(UV-C LED) water disinfection

The safest, most-reliable ultraviolet light-emitting diode (UV-C LED) water disinfection product on the planet.

2024-25

Product & Technology Portfolio

CANOPUS water technologies

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CANOPUS

water technologies

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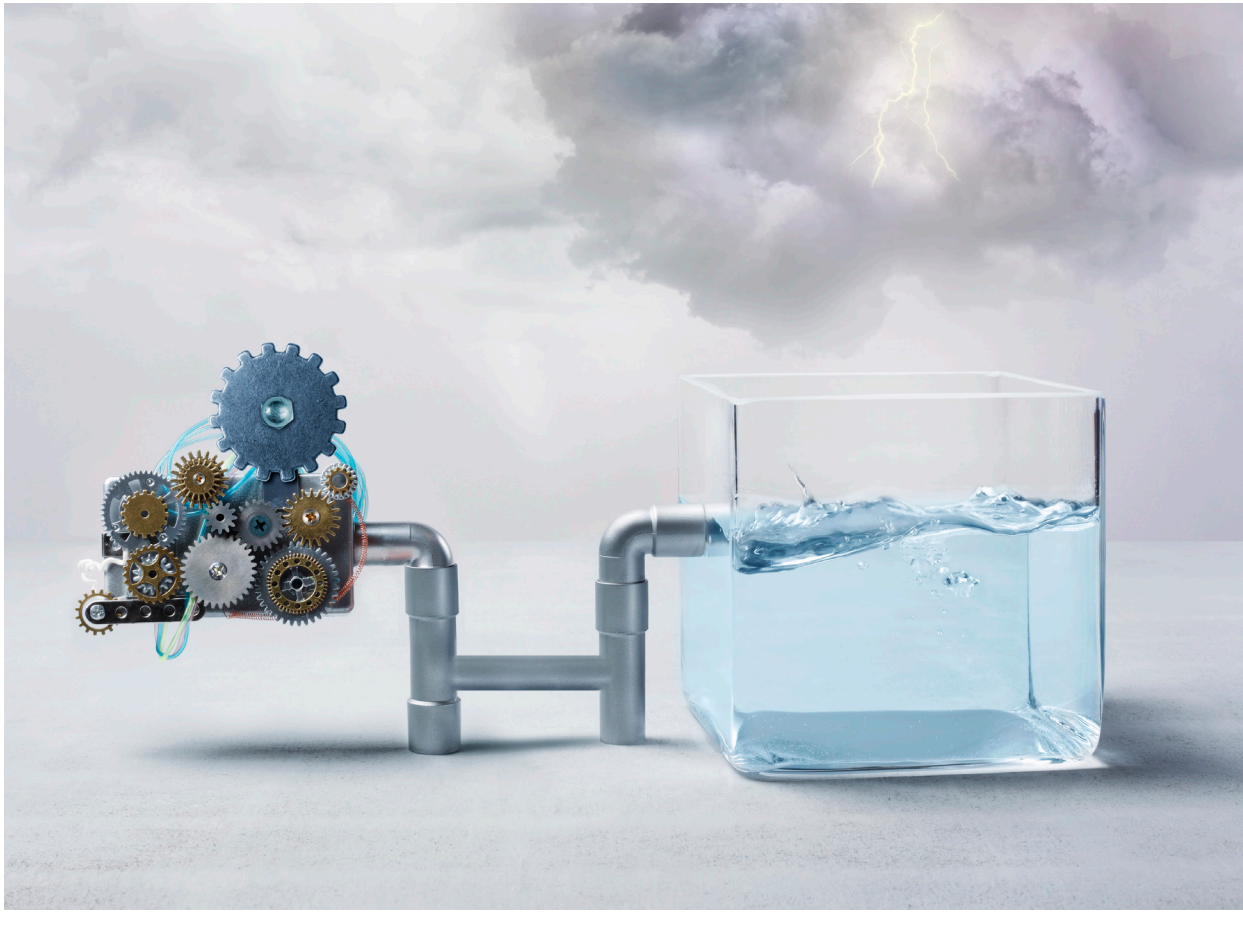
Water is the most essential commodity for human existence



