

LAMPS

LONG LIFE SPAN: Designed for up to 9,000 hours of use, minimizing replacements and maintenance downtime.

FLEXIBLE POWER OPTIONS: Available in multiple wattages and configurations to suit diverse HVAC systems and disinfection needs.

ENCAPSULAMP™ TECHNOLOGY: FEP-sleeved lamps prevent glass and mercury contamination, enhancing safety and durability.

LAMP SIZES: Available in lengths from 12” to 61” to accommodate a wide range of system dimensions.

WIDE COMPATIBILITY: Fits most standard UV-C fixtures, simplifying upgrades, retrofits, and maintenance processes.

CONSISTENT OUTPUT: Maintains stable UV-C performance throughout the lamp’s lifespan for reliable disinfection.



TIME TO GET TECHNICAL LAMPS



THE LIGHT THAT WORKS 24-7

UV-C light operates nonstop, disinfecting HVAC systems while optimizing energy efficiency.

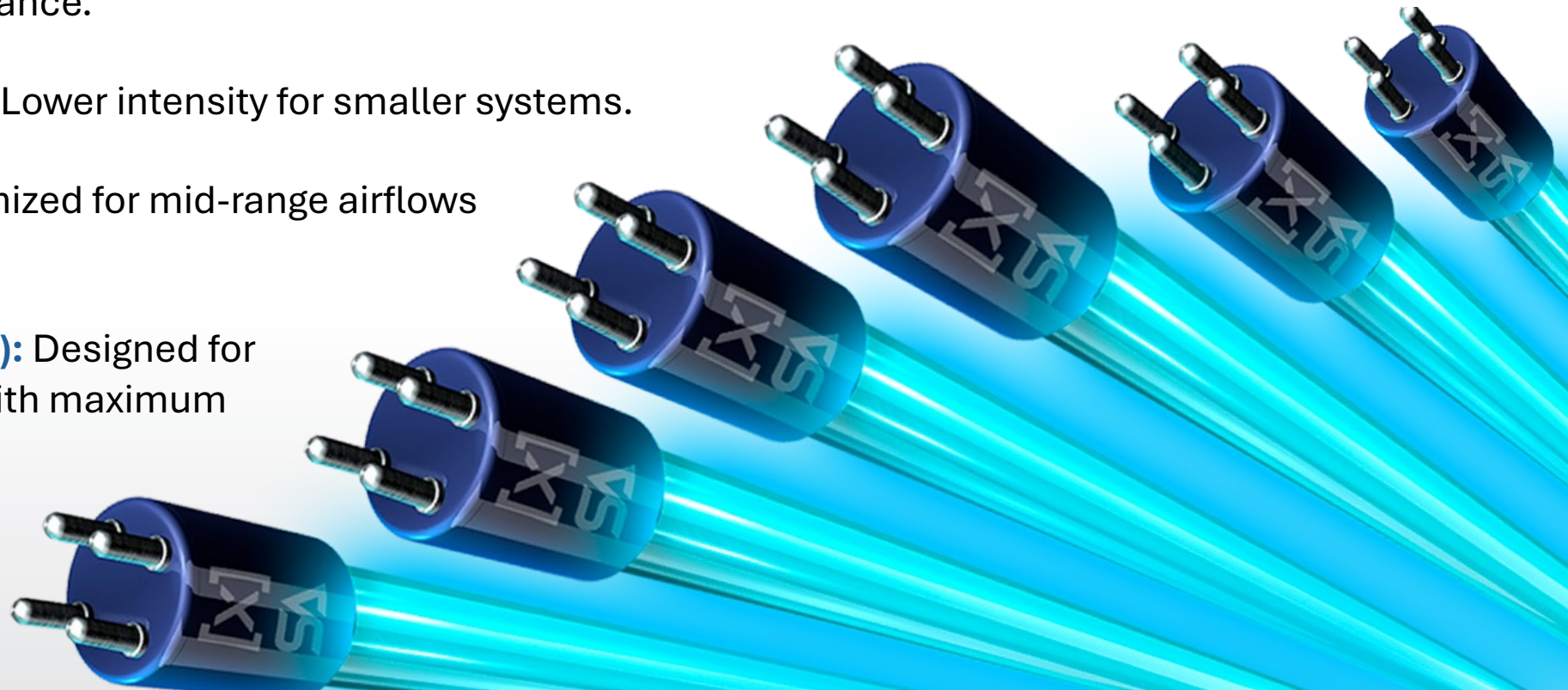
LAMP TYPES

Each UV-C lamp is engineered for a specific purpose, ensuring the ideal balance of performance and efficiency. Whether for high-demand systems or compact setups, every design is critical in maintaining HVAC performance.

STANDARD OUTPUT (SO): Lower intensity for smaller systems.

HIGH OUTPUT (HO): Optimized for mid-range airflows and larger surfaces.

VERY HIGH OUTPUT (VHO): Designed for high-demand conditions with maximum germicidal intensity.



TIME TO GET TECHNICAL

LAMPS

NO SHORTAGE OF LAMP TYPES:

GERMICIDAL LAMPS: Constructed from high-purity quartz or sodium-barium silicate glass for maximum UV-C transmittance at 253.7 nm, effectively disrupting microbial DNA.

FLOURESCENT LAMPS: Limited germicidal application due to phosphor coatings and impure glass, reducing UV-C output efficiency.

AMALGAM LAMPS: Advanced design for consistent UV-C output across variable temperatures, ideal for high-demand HVAC systems.

HOT CATHODE LAMPS: Feature tungsten filaments that heat to release electrons, igniting the mercury.

COLD CATHODE LAMPS: Unheated electrodes for lower power consumption, extended lifespan in smaller or intermittent applications.

UV-C

- Germicidal Lamps
- Disrupts DNA to inactivate microorganisms
- Mostly blocked by atmosphere

UV-B

- Fluorescence & Black Lights
- Limited sterilization potential
- Large amounts in natural daylight

UV-A

VISIBLE SPECTRUM

- Visible light from natural and artificial light sources
- Allows us to see everyday objects
- No germicidal

200 NM

300 NM

400 NM

500 NM

SHORTER WAVELENGTHS - HIGHER ENERGY

LONGER WAVELENGTHS - LOWER ENERGY

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EFFECTIVENESS FACTORS

LAMP PLACEMENT: Closer proximity to coils maximizes UV-C ensuring thorough microbial inactivation on critical surfaces.

AIR VELOCITY: High-speed airflow decreases UV-C exposure time, requiring higher lamp intensity or multi-lamp configurations for efficacy.

REFLECTIVITY: Surfaces like aluminum can reflect up to 75% of UV-C energy, enhancing irradiation in tight spaces and on complex surfaces.

ENVIRONMENTAL: Environmental: Humidity, temperature and air composition can affect UV-C output; systems must be designed to adapt to these variables.



IT JUST WORKS...

UV-C light at 253.7 nm disrupts DNA/RNA by forming thymine dimers, halting microbial replication and metabolism.

TIME TO GET TECHNICAL

LAMPS

OUR LAMP [x] FACTOR

ENCAPSULAMP™ TECHNOLOGY

SHATTER-RESISTANT COATING: FEP sleeved lamps contain glass that protects sensitive environments from contamination, reduces lamp hotspots, and enhances safety and overall durability.

DURABILITY: Designed for extreme conditions, maintaining UV-C output in high humidity and temperature fluctuations.

ECO-FRIENDLY COMPLIANCE: Certified UL-2998 zero-ozone emissions for sustainable, chemical-free operation.

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