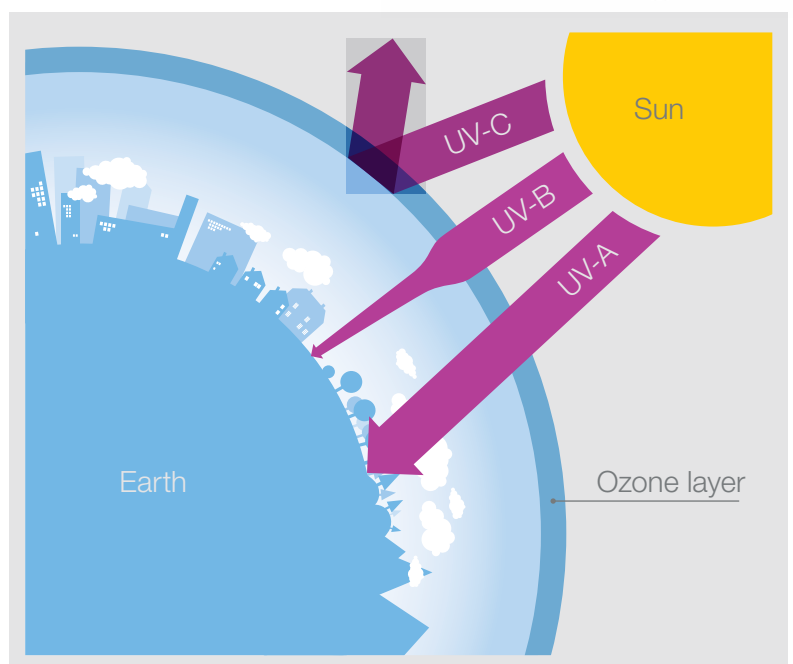
UV-B (280nm-315nm):

Can cause sunburn and skin cancer.

UV-C (200nm-280nm):

Kills microorganisms via short-wavelength ultraviolet radiation. This radiation is normally stopped by the Earth's ozone layer.

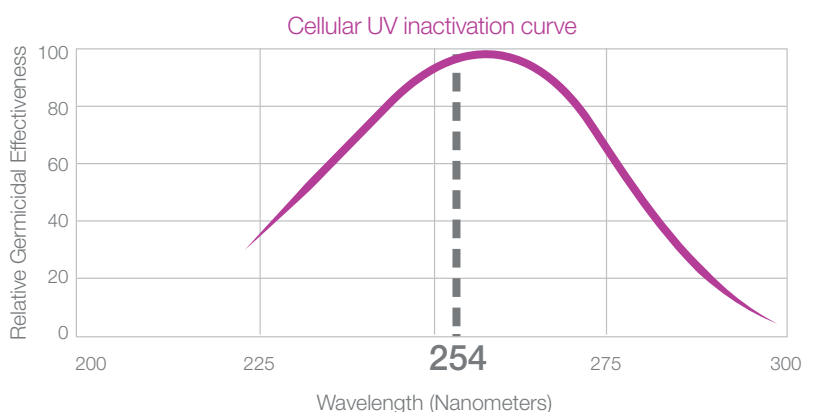
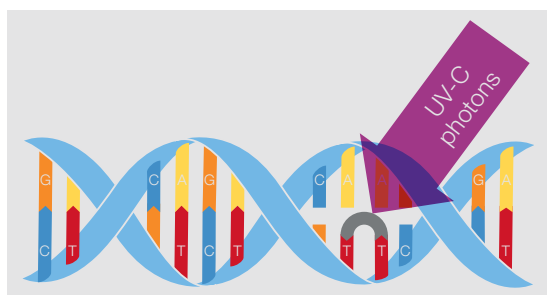
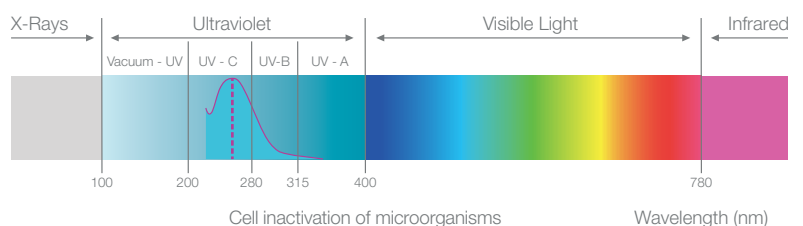
The Clinell UV-360 room sanitiser produces germicidal UV-C at a wavelength of 254nm. This wavelength inactivates the microorganisms' DNA, effectively killing it.



