

Are There Gaps in Your Infection Prevention Protocol?



High-Touch Surfaces are
a Leading Contributor



Put the Solution
at the Source



The KR615 In-Room Germicidal Enclosure *from...*

AUVS
ADVANCED ULTRA-VIOLET SYSTEMS

A \$45 Billion Problem Impacting Hospitals and Patient Outcomes

According to the Center for Disease Control, Hospital Acquired Infections (HAI) are estimated to cost US hospitals \$45 Billion. The problem negatively impacts patient outcomes with hospital stays being increased by an average of 19 days. In addition to the physical and psychological toll on patients, staff and family members, these extended stays hit the hospital's bottom line. Based on 2014 estimates, a facility with \$50 million in annual Medicare inpatient revenue has \$6.6 million at risk.

The microbial pathogens related to HAI are often transmitted through cross contamination of high-touch medical and non-medical devices and inadequately cleaned surfaces.

Germicidal wipes and bleaches are common answers but with drawbacks. Disinfecting robots address the problem but have their own drawbacks including cost, service and inability to address all surfaces that might harbor pathogenic microorganisms. They are not a complete solution.

Today, **Advanced Ultra-Violet Systems (AUVS)**—led by one of the foremost experts on microbial UV radiation as a sanitizing agent—is addressing these gaps with the KR615 Germicidal Enclosure.



HAI: The Cost

- \$45 Billion Annually
- 19 Day Average Increase in Hospital Stays
- \$3.8 Billion MRSA Costs:
 - \$30,000 to \$60,000 Per Incident
 - \$760,000 Annually for a 200 Bed Hospital
- \$4.8 Billion C. diff Costs:
 - \$18,000 to \$90,000 Per Incident
 - \$960,000 Annually for a 200 Bed Hospital

AUVS
ADVANCED ULTRA-VIOLET SYSTEMS
Germicidal UV Enclosures for Healthcare



The AUVS KR615: Meeting the Challenge

KR615 from AUVS puts the solution where the problem is: Bedside, in every room to decontaminate device surfaces, which are proven vehicles of cross contamination. Designed using patented germicidal advanced UV technology, the KR615 is a more efficient, less expensive and user friendly solution compared to wipes or liquid disinfectants.

Simply place each item in the enclosure and press the button. The KR615 runs through a 45-second UV decontamination cycle. UV is the leading microbial sanitizing agent available. The process can be repeated, not only during room cleaning and turn-over, but as frequently as needed, even while the patient is in the room.

For Your Patients, Their Families and Your Staff

The KR615 allows hospitals to sanitize the devices most often handled by healthcare workers, patients and family members, helping prevent the spread of infection in and out of the hospital.

Decontaminate and Sanitize:

- | | |
|------------------------|---------------------------------|
| • Stethoscopes | • Laryngoscope Handles |
| • Blood Pressure Cuffs | • Blood Glucose Meters |
| • Nurse Calls | • Electric Thermometers |
| • Call Cords | • Oximeter Sensors |
| • TV Remote Controls | • Vacuum Regulators |
| • Pillow Speakers | • Ultrasound Transducers |
| • EKG Wires | • Cell Phones and Small Tablets |

“The KR615 is automatic, providing consistent results. It is simple to use, with no learning curve. It is less expensive than germicidal wipes, quicker than current solutions, inexpensive to buy and environmentally friendly.”



“More than 99.9% destruction of MRSA and C. diff microorganisms.”

Undeniable Long Term Savings

KR615 vs. Wipes and Disinfectants

The AUVS KR615 is an economical, easy to use system that generates no waste. Wipes and disinfectants, on the other hand, have a variety of drawbacks and are less effective.

Compare the KR615 to germicidal wipes and disinfectants:

Cost Effectiveness

Based on manufacturer’s recommended usage of one C. diff germicidal wipe per surface and assuming 10 wipes per day/per room, a hospital with an 85% occupancy will spend \$62,000 annually per each 200 beds. This is an ongoing expense, certain to increase as the cost of wipes increases. Additional costs include ordering, inbound shipping/receiving, storage and dumping.

The KR615 is a one-time cost: a bedside utility with no ongoing expenses. It is available at a price point that allows a unit in every patient room, ICU, OR, Treatment and ED bay. KR615 units placed throughout your facility will pay for themselves in 2.5 to 5 years depending on your current usage of C. diff wipes and your projected incidence of HAI without the KR615.

Efficiency

Wipes and disinfectants require 3 – 5 minutes to sanitize C. diff with a kill rate dependent on the effectiveness of the individual healthcare worker, making results inconsistent and unpredictable.

Third party laboratory tests have shown that the KR615 provides more than 99.9% destruction of MRSA and C. diff microorganisms.

Green and Sustainable

Odors and Corrosives

Wipes with bleach solutions produce an offensive odor. Bleaches and similar disinfectants are hard on the skin and may be corrosive to medical equipment surfaces. Towels soaked in disinfectants present similar issues and have been cited by the FDA, CDC, EPA and OSHA as having the potential to pit and corrode electronic medical equipment.

The KR615 produces no offensive odors; results in no discomfort for healthcare workers and poses no threat to electronic medical equipment. Healthcare workers will gladly use the KR615.

Environmental Impact

A typical 200 bed hospital will send almost 5 truckloads of germicidal C. diff wipes to local landfills over a 10 year period.

