

UV-C LED Water Disinfection Module

—MP-UVC-4LB



SGS



Key Features

- **Safe: Mercury-Free UV-C LED Technology** Eco-Friendly, non-toxic, and compliant with global regulations.
- **Effective:** Achieves up to **99.999% Pathogen Reduction** (5.0 log) against bacteria, viruses, and microbes.
- **Efficient:** Up to **90% energy savings** with low power operation, reducing costs.

Product Overview

- Designed for disinfection, the MP-UVC-4LB uses **mercury-free UV-C LEDs** (270-280 nm) to deliver **up to 99.999% pathogen reduction**, ensuring safe, clean water. Every module undergoes **100% efficacy and water tight testing**, ensuring quality and durability.



Effective Disinfection



Low Maintenance



100% Efficacy Test



Intelligent



Easy to Install



Eco-Friendly &
Energy-Efficient

Applications



Water Dispenser



Water Purifier



Bathroom Fixtures



Washing Machine



Dishwasher



Motorhome/Yacht



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Product Features



Safe & Eco-Friendly

- Mercury-free, no chemical residues, no secondary pollution.
- Low-carbon design: Uses far less power than mercury lamps, no wastewater.



Powerful Disinfection

- Advanced UV-C LED chips and compact optical design for **99.999% germicidal efficiency**.
- Long-lasting stability with **15,000 hours LED service life**.



Efficient & Cost-Effective

- Up to 90% energy savings compared to mercury-based systems.
- Minimal maintenance: No scale buildup, instant startup, no ballast required.
- Compact, easy-to-install design with configurable monitoring.



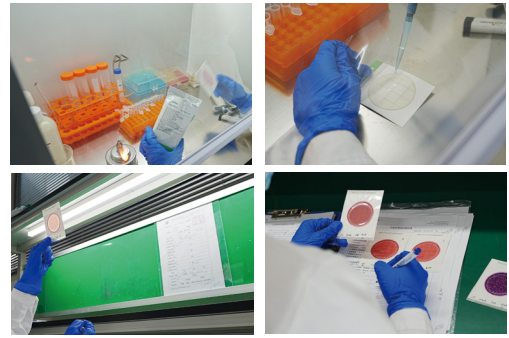
Intelligent Upgrades

- Integrated sensors for temperature, TDS, and water quality tracking.
- IoT-enabled for remote monitoring and smart water management.



Quality Assurance

- Complies with **ISO 9001/13485** standards.
- Rigorous pressure and tightness testing for reliability.



Control	5.7×10 ⁵ CFU/mL	3.6×10 ⁵ CFU/mL	3.1×10 ⁵ CFU/mL
	57CFU	36CFU	31CFU
Control Group Image(10,000 dilution)			
	0CFU	0CFU	0CFU
Test Group Image(Non Dilution)			
Test Summary	No E coli was detected in the experimental group samples	No E coli was detected in the experimental group samples	No E coli was detected in the experimental group samples

Version: A. 0			

Key Product Parameters

Parameters	
Model	MP-UVC-4LB
Rated Flow Rate	≤ 4 L/min
Power Adapter Input	DC 24V
Total Power	5 W
Power Supply Method	Terminal
UV-C LED Wavelength	270-280 nm
UV-C LED Lifetime	≥ 15,000 Hours
Disinfection Efficiency	Up to 99.999% or 5.0 Log Reduction (*)
Flow Switch	None
Water Pipe Interface Specification	1/4" Quick Connect
Inlet/Outlet Material	Stainless Steel
Maximum Inlet Pressure	0.4 MPa
Operating Temperature Range	4 °C to 60 °C
Product Dimensions	Φ25.4 mm * 130 mm
Exterior Material	Aluminum

(*) The actual disinfection efficiency subjects to the water quality.

The above test results are based on the following test conditions with test strain of Escherichia coli (8099), with 5×10^4 to 5×10^5 CFU/mL dechlorinated sterile test water.

pH	UV transmittance	Turbidity	Temperature	TDS
7.5 ± 0.5	98 ± 2%	< 1.0 NTU	20 ± 2.5°C (68 ± 5 °F)	200 to 500 mg/L