Ultraviolet effect of 254nm wavelength

Photochemical destruction of the DNA of microorganisms via absorption of UV-C light.

Shutdown of the organism's reproductive processes deactivates it and renders it non-pathogenic.



Room decontamination units (such as ultraviolet-C and hydrogen peroxide systems) aid in reducing environmental contamination after terminal room cleaning and disinfection¹.

Third-party testing results for Clinell UV-360 room sanitiser against *C. difficile* spores and MRSA

MICROORGANISM	DISTANCE (FEET)	TIME (MINS)	% REDUCTION COMPARED TO CONTROL	LOG REDUCTION COMPARED TO CONTROL
<i>Clostridium difficile</i> (endospores)	3	4	>99.995	>4.32
	8	5	>99.992	>4.09
	12	8	>99.995	>4.32
Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA)	3	1	>99.999	>5.69
	8	2	>99.999	>5.69
	12	3	>99.999	>5.69

Results verified by third-party laboratory.

The power of ultraviolet technology

The application of UV-C energy to deactivate microorganisms is known as Germicidal Irradiation or UVGI. Artificial UV-C energy is produced in germicidal ultraviolet lamps which produce UV radiation by ionizing low pressure mercury vapour.

Ionized mercury emits a predominantly discrete wavelength of 254nm - in the UV-C band which is an ideal wavelength for destroying the DNA of single cell organisms.

Advantages over other no-touch room decontamination technologies

1. Rapid room decontamination.

2. Can be used in high turnaround areas or rooms.

3. Ventilation system does not need to be disabled.

4. Smoke alarm does not need to be disabled.

5. UV-C radiation leaves no residual contamination or by-products which may cause health and safety concerns.
6. No consumable products. This ensures operating costs are low.

7. Can be used as part of a daily disinfection routine.

8. Safe for staff and patients. Ordinary glass and plastic windows will block any UV-C radiation and there is no need to seal room.

9. Room can be used immediately on completion.

Greater than
99.99%
kill of microorganisms
and is effective
from 1 minute.

TWO STEP BUNDLED APPROACH

A comprehensive two step bundled approach to environmental cleaning and disinfection.

Step 1: Regular cleaning/disinfection procedures with Clinell wipes.

Step 2: Supplement with UV light to ensure complete decontamination.

Comprehensive cleaning solutions

It is now generally accepted that contamination of environmental surfaces in hospital rooms plays an important role in the transmission of several key healthcare-associated pathogens^{1,2,3,4}. Many of these pathogens persist in the environment for days and some even for months.

Admission to a room previously occupied by a patient with MRSA, or *C. difficile* increases the risk for the subsequent patient admitted to the room to acquire the pathogen².

To decrease the frequency and level of contamination of environmental surfaces and medical equipment in hospital rooms, routine and terminal disinfection with a germicide has been recommended. Unfortunately, routine and terminal cleaning of room surfaces by environmental service personnel and medical equipment by nursing staff is frequently inadequate⁴.

Multiple studies have demonstrated that less than 50% of hospital room surfaces are adequately cleaned and disinfected when disinfectants are used⁴. The implementation of enhanced education, checklists, and methods to measure the effectiveness of room cleaning (e.g. use of fluorescent dye) with immediate feedback to environmental service personnel has been found to improve cleaning and lead to a reduction in healthcare-associated infections⁵.

“No-touch” methods (eg, ultraviolet C light [UV-C], hydrogen peroxide vapour) have been developed to improve terminal room disinfection and to reduce surface contamination and thereby reduce healthcare associated infections¹.

Studies have shown that adequate environmental cleaning is frequently lacking³.

Clinell UV-360 provides you with a fast and effective UV-C device which together with traditional terminal cleaning gives you a comprehensive bundled approach to environmental cleaning and disinfection.

