

aquisense technologies



- Advanced UV-C LEDs
- Patented Reactor Design
- Replaceable UVinaire
- Chemical & Mercury Free

PearlAqua™ Water Treatment

www.aquisense.com

LEDs

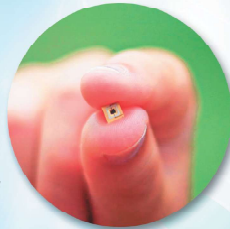


Wavelength Selectivity

UV-C LEDs are monochromatic and available in multiple wavelengths. This affords targeted performance for specific water-borne pathogens.



Temperature Independent
LEDs do not transfer heat to the water, thus limiting fouling and ensuring a constant UV output regardless of water temperature.



Low Power
Power consumption is reduced due to efficient reactor design and intermittent flow capabilities.

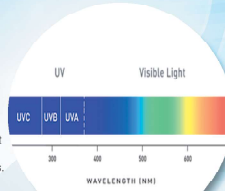


Chemical Free
UV provides physical treatment without the use of harmful chemicals.

UV



No Disinfection By-Products
No risk of harmful disinfection by-products being generated as with chemical treatment.



Low Maintenance
Robust technology that is easy to use and maintain.



Pathogen Inactivation
Effective against a wide range of water-borne pathogens, including chlorine resistant organisms such as Cryptosporidium and Giardia.



Mercury Free

Conventional UV lamps contain mercury, but UV LEDs are free of hazardous materials which eliminates risk of mercury spill due to lamp breakage.

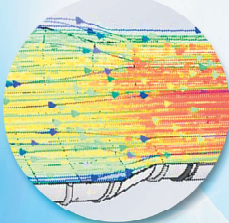
PearlAqua™ Evolution of Perfection

AquiSense Technologies combines over 50 years of UV disinfection expertise with 15 years of LED research to develop the PearlAqua. First introduced in 2012, PearlAqua is the world's first UV-C LED product designed for water disinfection.

Reactor



Patented Flow Design
Advanced design of the PearlAqua is based on years of UV-C LED research.



Cost Effective
Advanced reactor design using computational fluid dynamics and advanced materials greatly enhances overall system efficiency – higher flow rates at lower power.



Compact Footprint
High power density IMC-1 LEDs and advanced electronic controls allow for smaller footprint compared to traditional UV systems.



Instant On/Off
Intermittent flow friendly with remote start/stop. This saves energy and eliminates risk of overheating during flow events.

UVinaire™



Integrated Sensors
Optional UV intensity sensor available for real time monitoring of disinfection performance. Visual and electronic interface for indication of lamp operation and alarm conditions.



Replaceable
Easily replaced without special tools.



Data Logging
On board storage of lamp usage, temperature, on/off times, and intensity values.



Long Lamp Life
10,000-hour lamp life. Replacement intervals can be extended for several years due to its intermittent flow capability.



Safety Interlock
Safety switch ensures LEDs automatically turn off when UVinaire is removed.



Easy Installation
Plug-and-play with limited technical know-how. Fewer components, robust design and easy interface.



Unlimited Cycling
Lamp life is not affected by on/off cycles, allowing for unlimited lamp cycling. Gas discharge UV lamps can only be cycled a few times a day without impacting lamp life.

Applications



Transportation



Food/Beverage



Industrial



Life Sciences



Commercial/
Residential

PearlAqua Water Treatment



PearlAqua Micro

OVERVIEW

- POU system for integration into products and processes
- Flow rates up to 8 LPM
- Higher flow rates can be addressed with multiple units in parallel
- Disinfection performance third party validated

FEATURES

- Self-contained in one unit (reactor, light source, ballast, and controls)
- State of the art UV-C LEDs with lamp life up to 10,000 hours
- Highly configurable with water and electrical connections, cooling, and UV-C output power
- Optional UV Intensity sensor



PearlAqua

OVERVIEW

- Flagship plug & play device with robust construction
- Flow rates up to 14 LPM
- Higher flow rates can be addressed with multiple units in parallel
- Disinfection performance third party validated

FEATURES

- Self-contained in one unit (reactor, light source, ballast, and controls)
- State of the art UV-C LEDs with lamp life up to 10,000 hours
- Removable UVinair lamp module with safety interlock, heatsink, and cooling fan
- Stylish robust stainless steel shell
- External indicator lights for alarm conditions
- Digital and analog I/O
- Optional UV Intensity sensor



PearlAqua Deca

OVERVIEW

- World's first UV-C LED Point-of-Entry residential system
- Flow rates up to 45 LPM
- Low cost of ownership
- Disinfection performance third party validated

FEATURES

- Self-contained in one unit (reactor, light source, ballast, and controls)
- State of the art UV-C LEDs with a 5 year lamp replacement interval
- Instant on/off for intermittent flows
- Dynamic Power Control
- External indicator lights for alarm conditions
- Digital and analog I/O
- Standard UV Intensity monitoring