

What Is Klaran UVC LED?

Klaran UVC LED is an in-line UVC LED disinfection module designed for point-of-dispense treatment of potable water in POU water coolers and dispensers. Powered by cutting-edge technology, Klaran UVC devices provide maximum protection and vastly outperform traditional UV lamps in safeguarding effectiveness.

Disinfection Performance

Klaran UVC LED devices emit UVC wavelengths ≈ 265 nm. Studies show that wavelengths in the $\sim 250\text{--}270$ nm range are typically the most efficient at inactivating bacteria, viruses, and protozoa in water. Test results show a 99.9% reduction of *Pseudomonas* and *E. coli*.

Whilst the disinfection performance is superior, it is worth noting that the information and performance data shown above are based on information provided by the manufacturer of Klaran, Crystal IS, and are subject to correct installation and operating conditions.

Operating Parameters

Klaran devices should be installed in-line and near the point of dispense.

- **Flow range:** approx 0.5 - 2.8 L/min
- **Minimum flow to activate UV:** 0.5 L/min
- **Maximum operating pressure:** 100 psi
- **Required UV transmittance:** $\geq 95\%$ /cm at 265 nm
- **Pre-filtration requirement:** ≥ 5 micron



Lifecycle & Indicators

Klaran devices require no additional maintenance, unlike conventional UV bulb systems with higher cost of ownership.

- Life expectancy: 36,000 litres at 2 L/min
- LED indicates when UVC disinfection is in progress
- LED indicates end of service life / replacement required



Environmental & Cost Profile

Klaran devices are mercury-free, chemical-free and effluent-free disinfection solutions. Why is this important? Unlike other disinfection systems, Klaran does not discharge reject water, meaning no water waste and no drain connection required.

To add to this, Klaran devices have an approximate operating cost of £0.0029 per litre at trade cost.

Installation

We offer a pre-installation service so you don't have to worry. However, you can also purchase a Klaran device on its own for self installation.

For more information, check out our video, contact a member of our team, or read more on our website.