Range of use

Ideal for use in most healthcare rooms and areas, such as:

1. Patient's side rooms and bathrooms after terminal cleaning.
2. Daily in high risk patient's rooms whilst the patient is undergoing treatment.
3. Operating rooms after terminal cleaning.
4. Operating rooms in between cases whilst the next patient is having an anaesthetic.
5. Haematology and oncology room suites in between patients.
6. Sluice rooms.
7. High turnaround rooms where no downtime is possible.



less than 50% of hospital room surfaces are adequately cleaned and disinfected²

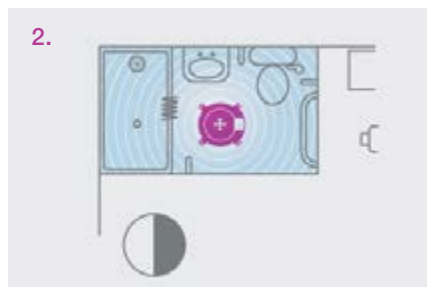
The Clinell UV-360 room sanitiser only adds 20 minutes to standard room disinfection protocols.

How to use

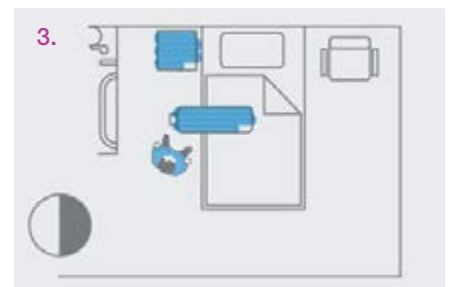
The Clinell UV-360 room sanitiser is faster than any other UV solutions currently available. It is also significantly faster and easier than any 'non-touch' room decontamination solutions currently available.



1. Before using the UV unit you must perform regular cleaning as per local policy. This is to remove any visible soiling which may reduce the efficacy of the machine. First clean the bathroom.



2. After cleaning, roll the UV unit into the bathroom and apply the appropriate warning signage. Ensure the shower curtain is bunched into the middle and the toilet seat is up. Set the unit to run for 10 minutes. You will have 30 seconds to leave the room, ensure you close the door behind you.



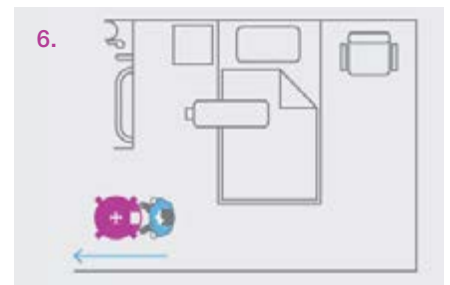
3. Whilst the UV unit is disinfecting the bathroom, perform a regular terminal clean in the ward room, ensuring the room is cleaned in a thorough and methodical manner, as per local guidelines and/or hospital policy.



4. When you have finished, roll the UV unit to the left, at the foot of the bed. Ensure all bed rails are up and all the linen is removed. Expose common touch points by opening drawers and cupboards etc. Set the unit to run for 10 minutes. You will have 30 seconds to leave the room, ensure you close the door behind you.



5. After 10 minutes enter the room, it will smell of ionisation which is normal. Turn items such as remote controls upside down. Re-position the unit to the right hand side, at the top of the bed. Set the unit to clean for 10 minutes. You will have 30 seconds to leave the room, ensure you close the door behind you.



6. After 10 minutes enter the room, it will smell of ionisation which is normal. Wear fresh PPE and make the bed and tidy the room. Dispose of PPE, remove the UV unit and all the warning signage.

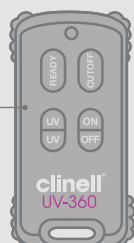
Having two placements either side of the bed helps to reduce shadowed areas