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COMMITMENT TO EXCELLENCE

WHO WE ARE

Canopus Water Technologies Inc. specializes in the development and production of non-chemical water disinfection solutions tailored for residential, industrial, and commercial usage. Our dedicated team at Canopus employs a distinctive systems approach, addressing a market that needs innovation. Committed to upholding the highest standards of safety, reliability, and performance, Canopus products ensure unparalleled excellence.

OUR MISSION

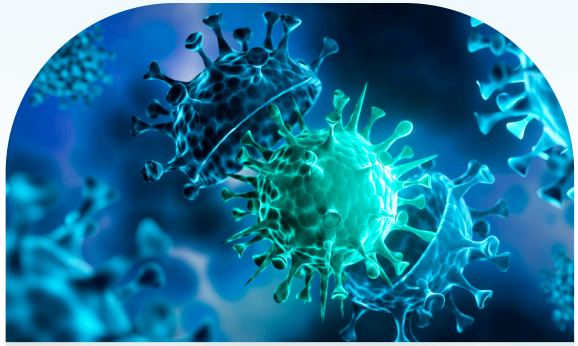
We are committed to make technology serve people and businesses by safely and non-chemically disinfecting water to the highest quality standards as listed by the EPA, NSF, and WQA.

CANOPUS water technologies

TREAT YOUR WATER FROM

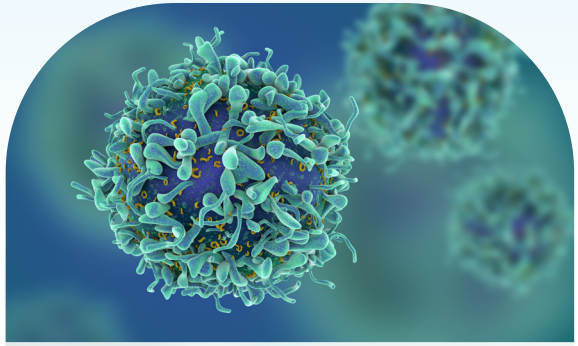
BACTERIA

Canopus UVC-LED products inactivate the most common waterborne bacteria including E-coli, Legionella, and Salmonella by at least 99.99%.



VIRUSES

Canopus UVC-LED products reduce waterborne viruses including Rotavirus, Hepatitis A, and Polio.



MICROBIAL CYSTS

Canopus UV effectively treats water from microbial cysts including Giardia, Cryptosporidium and Microsporidia.

As resources dwindle and infrastructure ages, along with a growing understanding of the risks associated with prolonged chlorine exposure, chemical-free water disinfection emerges as a critical priority in the water treatment process.

Removal of Total Coliform and E. coli

PRODUCT FEATURES & BENEFITS

- Safe and reliable high intensity UV-C LED to inactivate most harmful bacteria, viruses and parasites including: Cryptosporidium, Giardia, and E.Coli with no compromise.
- NO chemicals, NO mercury, NO high voltage, and all materials are RoHS compliant.
- Innovative reaction chamber to provide the highest possible UV dose - validated by an independent and industry recognized laboratory.
- Long life with low cost of ownership: NO yearly lamp replacement.
- Compact design for installation in tight spaces.
- Instant ON/OFF capability.
- Bluetooth enabled for ease of use and monitoring.
- Stable operation and independent temperature profile.

