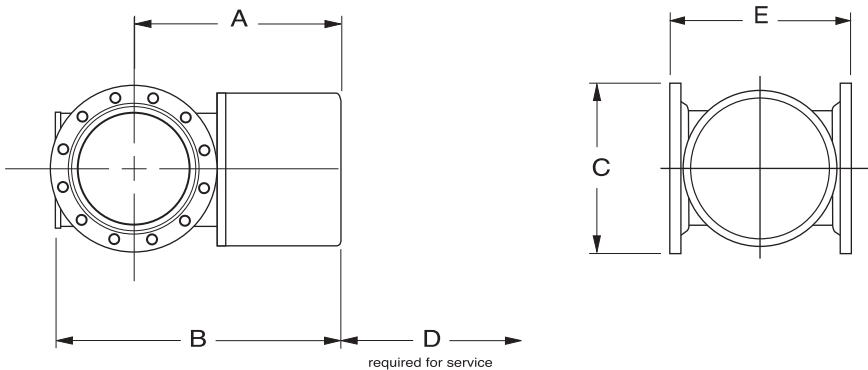


Trojan UVSwift™ Specifications

| System Type | UVSwift - 12" | UVSwift - 24" | UVSwift - 30" |
|---|--|--|---|
| Inlet/Outlet | 12" - 150# Flange or 300 mm DIN Flange | 24" - 150# Flange or 600 mm DIN Flange | 30" AWWA Flange or 800 mm DIN Flange |
| Flow Treated | Up to 3.6 MGD (567 m ³ /hr) | Up to 16 MGD (2500 m ³ /hr) | Up to 25 MGD (4000 m ³ /hr) |
| Number of Lamps | Up to 4 | Up to 8 | Up to 10 |
| Total Lamp Power | 5 - 12 kW | 40 - 75 kW | 50 - 120 kW |
| Power Supply | 240 or 480 V 60 Hz | 480 or 600 V 60 Hz | 480 or 600 V 60 Hz |
| Reactor Material | 316L SS | 316L SS | 316L SS |
| Approximate Reactor Dimensions | | | |
| A | 25" - 0.6 m | 34" - 0.9 m | 36" - 0.9 m |
| B | 36" - 0.9 m | 52" - 1.3 m | 66" - 1.7 m |
| C | 19" - 0.5 m | 32" - 0.8 m | 40" - 1.0 m |
| D | 15" - 0.4 m | 24" - 0.6 m | 48" - 1.2 m |
| E | 21" - 0.5 m | 35" - 0.9 m | 53" - 1.3 m |
| Approximate Control Power Panel Dimensions | | | |
| | 48" x 36" x 16" max 1.2 x 0.9 x 0.4 m max | 80" x 68" x 24" max 2.0 x 1.7 x 0.6 m max | 85" x 115" x 26" max 2.2 x 2.9 x 0.6 m max |
| Max System Pressure | 150 psi - 10 bar | 150 psi - 10 bar | 75 psi - 5 bar / 150 psi - 10 bar |
| Automatic Cleaning System | Optional | Optional | Optional |

Information is subject to change. Contact your Trojan Representative to confirm data and system availability.

Contact your Trojan Representative for specific sizing information.



Trojan UVSwift™ systems are, or soon will be, safeguarding drinking water in these locations

- North Battleford, SK
- Waterloo, ON
- North Bay, ON
- Seattle, WA
- Ontario, NY
- Lake Tahoe, CA
- High Prairie, AB
- Owego, NY
- Albany, NY
- Rose, NY
- Crested Butte, CO
- The Netherlands

Trojan – A Pioneer in UV Products and Service

- A Canadian-based, publicly traded, high technology environmental company
- ISO9001 Certified and operates internationally - with more than 300 employees worldwide
- Largest installed base of UV disinfection systems
- Recognized for its exceptional customer service and extensive support network
- 25 years of experience supplying ultraviolet disinfection systems for municipal water and wastewater, residential, industrial/commercial applications and environmental contaminant treatment



Trojan Technologies Inc.

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3020 Gore Road, London, Ontario, Canada N5V 4T7
Telephone: (519) 457-3400 Fax: (519) 457-3030