CLINELL UV-360

Optimal height and width for
hospital room entrances

Aluminium reflector mast for optimum
UV-C energy distribution

Remote control

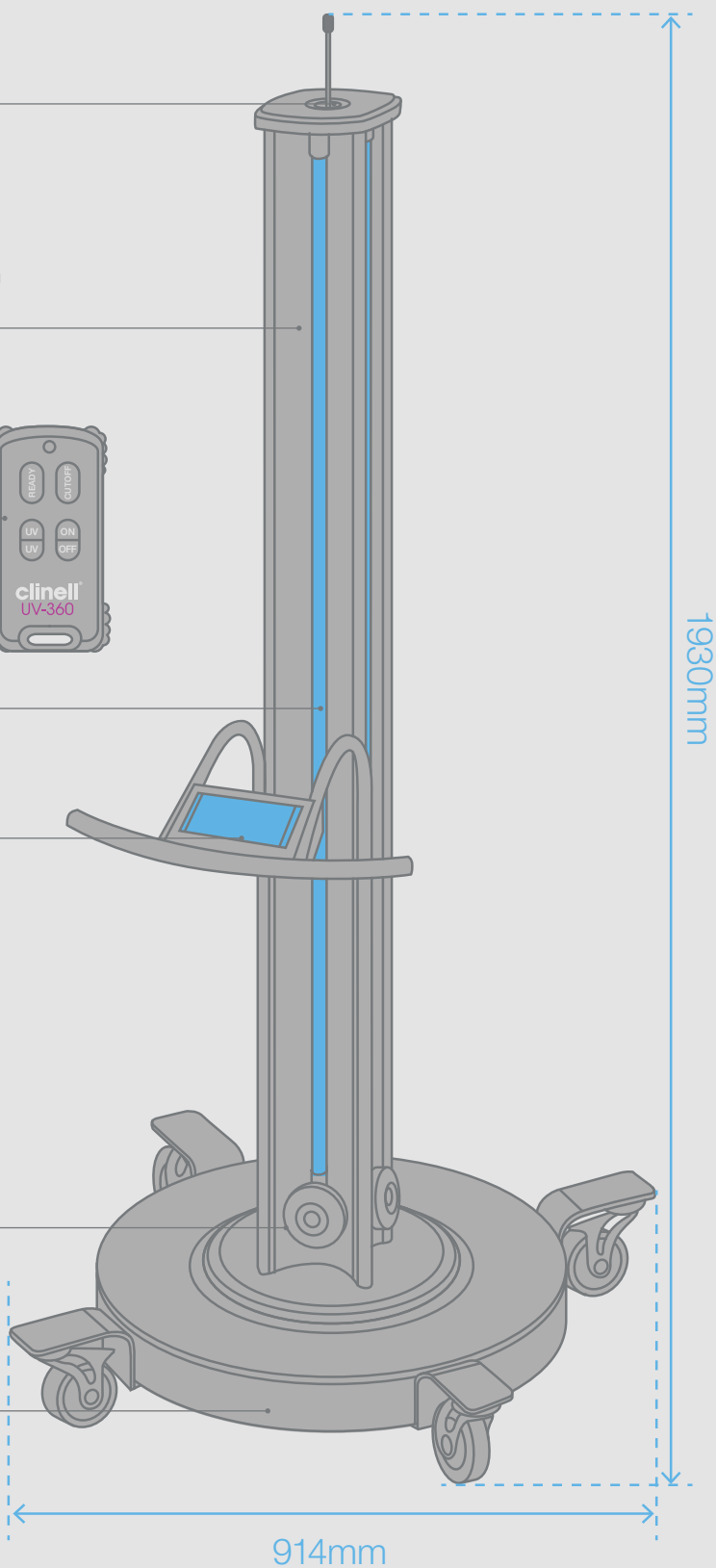


4 polymer encapsulated
maximum output UV lamps

Easy and intuitive touch-screen
operating system

4 safety motion sensors

Only weighs 40kg for
effortless movement



LUMACEPT UVC MAX REFLECTIVE COATING

UVC Max reflective coating by Lumacept™ - covering the walls of a patient room with a UV-C-reflective coating substantially decreases the time to achieve microbial inactivation¹.