APPLICATION

- Point of entry (POE) and point of use (POU) residential: drinking, pools, and irrigation
- Commercial such as restaurants, health centers, pools and spas
- Medical, pharmaceutical, and Biotechnology
- Semiconductor
- Wastewater

COMMON USES FOR THE C-UV

- Water dispensers and sinks
- Ice machines
- Coffee machines
- Drinking fountains
- Reusable water bottle refill stations

POINT OF ENTRY AND POINT OF USE

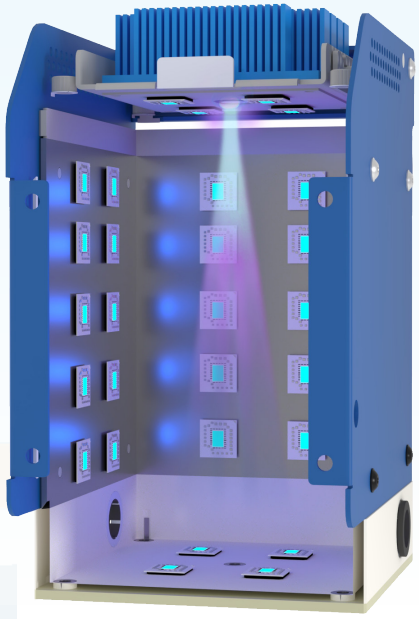
The C-UV200n is designed for both point of entry (POE) and point of use (POU) applications, making it the ideal water purification solution for residential homes as well as industries such as:

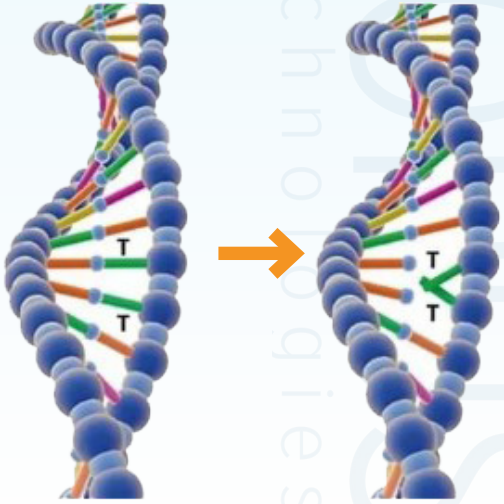
- Patient health
- Medical device manufacturing
- Semiconductor
- Pharmaceutical
- Biotechnology
- Wastewater

UV Water Sterilizer

INNOVATION IN WATER DISINFECTION

The C-UV200n is a safe, reliable, High performance water disinfection appliance that eradicates harmful bacteria, viruses and parasites. The C-UV200n uses no chemicals and no mercury in its disinfection process, and all components are compliant with the European Union's Restriction of Hazardous Substances Directive.





CANOPUS CONNECT

OUR PRODUCT`S MOBILE APP

- **With our easy-to-use App, Canopus Connect, you can control your WIFI enabled C-UV200n, C-UV200 , C-UV200+ and C-UV200u.**

- **You can also monitor the service hours of your device and know when the UVC-LEDs need to be replaced.**

- **Canopus Connect is available on the Google Play Store for Android and the Apple App Store for iOS.**

Download on the App Store

GET IT ON Google Play

Why Choose LED VS Mercury Lamp

Standard Mercury Lamp

No Mercury	X
No fouling	X
No High Voltage Ballast	X
Instant On/OFF	X
Energy Efficient	X
Compact	X
Rugged	X

VS

LED UV

No Mercury	✓
No fouling	✓
No High Voltage Ballast	✓
Instant On/OFF	✓
Energy Efficient	✓
Compact	✓
Rugged	✓

THE MARKETS

OUR SCALABLE PRODUCTS ADDRESS

RESIDENTIAL

POOL & SPA

MEDICAL

DESALINATION & MARINE

AGRICULTURAL & FARMING

WASTEWATER

DISASTER RELIEF

COMMERCIAL & HOTEL

FOOD & BEVERAGE

RESIDENTIAL

C-UV200f

ULTRAVIOLET LED

Maximum Flow Rate
1 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200p

ULTRAVIOLET LED

Maximum Flow Rate
2 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200u

ULTRAVIOLET LED

Maximum Flow Rate
10 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200f
ULTRAVIOLET LED

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UNDER THE SINK

Ensuring the purity of your drinking water is more crucial than ever. UV disinfection technology provides a powerful, and an efficent solution that fits neatly under your sink, transforming tap water into a safer, cleaner resource for your family.

