

The only FDA approved self-sanitizing keyboard and mouse



Proven to kill **99.99%** of the pathogens on the surface¹

The only FDA approved UV device for surface sanitization

Sanitizes automatically between uses

Works in seconds



The Problem

Healthcare Acquired Infections (HAIs) are a leading cause of death in the USA and around the world. Our own hands are often infection vectors for the microbes that make us sick. The potential to spread deadly pathogens through cross-contamination is increasing as the advent of electronic medical records requires greater use of shared workstations. Computer keyboards and mice are two of the top five vectors for cross-contamination.

Preventing deadly diseases such as methicillin-resistant staphylococcus aureus (MRSA), Clostridium difficile (C. difficile) and norovirus is a top priority for hospitals, however, many organizations struggle with the challenge of manually disinfecting shared surfaces in busy environments. Frequent hand washing and other existing interventions are time consuming and break down due to lack of human compliance. For instance, effective hand washing requires up to 2 hours per day² and has approximately 20-30% adherence amongst clinicians.^{3,4}

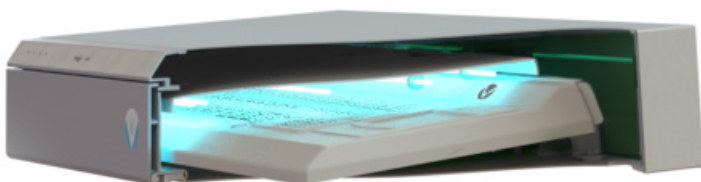
"Conventional computer keyboards have been identified as a key point of transmission for viruses and bacteria, especially within the medical setting. The Vioguard keyboard takes the guesswork out of sanitization efforts, reduces labor costs and improves compliance."

— Larry Ranta,
President and CEO of Vioguard



Top 5 Vectors for Cross-Contamination

✓ Keyboard ✓ Mouse Doorknob Telephone Pens & Pencils



The Solution

The Vioguard Self-Sanitizing Keyboard uses the germicidal properties of ultraviolet light (UV-C) to automatically disinfect the keyboard and mouse after every use. The system is 99.99% effective in killing harmful microorganisms within seconds, eliminating the need for manual cleaning and disposal of biohazard waste.

Critically, the Vioguard system does not require human intervention.

The sanitization process engages automatically and confirms that the surfaces have been properly sanitized, ensuring consistent and reliable disinfection.

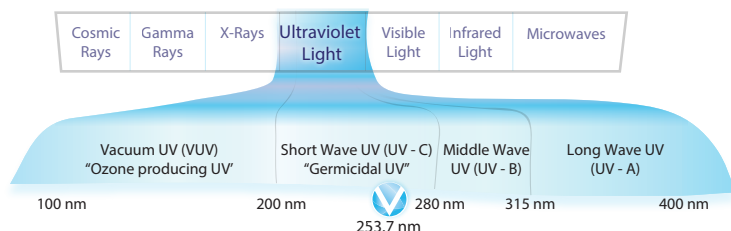
Over **75,000** people die each year in the USA from HealthCare Associated Infections (HAIs)⁵

Ultraviolet Germicidal Irradiation- A Superior Technology

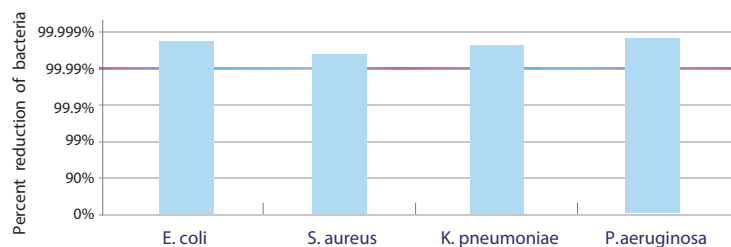
Since the early 20th century, ultraviolet germicidal irradiation has been used as an effective disinfectant in HVAC, water treatment facilities and hospital environments. Hospital-borne pathogens can be killed or rendered harmless with the use of UV-C in appropriate dosages by effectively disrupting microorganisms' DNA and RNA while preventing colonization.

Unlike their resilient response to chemical disinfectants, microorganisms are unable to develop UV-C resistance. Widespread use of antibiotics and disinfectants continue to create chemical and drug-resistant "superbugs," which the CDC lists as a top threat for 2014. **The Vioguard solution kills these superbugs and will not create new, resistant microorganisms.**

Electromagnetic Spectrum



Vioguard Efficacy¹



UVKB-50 R2.0 Product Features

Power input: 100-240 VAC, 50-60 Hz
 Status Indicator: Multi-color LED indicates disinfection status
 Disinfection Time: 90 seconds (average, based on default UV dosage setting)
 PC Interface: Single USB compatible for both keyboard and touchpad
 Operating system: Compatible with Mac, Linux, Windows (simply plug and play)
 Safety: Mechanical and Electrical features to prevent UV exposure
 Automated Compliance: Self-Sanitizes after 1, 5 or 10 min. of non-use (user selected)
 Input: Full keyboard, numeric keypad and touch pad (available in any language)
 Dimensions: 10" x 20" x 3.23"

US Patent #US8,084,752, B2



Harmful Microorganisms are Costly

The Centers for Disease Control (CDC) estimates that 4% of hospital patients acquire an infection in the U.S.⁵ which results in \$35-45 billion in direct medical costs each year.⁶

Custom Integration

The Vioguard Self-Sanitizing Keyboard can easily be integrated into medical carts, workstations, wall-mounted computer systems, and other custom configurations.



References

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- ³ Novoa, A.M. et al. AJIC, 2007; 35(10): 676.
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- ⁵ Magill, S.S., et al. N Engl J Med 2014; 370: 1198
- ⁶ Scott II, R.D. The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefit of Prevention, CDC. Available at: http://www.cdc.gov/hai/pdfs/hai/scott_costpaper.pdf. March 2009.