The KR615 produces no ongoing waste. Landfill dumping and related costs are completely eliminated, making it not only a green solution but a completely sustainable environmental strategy.

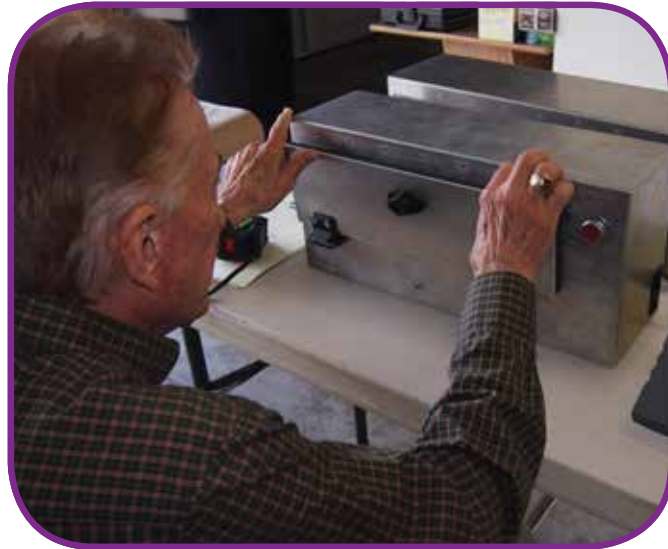


A Green Solution

No Ongoing Waste:
Dumping and Related
Costs Eliminated

A Sustainable
Environmental Strategy

AUVS: Science, Experience and Innovation



Drug-resistant superbugs associated with HAIs are killed by the destructive effects of the UV 254 nm germicidal wavelength used in the AUVS KR615 Sanitizer.

Dr. Wayne Clark, a recognized expert in germicidal UV applications, developed the KR615 specifically to address the spread of infection in healthcare environments.

He holds multiple patents and has been contracted by the Department of Advanced Research Projects Agency (DARPA) for the Pentagon's Immune Building program to address threats of bio-terrorism in air handlers. Along with his team of PHD's in electrical engineering, plasma physics and nuclear engineering, Dr. Clark developed the KR615 based on their work for the Department of Defense.

Dr. Clark's patented technology utilizes UV radiation to create a homogeneous flux of photons to sanitize items. Its innovative UV enhancement or "photon multiplication" technology permits the use of relatively low power UV sources to achieve high microbial kill levels. This technology permits the creation of very intense, highly uniform UV doses without increasing the input power.

In addition, AUVS' reflective cavity technology is designed to assure that the UV energy reflects to every location in the cavity from every direction.

The system is set for a 45-second cycle. At that duration, the KR615 effectively destroys one of the most problematic contaminants - C. diff spores.

KR615 Operating Instructions

Warnings

- Read and save all notices, warnings and safety instructions received with equipment.
- Avoid exposure to direct or strongly reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.
- Always disconnect power to the equipment and unplug, before performing any service or maintenance.
- Do not operate without proper electrical ground.
- Intended for indoor use only.
- Do not alter the construction or design. Do not remove safety labels.
- Do not use equipment for other than its intended purpose.
- Do not operate equipment if the power cord and/or plug are damaged, or if any other damage to the unit is visible or suspected.
- Utility power must match power requirements listed on the unit label.
- Equipment should be protected from the elements and from temperatures below freezing.
- Do not place liquids in or on top of the unit.
- LAMPS CONTAINS MERCURY, FEP encapsulation is employed to prevent breakage. During disposal, however, current laws should be adhered to. Visit www.lamprecycle.org.

Warranty

- AUVS Warrants the KR615 for one year for parts and labor.
- If KR615 fails to operate call 716-525-2127, for a Return Authorization (RA). Do not ship unit back without RA.
- Hospital is responsible for unit installation. AUVS will provide an installation kit for specified manufacturer's rail or wall mount system at an extra charge. Call 716-525-2127.

Specifications

Overall Dimensions	Overall (9.75 x 20 x 7)
Enclosure Dimensions	Overall (4 x 15.5 x 6)
Weight	10 lbs.
Power	110V, AC
Bulb Life	16,000 hours = 50+ years under normal use
Decontamination	Greater than 99.9%



Operating Instructions

- 1) Clean item to be sanitized as per manufacturer's instructions.
- 2) Place item in the KR615 enclosure. For items with cords that must remain connected, thread the cord through the unit's flexible door gasket system.
- 3) Close the door securely and turn knob to lock.
- 4) Press the in ON button to begin the 45-second decontamination cycle. The LED indicator will illuminate indicating decontamination is in progress.
- 5) When the LED indicator turns off, remove the item and use as normal.

Note: Covered surfaces not contacted by the UV light will not be decontaminated.





Germicidal UV Enclosures for Healthcare

Filling the Gaps in Your Infection Prevention Protocol



The AUVS KR615 with a MRSA and C. diff kill rate greater than 99.9%



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Visit: www.AdvancedUVSystems.com



Robots: Decontaminate Empty Rooms Only



AUVS KR615:

Addresses cross contamination every day from Admittance through Patient Release – without disinfectant wipe-related issues



Cross contamination occurs through in-room surfaces and devices as well as medical and non-medical devices that move in and out of the patient room.