TROJANUV®AOP
DEMONSTRATION SYSTEM

Piloting & Demonstration

TROJANUV

Water Confidence®

TROJAN UV® AOP

DEMONSTRATION SYSTEM

Introducing the TrojanUV AOP Demonstration System

A Complete Piloting & Demonstration Solution

The TrojanUV® AOP Demonstration System is a fully packaged UV AOP system with oxidant and instrumentation options specifically designed for demonstration, feasibility, and piloting work. Its compact and skidded design allows for easy transportation and positioning in tight spaces – fitting through standard doorways. It easily integrates into adjacent plant equipment for ultimate convenience and ensures you get results quickly.

The Trojan piloting team is available to help with every step of your piloting journey and we take pride in sharing our decades of best-in-class expertise with our customers.

Water Quality Data & Insights

The system allows for a complete understanding of your water data so you can build confidence in your proposed treatment train and confirm the performance of UV AOP on your target contaminants. Leverage Trojan's expertise gained from over 20 years of experience in advanced treatment by letting us help with site-specific needs and planning assessments; laboratory testing by our world-class scientists; and the use of our data collection and management systems to provide you with simplified and actionable data insights.

Operation & Maintenance Experience

The system enables operators to gain experience by operating and maintaining equipment that was designed using real-world best practices and full-scale components. The system uses the same full-sized components as the TrojanUVFlex®AOP – TrojanUV Solo Lamp® and Drivers, UVI sensors, wiping system, controls logic. This enables training on a system that helps you build the advanced water treatment operations staff you need for the future, and allowing that staff to gain the experience needed to qualify for their advanced water treatment operator certification.

Public Outreach Enablement

Designed to serve as a simplified tool to support public outreach and engagement, its compact design is easy to manoeuvre and has options for fully customizable graphics that are ready to show from any angle. Accelerate your plan for public demonstration with equipment designed with the public in mind.

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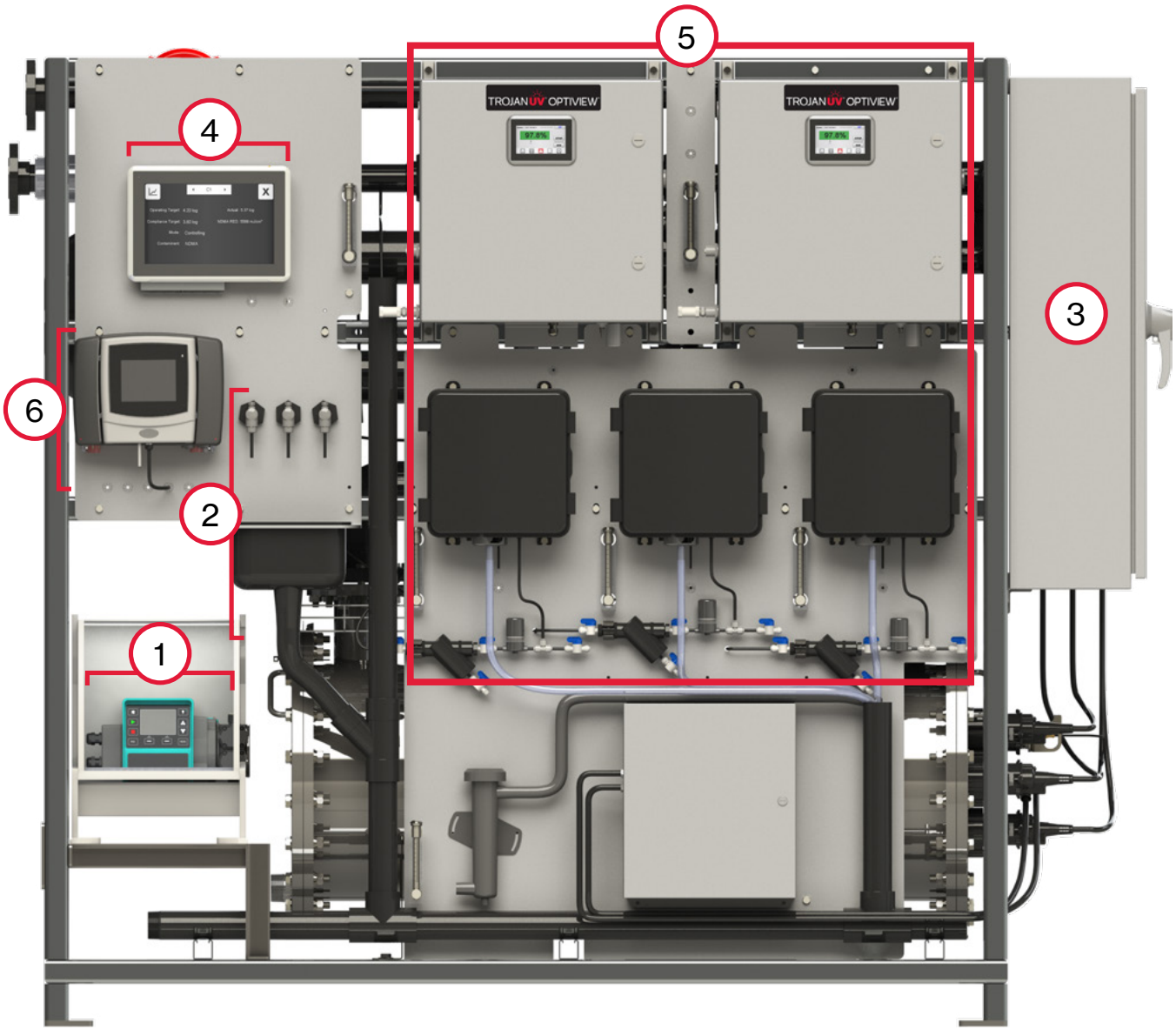
Key Features

