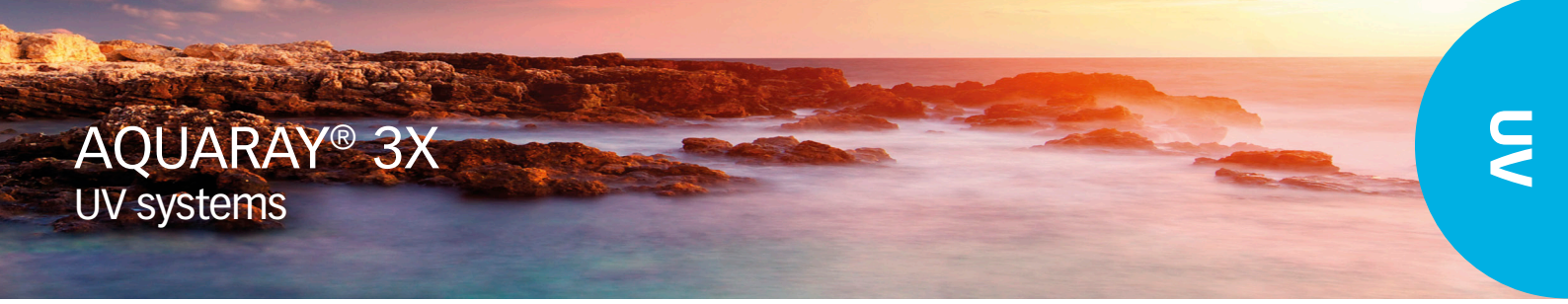


AQUARAY® 3X
UV systems

UV

The Aquaray® 3X Vertical Lamp System offers a high amount of UV output within a reduced footprint while providing the degree of disinfection required for even the most stringent of effluent criteria, such as Reuse applications.

APPLICATIONS

- **Wastewater Disinfection**
- **Wastewater Reuse**
- **CSO (Combined Sewer Overflow)**

MAIN CHARACTERISTICS

- **Low Pressure high output amalgam lamps**
- **Rated for outdoor/indoor use**
- **Vertical cross flow design**
- **Future upgrade flexibility**

MAIN FEATURES

- **Energy conservation**: With a combination of variable-output electronic ballasts, highly efficient amalgam lamps and row-by-row lamp switching increments, the Aquaray® 3X ensures energy conservation by dose pacing based on flow rate.
- **Validated performance**: The Aquaray® 3X has been third party validated and completed strict bioassay testing for disinfection and water reuse (Title 22 certified)
- **Easymaintenance**: Due to the vertical design, the Aquaray® 3X includes easy access to the UV lamps and quartz sleeves (no need to remove the UV module from channel).
- **Save space**: To minimize the footprint, the Aquaray® 3X utilizes Low Pressure High Output Amalgam lamps in a vertical design.

UV TECHNOLOGY : AQUARAY® 3X

The Aquaray® 3X High Output Vertical Lamp Ultraviolet Disinfection System has been designed to provide disinfection for larger wastewater plants within a small footprint.

The germicidal effect of the UV light inactivates most micro-organisms such as bacteria, viruses and parasites, while eliminating the need for dangerous chemicals.

The UV dose (UV intensity x contact time) defines the treatment efficiency which is provided by the unit. The effective dose applied depends on the UV transmittance of water to be treated as well as the proper hydraulic design of the UV system.

HOW IT WORKS

The low pressure high output amalgam lamps are powered by electronic ballasts to generate germicidal wavelengths of the UV spectrum. The lamps are inserted in quartz sleeves and isolated from the wastewater while delivering the required effluent inactivation.

UV sensors are installed to monitor the UV intensity from the lamps and guarantee that the proper intensity is delivered.

The periodic maintenance of the system has been made simple and efficient by allowing the replacement of the lamps without removal of the submerged UV modules from the channel.

PRODUCT HIGHLIGHTS

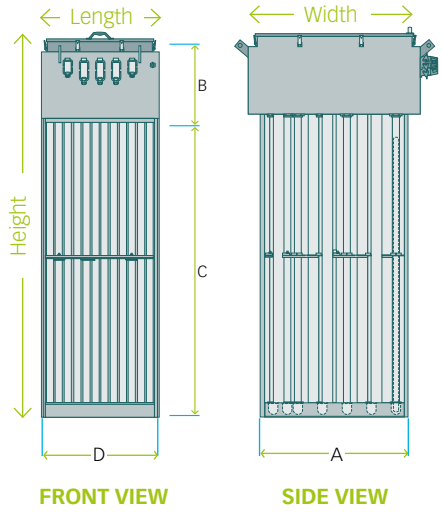
> High output vertical lamp
> Easy maintenance
> Small footprint
> Energy conservation
> No submerged connections
> Validated performances by third party (USEPA)
> Title 22 certified

OZONIA

OZONIA UV

TECHNICAL DATA	AQUARAY® 3X
Flow rate per module m³/h (Based on 30 mJ/cm2 and 65% UVT)	800
Number of Lamps per module	36
Lamp technology	Low pressure, high output amalgam
Power Consumption per lamp	400 W
Ballast type	Electronic variable output
Lamp configuration	vertical cross flow
Average lamp life	10 000 - 12 000 hours
Power supply	230V/3ph + N/50-60Hz
Module Protection Class	IP 54
Control Panel Protection Class	IP 55

MODEL	Reactor Dimensions (mm)			
	A	B	C	D
Aquaray® 3X	915	535	1880	735



MATERIALS

- 316 stainless steel
- UV resistant materials

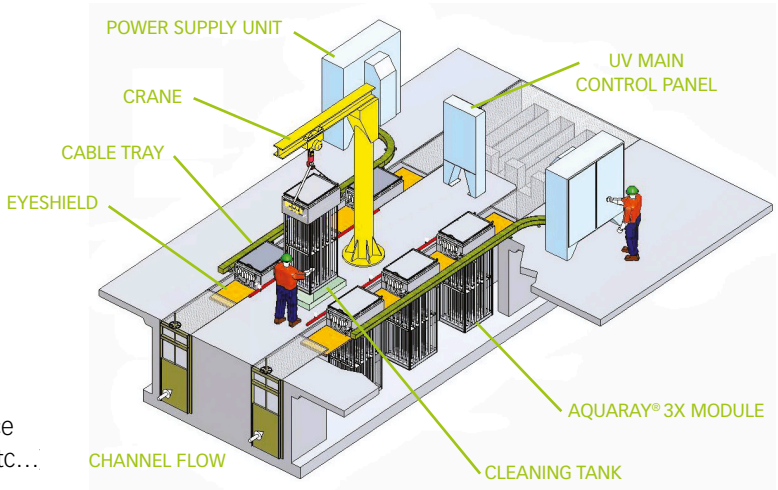
OPTIONS

- In-Channel Air Scrub
- UVT Analyzer
- Chemical cleaning system
- Lifting Apparatus

REMOTE CONTROL AND ALARMS

- SCADA communication capability
- Dose pacing via external flow signal and UV transmittance
- Various alarms (low UV intensity, failed adjacent lamps, etc…

TYPICAL INSTALLATION



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