Patient Room Study: UV-C Reflectivity Increased 14x in the Shadows

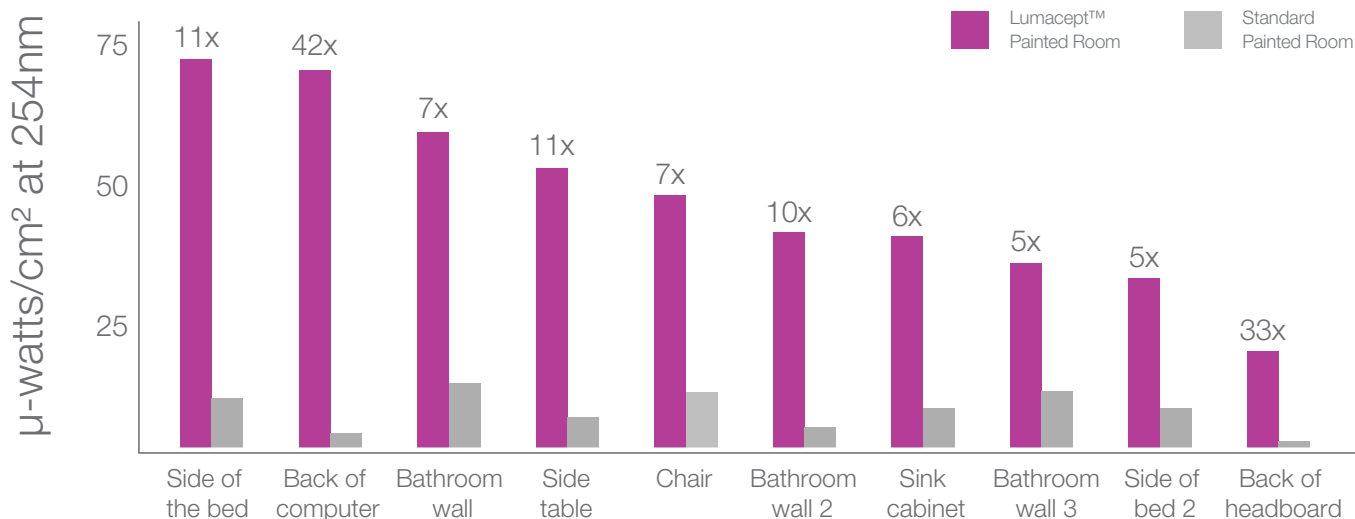
Standard paint and wall coverings absorb 93-97% of the invisible germicidal UV light. The UV light that reaches shadowed areas has to reflect off surfaces like walls and ceilings, and with each bounce most of the remaining UV light is absorbed. With patent pending Lumacept™, germicidal UV is still present after multiple bounces to disinfect the nooks and crannies where pathogens can hide.

In a Patient Room Study involving ten shadowed surfaces (not in direct line-of-sight of the UV-C device), Lumacept™ coated walls increased UV-C intensity by an average of 14 times more than standard painted walls. Note that Lumacept™ even reflected UV-C into deeply shadowed areas like the back of the headboard.

Even directly lit surfaces benefit. In the same study, six surfaces that were in direct line-of-sight of the UV-C device were also measured. Lumacept™ coated walls increased UV-C intensity by an average of 40% over standard painted walls.

Shadowed areas are often indirectly lit by light that has bounced off more than one surface. Lumacept™ maintains significant UV-C intensity even after multiple bounces.

After only two bounces standard paint typically has less than 0.5% of the original UV-C intensity.



UV DOSE VERIFY™ POWERED BY UVDI

Clinell UV-360 Dose Verify™ technology verifies that a specific germicidal UV-C dose has been received on a target surface, whether direct or indirect (shadowed) line of sight to the UV-360.

UV Dose Verify™ technology

This patent pending technology eliminates guesswork in determining whether sufficient UV-C dose levels have reached their targeted surface.

Dose Verify™ is used for establishing protocols for room disinfection, quality audits, training and record keeping.

UV-C sensitive coupons change colour when exposed to UV-C energy, and that colour change is calibrated to specific germicidal dose levels.

Independent laboratory testing validated colour change associated with 2 log (99%) reduction for MRSA and *C. difficile*.



89% of surfaces cleaned by clinical staff failed the ATP benchmark⁶.

REFERENCES

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3. Rutala WA, Weber DJ. Disinfectants used for environmental disinfection and new room decontamination technology. *Am J Infect Control*. 2013 May;41(5 Suppl):S36-41. doi: 10.1016/j.ajic.2012.11.006.
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5. Donskey CJ. Does improving surface cleaning and disinfection reduce health care-associated infections? *Am J Infect Control* 2013;41:S12–S19.
6. Anderson, R.E., et al., Cleanliness audit of clinical surfaces and equipment: who cleans what? *Journal of Hospital Infection*, 2011 78(3): p. 178-181.

* Subject to annual spend. Only available in the UK (excludes Northern Ireland).