Kepri™ UVC Upper-Air Disinfection System

Safe & Effective UVC LED Light Source

Safe & Effective Room Air Disinfection

EXCELITAS
TECHNOLOGIES®

Kepri™ UVC Upper-Air Disinfection System

The Evolution of UVC Disinfection Technology

The LED-based Kepri™ UVC Upper-Air Disinfection System provides safe, effective, real-time disinfection of upper-level room air regardless of room occupancy. Kepri's potent UVC energy is effective against a wide range of pathogens including bacteria, mold and viruses such as those that cause COVID-19. The Kepri's truly unique design allows for safe and effective room air disinfection.

Natural convection within a room ensures proper air distribution into the UVC emission zone for thorough disinfection in 20 minutes to 99.9% (log 3).

Easy Installation

Weighing only 5.5 lbs (2.5 kg), the Kepri Upper-Air Disinfection System is easy to install using the adaptable mounting bracket with 110-240V wall plug/cable. The compact, low-profile design affords unassuming installation in a wide variety of spaces. It features **low noise** operation and a dust free optical chamber design to minimize maintenance requirements and ensure maximum UVC emission.

— UVC
— Presence
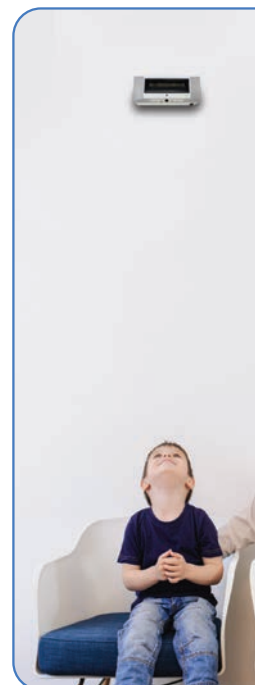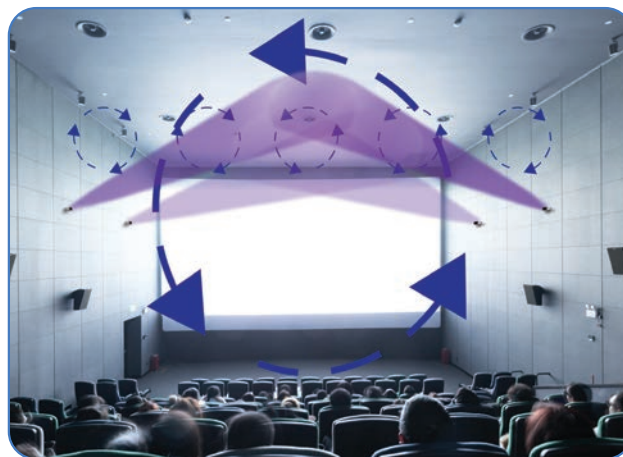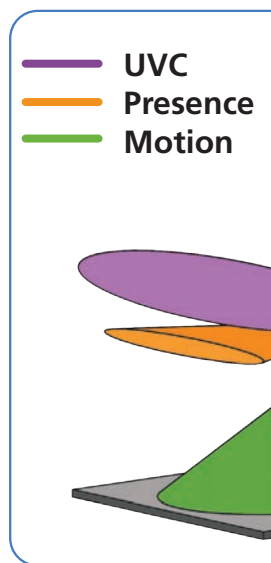— Motion

The Upper-Air Concept

The Kepri Disinfection System irradiates the upper atmosphere of a room with UVC light allowing for safe disinfection even when the room is occupied. As pathogens pass through the active UVC disinfection zone, the UVC light damages the pathogens' DNA/RNA, preventing its ability to replicate and effectively inactivating its ability to infect and spread.

This continuous disinfection offers higher levels of effectiveness when compared to other **traditional UV lamp-based** air germicidal treatments **at lower power.**

Occupant-Safe Operation

As safety is critical in UVC disinfection, Excelitas sets the industry standard with a three-tiered sensor monitoring system to ensure safe operation, even in fully occupied rooms.

- The **Tilt Sensor** will turn off the Kepri disinfection unit in the event the unit falls below zero degrees on the horizon. The tilt sensor is a safety feature to ensure no harmful UVC energy is emitted into the lower part of the room.

- **Presence sensor** detects anyone in the UVC central emission field (i.e. changing a lightbulb on a ladder) and immediately turns off the UVC emission until the emission field is clear.

- **Motion-Activated Occupancy Sensor and Switch** detects movement in the room and allows the user to select their individual operating preference using a three position selectable switch. The switch can be set in the following three modes.

  - Always on
  - Only on when the room is Occupied
  - Only on when the room is Unoccupied.
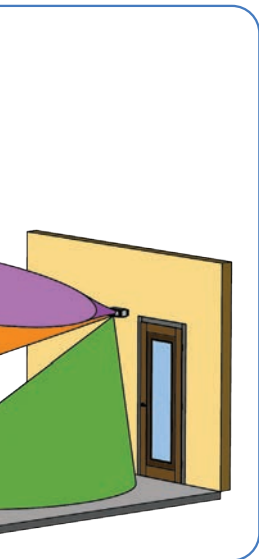
Additionally, because Kepri is LED-based, it disinfects without any potentially toxic Mercury (Hg) and without emitting any harmful or environmentally unfriendly ozone gas.