1. **Peristaltic Pump**
   Pumps the appropriate volume of oxidant from stock solution into the water stream.
2. **Sample Collection Sink**
   Samples are conveniently collected from point of oxidant injection, point of entry into UV chamber, and after exiting the UV chamber.
3. **Control Power Panel (CPP)**
   Offers Trojan Technologies' one-of-a-kind automatic Active Control philosophy as well as manual operator control of the UV system and oxidant dose delivery.
4. **Human Machine Interface (HMI)**
   Displays real-time operating information about the entire system to the operator as well as a convenient single location for the operator to adjust treatment parameters.
5. **Monitoring Instrumentation**
   Online instrumentation enables monitoring of critical water characteristics like UV transmittance (UVT), free and total chlorine, and pH.
6. **Data Compiler**
   Collects and displays real-time data from instruments and communicates data to the SCC where UV dose and oxidant dose targets are determined and delivered.



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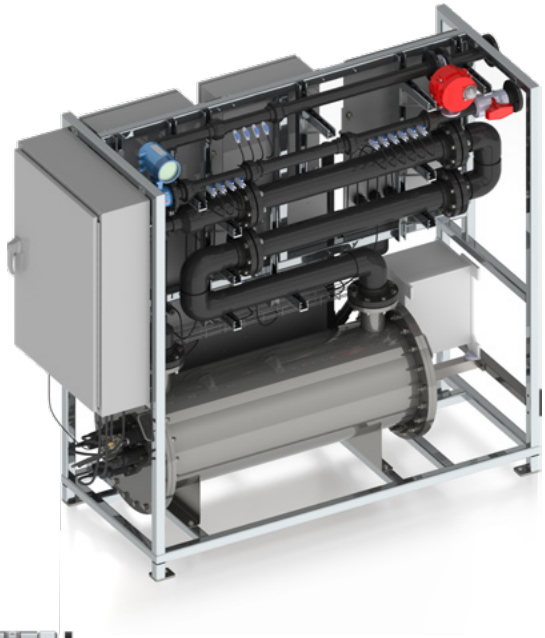
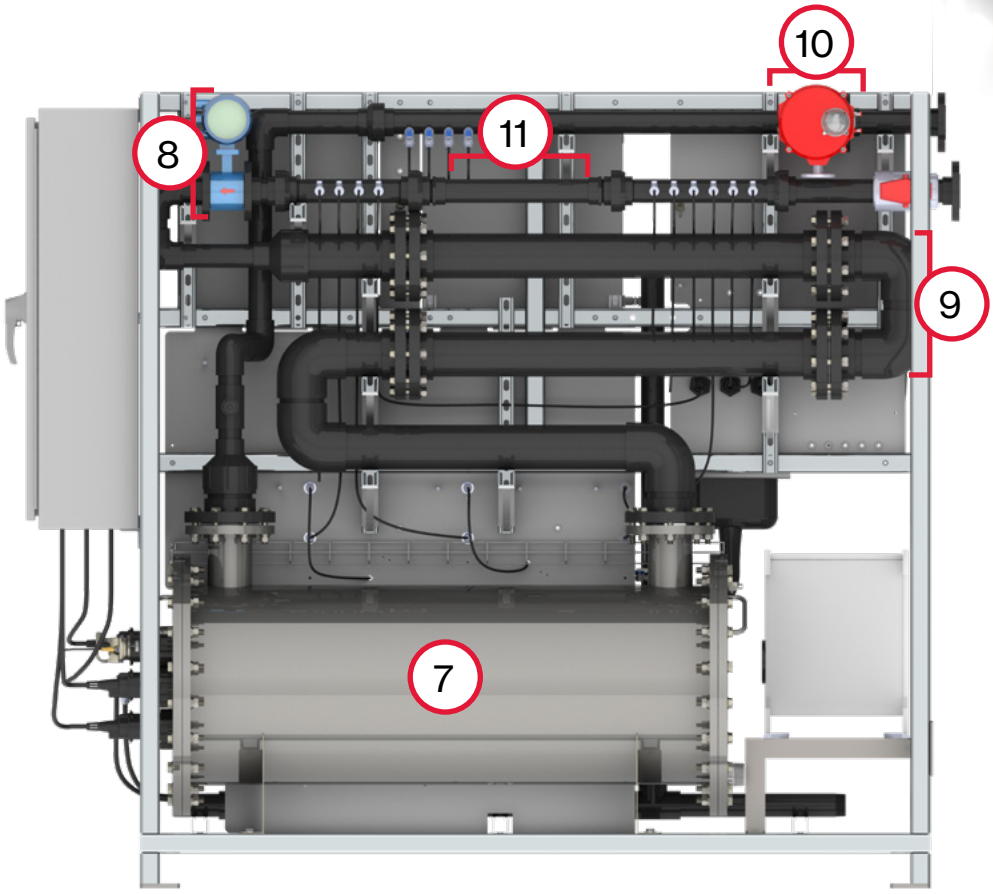
Key Features