How UV Disinfection Works:

UV disinfection involves using ultraviolet light to neutralize harmful microorganisms by damaging their DNA, effectively preventing them from reproducing and causing illness.

Benefits of Under-the-Sink UV Disinfection:

- **Continuous Protection:** Automatically disinfects water as it flows through your pipes, ensuring every drop from your faucet is clean.
- **Space-Saving Design:** Compact units fit discreetly under the sink, saving space and staying out of sight.
- **Versatile Compatibility:** Designed to function independently or alongside existing filtration and reverse osmosis systems, enhancing overall water quality without additional modifications.
- **Chemical-Free:** Unlike traditional water purification methods, UV disinfection does not use chemicals, leaving no taste or odor in your water.

AQUARIUM

Maintaining pristine water conditions in aquariums is crucial for the health of aquatic life and the overall aesthetic appeal. UV disinfection technology offers a powerful solution to improve water clarity and safety by effectively eliminating harmful pathogens and algae.

How UV Disinfection Works:

UV disinfection employs ultraviolet light to neutralize bacteria, viruses, and algae by damaging their DNA, preventing them from reproducing and causing disease or turbidity.

Benefits of UV Disinfection for Aquariums:

- **Crystal Clear Water:** UV treatment helps maintain clear and clean water, enhancing the visual appeal of the aquarium.

- **Disease Prevention:** By controlling pathogen levels, UV disinfection reduces the risk of disease outbreaks among fish and other aquatic organisms.

- **Algae Control:** UV light helps manage algae growth, preventing unsightly green water and maintaining a balanced ecosystem within the tank.

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C-UV200p
ULTRAVIOLET LED

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HOT TUBS & COLD PLUNGES

Maintaining pristine water quality is essential for the optimal enjoyment and safety of hot tubs and cold plunge pools. UV disinfection technology offers a superior, chemical-free solution to ensure clean, clear, and safe water for both relaxation and therapeutic benefits.

How UV Disinfection Works:

Maintaining pristine water quality is essential for the optimal enjoyment and safety of hot tubs and cold plunge pools. UV disinfection technology offers a superior, chemical-free solution to ensure clean, clear, and safe water for both relaxation and therapeutic benefits.

Benefits of UV Disinfection for Hot Tubs and Cold Plunges:

- **Superior Water Clarity:** UV disinfection helps keep the water crystal clear, enhancing the visual appeal and comfort of the bathing experience.

- **Reduced Chemical Use:** By effectively controlling microbial growth, UV reduces the need for chemicals like chlorine, which can cause skin irritation and unpleasant odors.

- **Health and Safety:** UV technology ensures the water is free from pathogens, safeguarding users against infections and promoting a healthier environment.

- **No heat transfer from the lamp to the water.**

COMMERCIAL

C-UV200n

ULTRAVIOLET LED

Maximum Flow Rate

6 GPM

UV Dose

Greater than 40 mj/cm2

Operating Pressure

10PSI - 100PSI

C-UV200U

ULTRAVIOLET LED

Maximum Flow Rate

10 GPM

UV Dose

Greater than 20 mj/cm2

Operating Pressure

10PSI - 100PSI

C-UV200+

ULTRAVIOLET LED

Maximum Flow Rate

30 GPM

UV Dose

Greater than 20 mj/cm2

Operating Pressure

10PSI - 100PSI

C-UV200u

ULTRAVIOLET LED

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HOSPITALITY

In the hospitality industry, maintaining the highest standards of cleanliness is crucial not only for compliance but also for ensuring guest satisfaction and trust. UV disinfection technology provides an innovative solution that significantly enhances cleanliness and safety in hospitality settings.

How UV Disinfection Works:

UV disinfection uses ultraviolet light to effectively kill or inactivate microorganisms by damaging their DNA or RNA.