Excelitas meets a stringent UL-8802 standard which limits the amount of UVC energy into the lower part of the room, assuring safe operation.

Effective Pathogen Elimination

Third-party testing shows that Kepri reduces the airborne viral load by 99% in as little as 20 minutes. No matter if it is bacteria, mold, or virus, Kepri effectively reduces airborne pathogens. Please visit our website for additional documentation such as the user's manual and disinfection efficacy test report.

Features & Benefits

- Motion-Activated Occupancy Sensor & Switch offers 3 operating modes
- Integrated tilt sensor ensures safe upward UVC emission
- Presence sensor shuts off UVC if someone enters emission field
- Environmentally friendly... energy efficient with no Mercury or ozone emission
- Low maintenance
- Adjustable mounting bracket
- Replaceable LED light source

Effective Air Disinfection for

- Medical & dental facilities
- Long-term care facilities
- Classrooms & lecture halls
- Offices & conference rooms
- Restaurants & bars
- Theaters & casinos
- Airports & train stations
- Cruise ships & hotels
- Gyms & locker rooms
- Food processing plants
- Manufacturing facilities

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Parameter	Value	Units
Input voltage / frequency	90/240 [50/60]	VAC [Hz]
Weight (bracket and device)	5.5 (2.5)	lbs (kg)
Minimum mounting height*	90.5 (2.3)	in (m)
Power consumption	30	W
Wavelength (typical)	270	nm

Safety

CE Marked
CAN/CSA C22.2 No. 250.0-18_4th Ed.
UL 1598_4th Ed.-2018,
UL 8802_Issue 4_August-2021,
IEC 61020-1:2010/A1:2016,
EN 61010-1:2010/A1:2019, IEC
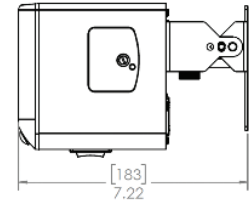62471:2006 (First Edition)

*Measured from the bottom of the bracket
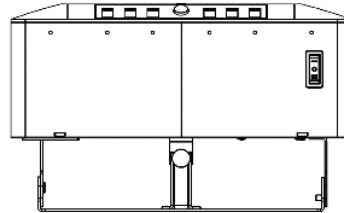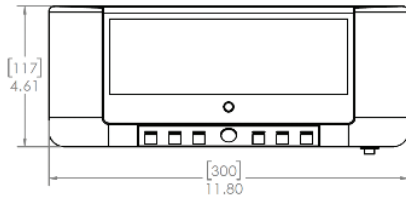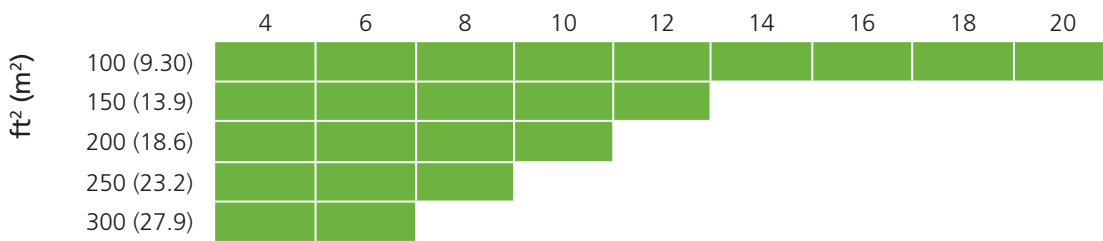
Warning: UVC ultraviolet rays are harmful to the eyes and skin. Avoid exposure to direct or reflected UVC rays.

Dimensions in inches (mm)   Part Number 010-00490R

ft² (m²) \ ACH	4	6	8	10	12	14	16	18	20
100 (9.30)	✓	✓	✓	✓	✓	✓	✓	✓	✓
150 (13.9)	✓	✓	✓	✓	✓				
200 (18.6)	✓	✓	✓	✓					
250 (23.2)	✓	✓	✓						
300 (27.9)	✓	✓							

Effective Air Exchanges per Hour (ACH)

1. Effective air exchanges per hour (ACH) for a room with a 10ft (3.0m) ceiling.
2. Values are extrapolated from Intertek test data dated Dec 17, 2021- available on our website. Original single point test measured a 99.9% reduction of Coliphage φX174 (typical single stranded virus) in 20 minutes. Effective air exchanges for other pathogens will differ.
3. The times given assume perfect air mixing within the space (i.e. mixing factor = 1). Disinfection rates are dependent on-air mixing. The following effective air exchange (ACH) data should only be used as a best-case guideline.
4. For more information, please refer to the CDC guidelines for Environmental Infection Control in Health-Care Facilities (2003) Appendix B and the CDC Upper-Room Ultraviolet Germicidal Irradiation (UVGI) web page.

About Excelitas Technologies

Excelitas Technologies® Corp. is a leading industrial technology manufacturer focused on delivering innovative, market-driven photonic solutions to meet the illumination, optical, optronic, sensing, detection and imaging needs of our OEM and end-user customers. Serving a vast array of applications across biomedical, scientific, semiconductor, industrial manufacturing, safety & security, consumer products, defense and aerospace sectors, Excelitas stands committed to enabling our customers' success in their many various end-markets. Our team consists of more than 7,500 professionals working across North America, Europe and Asia, to serve customers worldwide.

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