

# **LiquiTech® Copper-Silver Ionization System**

The LiquiTech® Copper-Silver Ionization System is an innovative, chemical-free disinfection solution for potable water systems. It's designed to quickly destroy Legionella and other waterborne pathogens and achieve long-term prevention without creating harmful byproducts or damaging plumbing.

## **Smart features**

**Self-controlled:** Modulates ion output based on current water conditions, ensuring ion concentrations align with water usage.

**Remotely monitored:** A remote monitoring system tracks and logs system data 24/7, providing real-time diagnostics, alarm notifications and resolutions, and documentation required for regulatory compliance.

# **Key benefits**

- » Effective: Outperforms chemical and oxidative alternatives in controlling pathogens.
- » Fast results: Provides complete system disinfection within 48 hours.
- » Lasting protection: Does not dissipate rapidly in hot water like chemicals.
- » Safe: Safe for humans, no harmful carcinogens, and no corrosion to plumbing.
- » Backed by science: Hundreds of research studies have identified copper-silver as the most effective disinfectant against Legionella, with additional studies showing its effectiveness against other pathogens.













## **How it works**

The technology includes flow cells equipped with copper and silver electrodes. As water passes through the flow cell chamber, a direct current is applied across the electrodes to introduce positively charged copper and silver ions into the water supply. These positively charged ions bond to the negatively charged receptors of microorganisms, disrupting the absorption of life-sustaining nutrients and ultimately causing cell death. Because the system is equipped with an electronic control system, precise ion levels are maintained throughout the plumbing system, providing residual protection and prevention of recontamination.

**Step 1:** Water passes through the flow cell chamber.

**Step 2:** A direct current is applied across the electrodes, creating positively charged ions.

**Step 3:** The ions seek out pathogens throughout the plumbing system, providing ongoing disinfection.

# **Technical specifications**

The flow cells, which house the copper silver electrodes, are manufactured using high-temperature, high-pressure, schedule 80 CPVC. Electrode spacers are fabricated from DuPont PBT polyester resin. For ease of installation, periodic cleaning, and inspection, the flow cells are supplied with LiquiTech quick-connect stainless steel clamps.

Flow cells are available in various sizes and configurations depending upon the application. Standard 150-pound flanges with 304 stainless steel nuts, bolts, and washers are also available. The entire system, electronic control unit, flow cells, and interconnecting wire are ETL (UL-979 Water Treatment Appliances; UL-508 Industrial Control Equipment; and UL-1081 Swimming Pool Pumps, Filters, and Chlorinators), and CSA C22.2 (No. 14 Industrial Control Equipment; No. 108 Liquid Pumps; and No. 68 Motor Operated Appliances) certified. All LiquiTech flow cell wetted parts are NSF Standard 61 certified.

### Materials

Schedule 80 CPVC (all models).

#### Installation

Vertically. Rack mount and preplumbed configurations available.

### Connection

Quick-connect, powder-coated 304 stainless steel clamp connections standard. Must be tightened to torque of 10 ft-lb. Torque wrench and 6mm hex bit provided with system purchase.