Benefits of UV Disinfection in Hospitality:

- **Superior Sanitation:** UV disinfection provides a high level of sanitation, effectively reducing the spread of infectious diseases among guests and staff.

- **Odor and Allergen Control:** By breaking down microbial contaminants, UV systems help in reducing odors and allergens, which is essential for guest comfort and satisfaction.

- **Chemical-Free Cleaning**: Offers an eco-friendly Sanitation alternative that reduces the use of harsh chemicals, ensuring a safer environment for both guests and staff.

C-UV200+
ULTRAVIOLET LED

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POOL & SPA

UV disinfection technology is transforming pool and spa maintenance, offering a powerful yet simple solution to keep water crystal clear and free from harmful microorganisms. This technology enhances water quality while reducing the reliance on traditional chemicals.

How UV Disinfection Works:

UV disinfection uses ultraviolet light to neutralize bacteria, viruses, and other pathogens by damaging their DNA, making them harmless and unable to reproduce.

Benefits of UV Disinfection in Pool and Spa Management:

- **Enhanced Water Clarity:** UV treatment improves water transparency and reduces cloudiness, keeping pools and spas visually appealing.

- **Reduced Chemical Use:** By effectively controlling microbial growth, UV reduces the need for chlorine and other chemicals, minimizing irritation to skin and eyes and improving comfort for swimmers.

- **Prevents Chloramine Formation:** UV light breaks down chloramines, compounds that cause the characteristic “chlorine smell” and can trigger respiratory issues.

C-UV100

ULTRAVIOLET LED WATER DISINFECTION SYSTEM

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BUILDING AND HIGH - RISE

In today's urban landscapes, ensuring the safety and purity of water in buildings and high-rises is crucial. Traditional disinfection methods often fall short in addressing the unique challenges posed by these complex structures. UV LED disinfection offers an advanced, efficient, and reliable solution to maintain superior water quality across all levels.

Benefits of UV Disinfection in Building Environments

- **Safe Water Supply:** Ensures that water used in the building is free from harmful microorganisms, crucial for large buildings like hospitals, schools, and commercial complexes.
- **Chemical-Free Disinfection:** Offers a non-toxic alternative to chemical treatments, avoiding potential hazards associated with chemical use in closed environments.
- **Energy Efficiency:** UV systems are energy-efficient solutions that can be integrated into existing HVAC systems, helping to manage operating costs.

INDUSTRIAL & AGRICULTURE

C-UV200n

ULTRAVIOLET LED

Maximum Flow Rate
6 GPM

UV Dose
Greater than 40 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200U

ULTRAVIOLET LED

Maximum Flow Rate
10 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200

ULTRAVIOLET LED

Maximum Flow Rate
20 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200u

ULTRAVIOLET LED

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FACTORIES & INDUSTRIAL SETTINGS

UV LED disinfection utilizes high-intensity UV light to eliminate harmful microorganisms, including bacteria, viruses, and protozoa, in water. Unlike conventional UV lamps, UV LEDs are more energy-efficient, have a longer operational life, and are mercury-free, making them a safer and more sustainable choice for industrial applications. The UV light emitted by LEDs penetrates the cell walls of microorganisms, disrupting their DNA and rendering them inactive and non-infectious.

Benefits of UV Disinfection for Factories:

- **Chemical-Free Disinfection:** UV systems disinfect water without the addition of chemicals, preventing contamination of products and protecting equipment from corrosive substances.

- **Efficient Pathogen Elimination:** UV light effectively destroys harmful microorganisms, ensuring water used in production processes is safe and clean.

- **Cost-Effective Maintenance:** Compared to chemical treatment methods, UV systems typically require less maintenance and operational oversight, reducing long-term costs.

- **Eco-Friendly Solution:** By eliminating the need for chemical disinfectants, UV disinfection helps factories reduce their environmental footprint.

