

UV-C LED Water Disinfection System

—IN-UVC-4LC



Compact Size · High Performance · Worry-Free Installation

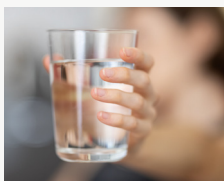
The UV-C LED Water Disinfection System features independently developed high-performance UV-C LED devices and a unique structure. It outperforms traditional mercury-lamp solutions with higher disinfection efficiency, better stability, and faster response. It redefines domestic and commercial water safety through technology – from efficient disinfection and durability to easy installation and smart energy saving. Ideal and safer (mercury-free) for under-sink use, it kills 99.999% of bacteria with no need for maintenance.

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

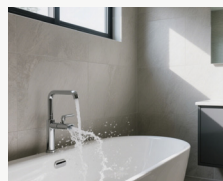
- Designed for disinfection, the IN-UVC-4LC uses **mercury-free UV-C LEDs** (270-280 nm) to deliver **up to 99.999% pathogen reduction**, ensuring safe, clean water. Every module undergoes **100% efficacy and water tight testing**, ensuring quality and durability.



Daily Drinking Water



Kitchen



Bathroom



Catering Industry

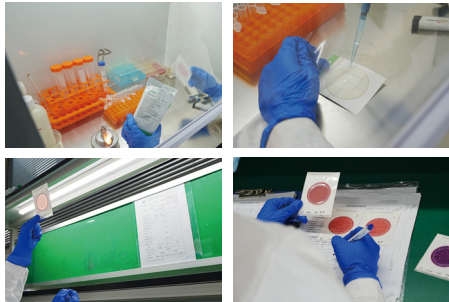


Food and Beverage Processing



Medical and Laboratory Water

100% Disinfection Efficacy Test



| | | | |
|--------------------------------------|--|--|--|
| Control | 5.7×10 ⁸ CFU/mL | 3.6×10 ⁸ CFU/mL | 3.1×10 ⁸ CFU/mL |
| Control Group Image(10,000 dilution) | | | |
| 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 |

| | | |
|-----------------------|--------------------------|--------------------|
| Influent spiked water | Effluent filtrated water | *Removal rate(s) % |
| >5×10 ⁸ | <1 | >99.999 |

| | |
|-----------------------|----------|
| Disinfection Rate (%) | >99.999% |
| First Test Value | >99.999% |
| Second Test Value | >99.999% |
| Third Test Value | >99.999% |

Version: A.0

Applications



Key Product Parameters

| Parameters | |
|------------------------------------|--|
| Model | IN-UVC-4LC |
| Rated Flow Rate | ≤ 4 L/min |
| Power Adapter Input | 100-240 V 50/60 Hz |
| Total Power | 5 W |
| Power Supply Method | Adapter |
| 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 | Integrated |
| Water Pipe Interface Specification | 1/4" Quick Connect |
| Inlet/Outlet Material | Food-Grade Plastic |
| Maximum Inlet Pressure | 0.4 MPa |
| Operating Temperature Range | 4 °C to 60 °C |
| Product Dimensions | Φ42 mm * 252 mm |
| Exterior Material | Stainless Steel |

(*) 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 × 10⁴ to 5 × 10⁸ 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 |