

UV-C Light for Cleanliness

What is Ultraviolet (UV)?

Ultraviolet light is a spectrum of electromagnetic radiation that is invisible to most humans. Ranging from UV-A to V-UV, it has a wide variety of uses in everyday life and scientific research. Short-wave UV, specifically UV-C, is invisible to humans and per the FDA can be used as a disinfectant for air, water, and nonporous surfaces. Independent testing has concluded that UV-C technology can render harmless 99.9999% of bacteria, 99.999% of viruses, and 99.9% of parasites, including cryptosporidium and giardia, by modifying the cells' functions to prevent it from multiplying.

How is UV-C Light Used in Water Coolers?

Modern point-of-use water coolers often use UV-C as an agent for keeping drinking water fresh and maintaining the cleanliness of the water dispenser. Culligan Quench filtered water coolers are equipped with either in-tank UV or point-of-dispense UV to maintain the cleanliness and great taste of the filtered water without adding any chemicals, like chlorine. Both in-tank UV and point-of-use UV will ensure your users are drinking freshly-filtered, clean, healthy drinking water, but there are some key differences to consider when determining which UV-C is right for your workplace.

In-Tank vs. Point-of-Dispense UV Light

There are some key differences to consider when determining which UV-C is the right choice for clients. While both In-Tank and Point-of-Dispense UV will help maintain drinking water's cleanliness and great taste, neither are a filtration technology nor cannot be relied upon if the water is microbiologically unsafe.

Culligan Quench's In-Tank LED UV is designed to help maintain the cleanliness of the filtered water, giving a clean, fresh taste. In-Tank LED UV is the most advanced UV technology and provides a more sustainable alternative to traditional halogen UV lamps. By comparison, the LED UV systems use less energy, emit less heat, are effective for more hours thus requiring less replacement, and waste and react less with other materials so the water taste is fresh and clean.

With Culligan Quench's Point-of-Dispense UV system, Firewall®, drinking water is moved through a double-helix quartz tube that wraps around a halogen UV bulb just prior to dispensing. The more powerful halogen UV lamp provides a final sanitization barrier before the drinking water is dispensed. This process can slow the time to dispense for up to 2 seconds

Our Machines with In-Tank UV

- Q3
- Q4
- Q12
- Q5 FS/CT
- Q8 FS/CT
- The 960/965
- The 960-16/965-16



Our Machines with Firewall® UV

- Q6 FS/CT
- Q9 FS/CT
- Q10 FS/CT



so the water can be properly exposed to the UV-C light. As with all halogen lightbulbs, the Firewall's UV light can give off heat and may affect the temperature of the dispensed drinking water.

Most drinking water supplies in our nation are safe from bacteria and viruses so the benefit of UV is for better tasting water.

Culligan Quench's In-Tank vs. Firewall[®] Point-of-Dispense UV

	In-Tank UV	Firewall [®] UV
Maintains Cleanliness of Filtered Water	✓	✓
Offers Peace of Mind	✓	✓
Continually Cycling On/Off	✓	
LED UV Light Bulb	✓	
Halogen UV Light Bulb		✓
Temperature of Dispensed Water May be Affected		✓
May Delay Dispensing		✓
Final Sanitization Barrier Before Dispensing		✓
Requires Less Energy	✓	
Longer Bulb Life	✓	
Dispenses if Bulb is Burned Out	✓	