C-UV200

ULTRAVIOLET LED

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AGRICULTURE

In agriculture, water quality is a critical factor that directly impacts crop health, yield, and overall farm productivity. Traditional disinfection methods often struggle to meet the diverse needs of agricultural applications. UV LED disinfection presents a modern, efficient, and effective solution, ensuring that water used in farming is free from harmful microorganisms and safe for irrigation and livestock.

Benefits of UV Disinfection for Agriculture:

- **Pathogen Control:** Effectively destroys bacteria, viruses, and protozoa, preventing the spread of disease among crops and livestock.

- **Chemical-Free Treatment:** Offers a non-chemical approach to water purification, avoiding residues that could affect crop quality and soil health.

- **Water Conservation:** Allows for the safe reuse of water, essential in regions facing water scarcity and in sustainable agriculture practices.

- **Improved Crop Yield and Health:** By providing pathogen-free water, UV disinfection helps in promoting healthier plant growth and higher yields.

SPECIALITY

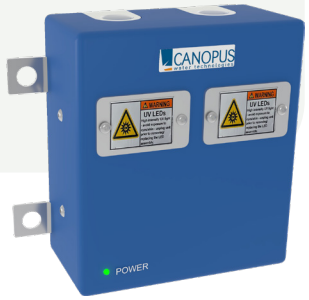
C-UV100p-Dual

DUAL ULTRAVIOLET LED

Maximum Flow Rate
1 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI



C-UV200p

ULTRAVIOLET LED

Maximum Flow Rate
2 GPM

UV Dose
Greater than 20 mj/cm2

Operating Pressure
10PSI - 100PSI

C-UV200n

ULTRAVIOLET LED

Maximum Flow Rate
6 GPM

UV Dose
Greater than 40 mj/cm2

Operating Pressure
10PSI - 100PSI

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FOOD & BEVERAGE

In the pursuit of higher standards of food safety and quality, the food and beverage industry is turning to advanced solutions like UV disinfection technology. This technology offers a non-chemical, efficient method to disinfect water, surfaces, and even air, which are critical in food processing environments.

How UV Disinfection Works:

UV disinfection utilizes ultraviolet light to inactivate microorganisms by damaging their DNA and RNA, rendering them unable to replicate and cause infection.

Benefits of UV Disinfection in Food and Beverage Industry:

- **Enhanced Food Safety:** Effectively reduces the risk of contamination by pathogens, ensuring safer food products for consumers.

- **Extended Shelf Life:** By controlling microbial growth, UV technology can extend the shelf life of products without the use of preservatives.

- **Eco-Friendly:** UV disinfection is a green technology that uses physical processes instead of chemicals, avoiding residue in food products and impact on the environment.

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EMERGENCY AND DISASTER

In emergency situations where health risks are elevated, UV disinfection technology serves as a critical tool for rapid and effective sterilization. This technology ensures safe environments intemporary shelters, emergency medical facilities, and during natural disaster responses.

How UV Disinfection Works:

UV disinfection uses ultraviolet light to deactivate the DNA of bacteria, viruses, and other pathogens, stopping them from multiplying and causing disease.

Benefits of UV Disinfection in Emergency Settings:

- **Immediate Effectiveness:** UV light starts disinfecting instantly, crucial in situations where time is of the essence and traditional methods are too slow.

- **Broad Spectrum Disinfection:** Capable of eliminating a wide range of pathogens, including resistant strains and newly emerging threats.

- **Safe and Non-Toxic:** Provides a chemical-free disinfection method that avoids the logistical challenges and health risks associated with hazardous chemical disinfectants.

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HOSPITAL SANITATION

The relentless challenge of maintaining sterile environments in healthcare settings is being met with innovative solutions such as UV disinfection technology. This powerful tool offers a reliable, chemical-free method to eliminate pathogens, helping to safeguard both patient and staff health.

How UV Disinfection Works:

UV disinfection technology utilizes ultraviolet light to destroy harmful microorganisms by disrupting their DNA and RNA, preventing them from reproducing and causing infections.