7. **UV Chamber**
   Available in a 4–lamp chamber with optional sleeve wiping, this is the site where advanced oxidation treatment occurs. Also designed to meet USEPA standards for 6–log virus inactivation. UV lamps can be run in two configurations, with only two lamps on or all four lamps on. Lamps can be dimmed from 30% to 100% power (150W to 500W).
8. **Online Flow Meter**
   Measures and monitors the flow rate that goes into the system.
9. **Hydraulic Retention Time (HRT) Adjustment**
   Influent piping can be easily extended or shortened to vary the oxidant contact time before entry into UV chamber.
10. **Influent and Effluent Flange Connections**
    The electrically actuated modulating butterfly valve will automatically adjust to maintain a constant flow in the UV Chamber.
11. **Static Mixer**
    Ensures the injected oxidant is sufficiently mixed with the water before entry into the influent hydraulic system.





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System Specifications

System Characteristics	
Lamp Type	TrojanUV Solo Lamp – Low Pressure High Output
Lamp Power	500 Watts
Dimming	150W to 500W per lamp: 30% to 100% BPL in 0.5% increments
Lamp Driver	Electronic, variable power (30% to 100%)
Chamber Material	2205 duplex stainless steel
Dimensions (W × H × L)	34.5 in. × 78.5 in. × 93 in. (not including AC)
Weight	2300 lbs. dry
Installation Environment	1°C to 50°C indoors or outdoors (Air Conditioner required for ambient temps above 30°C. System should not be installed in the path of direct sunlight.)
Power Requirement	208Vac 34A or 240Vac (Split-Phase) 30A, 8.2kVA 60Hz
Flange Size	2 in. ANSI-DIN flange
Available Oxidants	Hydrogen Peroxide (H_2O_2) and Sodium Hypochlorite (NaOCl)
Sleeve Cleaning	Mechanical wiping (Optional)
UVT Range	80% to 98%
Flow Range	10 to 50 gpm
Opertating Pressure	60psi Max, -5psi min
TrojanUV Intelligence Suite	Built-in remote monitoring capability with Stream™

Instrumentation

Upstream Chemical Dosing	Product	Basic	Standard
UVT	TrojanUV – OptiView®	✔	1 device toggle 2 inputs
Total Chlorine	Hach – CL17sc	✖	✔
Dosing Pump		✔	✔
Influent Chemical Dosing, Before UV		**Basic**	**Standard**
UVT	TrojanUV – Optiview	✖	✔
Total Chlorine	Hach – CL17sc	✖	✔
Free Chlorine	Hach – CL17sc	✖	✔
pH	Hach – DPD1R1 Digital pH Sensor	✖	✔
Effluent UV		**Basic**	**Standard**
UVT	TrojanUV – OptiView	✖	1 device toggle 2 inputs

To learn more about the brands and affiliates of Trojan Technologies, please visit www.trojantechnologies.com

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