Key Benefits of UV Disinfection in Hospitals:

- **Infection Control:** Significantly reduces the incidence of hospital-acquired infections (HAIs) by efficiently eliminating pathogens from surfaces and air.

- **Chemical-Free Sanitization:** Offers a non-toxic alternative to chemical disinfectants, ensuring a safer environment for patients with respiratory issues or chemical sensitivities.

- **Rapid Disinfection:** UV systems can disinfect surfaces and rooms quickly, ideal for high-turnover areas such as operating rooms or patient wards.

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RVS AND CAMPERS

Traveling in an RV brings the comforts of home on the road, but ensuring a clean and safe water supply can be challenging. Traditional water purification methods often fall short in the compact and dynamic environment of an RV. This is where advanced LED UV disinfection technology shines. Compact, efficient, and chemical-free, LED UV systems provide a powerful solution to keep your RV's water supply free from harmful microorganisms and the ruggedness to overcome any bumps on the road.

How LED UV Disinfection Works

LED UV disinfection uses cutting-edge ultraviolet light technology to purify water. When water passes through the LED UV system, ultraviolet light penetrates the cells of bacteria, viruses, and other pathogens, disrupting their DNA and rendering them harmless. Unlike traditional UV systems, LED UV systems are more energy-efficient, have a longer lifespan, and start instantly without warm-up time. This makes them perfect for the variable and often constrained power conditions in RVs.

Key Benefits of LED UV Disinfection for RVs

- **Chemical-Free Process**
- **Low Maintenance Requirements**
- **Space Efficiency**
- **Energy Efficiency**
- **Immediate Treatment**
- **Improves Taste and Odor.**
- **Highly Reliable**

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YACHTS AND MARINE SETTINGS

Unique Water Purification Needs of Marine Environments

Marine environments, particularly on yachts, present unique challenges for water purification. Space and resources are often limited, making it crucial to have compact and efficient systems. Yachts need reliable water treatment solutions to ensure the safety and comfort of those on board. The presence of seawater, variable water sources, and the necessity to avoid harmful chemicals make traditional purification methods less ideal.

Highlighting the use of LED UV disinfection, we can emphasize its effectiveness in eliminating waterborne pathogens without relying on chemicals, which can be harmful to marine life. This method provides a safe, efficient, and eco-friendly solution for maintaining clean water on yachts.

Key Benefits of UV Disinfection for Yachts:

- **Chemical-Free Process**
- **Low Maintenance Requirements**
- **Space Efficiency**
- **Energy Efficiency**
- **Immediate Treatment**
- **Improves Taste and Odor**
- **Highly Reliable**

COMPARISON SHEET

Model Name	C-UV100p-Dual	C-UV100p2	C-UV200f	C-UV200p
Maximum Flow Rate	1 GPM Per Channel (4 lpm)	2 GPM (8 lpm)	1 GPM (4 lpm)	2 GPM (8 lpm)
Operating Pressure	10PSI - 100PSI	10PSI - 100PSI	10PSI - 100PSI	10PSI - 100PSI
UV Dose	Greater than 20 mj/cm2	Greater than 20 mj/cm2	Greater than 20 mj/cm2	Greater than 20 mj/cm2
Electrical	85 – 240 VAC/ 50-60Hz Power: 6W	85 – 240 VAC/ 50-60Hz Power: 3W	85 – 240 VAC/ 50-60Hz Power: 2.5W	85 – 240 VAC/ 50-60Hz Power: 2.5 W
Mechanical **(H)X (W) X (D)**	Dimensions: 4.5” X 4”X 2” Inlet/Outlet Ports: 1/4” FNPT Shipping Weight: 4lbs	Dimensions: 6.5” X 2 ”X 2” Inlet/Outlet Ports: 1/4” FNPT Shipping Weight: 2.5 lbs	Dimensions: 2.62” X 2”X 3.65” Inlet/Outlet Ports: 1/4” QC Shipping Weight: 2 lbs	Dimensions: 3.5” X 2” X 3.65” Inlet/Outlet Ports: Push-fit 1/4” QC Shipping Weight: 2 lbs
Environmental	Max water Temp: **40° C** Cooling: Natural convection, no fans or auxiliary cooling required	Max water Temp: **40° C** Cooling: Natural convection, no fans or auxiliary cooling required	Max water Temp: **40° C** Cooling: Natural convection, no fans or auxiliary cooling required	Max water Temp: **40° C** Cooling: Natural convection, no fans or auxiliary cooling required
Options	Control and diagnostics system with alarms when UV drops below a pre-set threshold and monitors the service hours of the system			

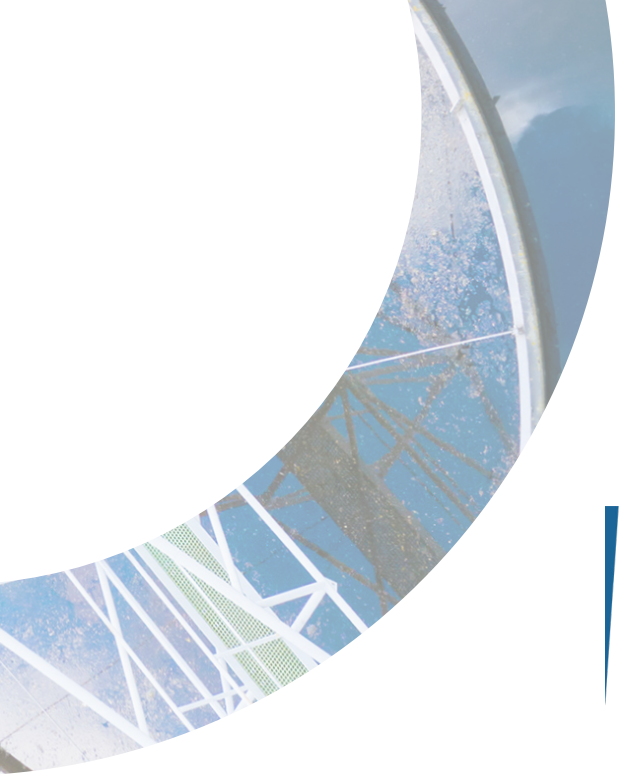
C-UV200n	C-UV200u	C-UV200 | C-UV200+	
6 GPM (24 lpm)	10 GPM (40 lpm)	20 GPM (80 lpm)	30 GPM (120 lpm)
10PSI - 100PSI	10PSI - 100PSI	10PSI - 100PSI	
Greater than 40 mj/cm2	Greater than 20 mj/cm2	Greater than 20 mj/cm2	
85 – 240 VAC/ 50-60Hz Power: 20 W	85 – 240 VAC/ 50-60Hz Power: 30 W	85 – 240 VAC/ 50-60Hz Power: 40 W	85 – 240 VAC/ 50-60Hz Power: 60 W
Dimensions: 7”X 4”X 5 1/4” Inlet/Outlet Ports: 1/2” QC Shipping Weight: 8 lbs	Dimensions: 10.5”x6.5”x7.5” Inlet/Outlet Ports: 3/4” or 1” FNPT Shipping Weight: 20 lbs	Dimensions: 10.5” X 14” X 7.5” Inlet/Outlet Ports: 1” or 1/4” FNPT Shipping Weight: 40 lbs	
Max water Temp: **40° C** Cooling: Natural convection, no fans or auxiliary cooling required	Maximum Water Temperature: **50° C** Cooling: Natural convection, no fans or auxiliary cooling required	Max water Temp: **50° C** Cooling: Natural convection, no fans or auxiliary cooling required	
Control and diagnostics system with alarms when UV drops below a pre-set threshold and monitors the service hours of the system			
WIFI Connectivity with UV detector readouts, Built-in on/off flow switch			

CANOPUS water technologies

MADE IN USA

CANOPUS

water technologies



CANOPUS
water technologies

Canopus Water Technologies Inc.

Innovation in Disinfection

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