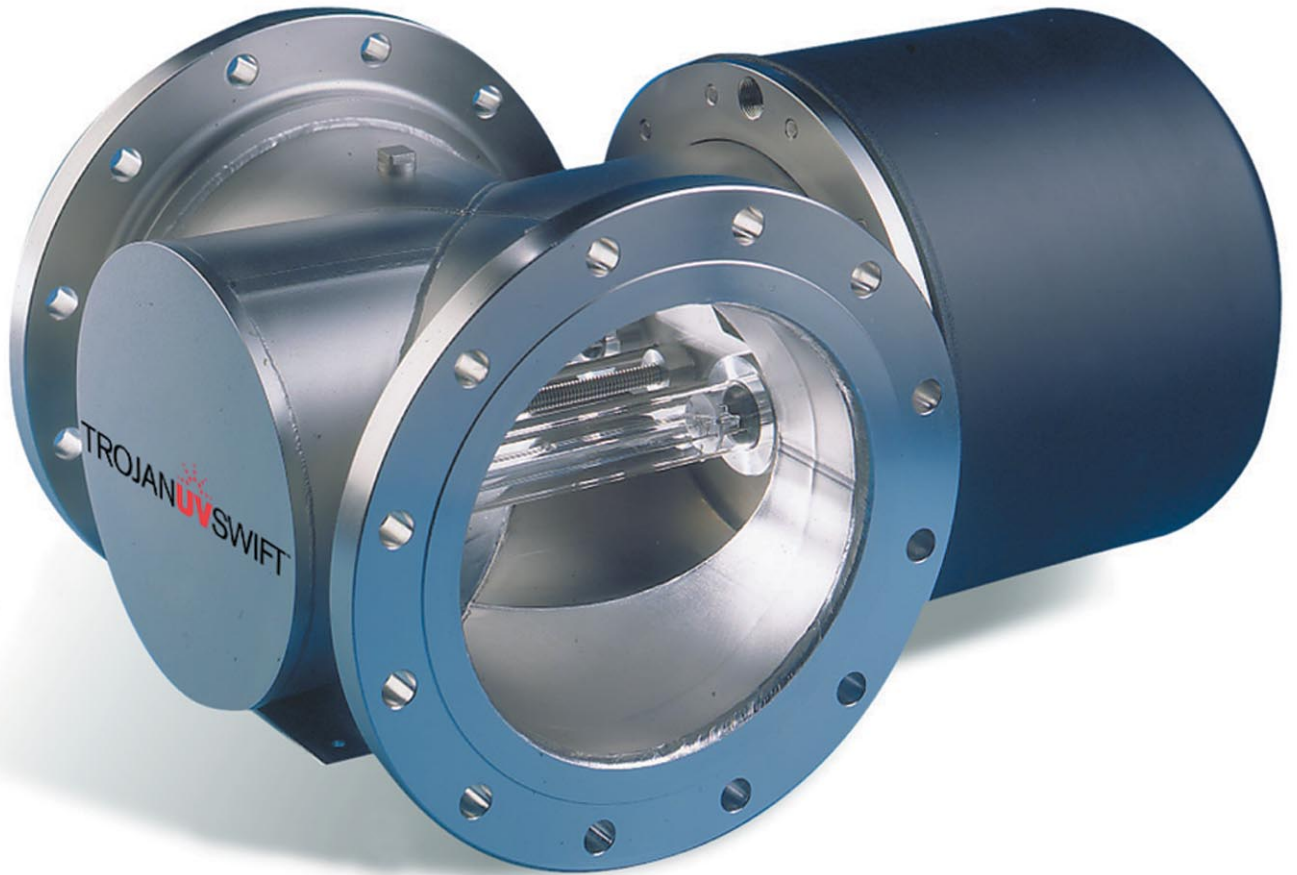
www.trojanuv.com

Trojan Technologies Inc. is a publicly traded company on the Toronto Stock Exchange under the symbol TUV.

Products in this brochure may be covered by one or more of the following patents:
Can. 2,160,729 U.S. 5,471,063
U.S. 5,504,335 U.S. 5,514,871
Other patents pending.

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TROJAN **UV** SWIFT™

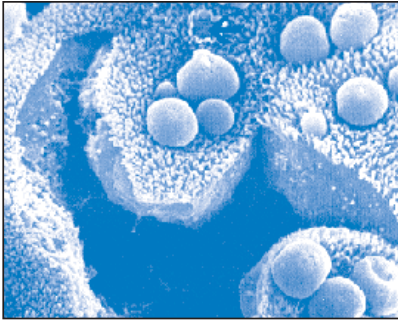


Municipal Drinking
Water Disinfection



Trojan Technologies

Why UV?



Cryptosporidium

UV is Well Suited to Meet Current and Future Regulatory Requirements

- *Crypto/Giardia* inactivation of up to 4-log at low doses
- UV produces no measurable change in disinfection by-products formed when chlorine or chloramines are used as a secondary disinfectant following UV
- UV has been proven effective for inactivating water-borne organisms including viruses, bacteria and protozoa

UV is the Most Cost-Effective Protection

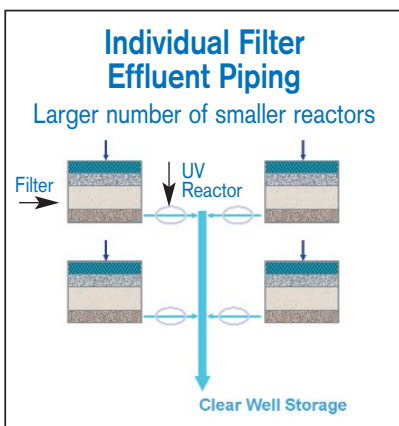
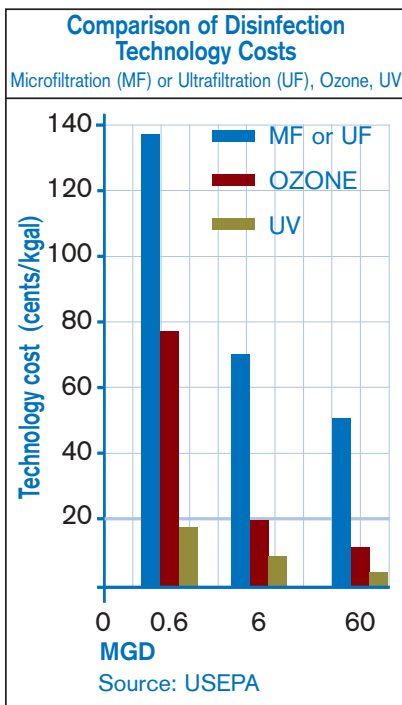
- UV offers municipalities proven protection at significantly lower capital costs than other technologies
- UV offers lower O&M costs and easier maintenance

Extremely Safe for Operators and the Public

- No dangerous chemicals to transport, store or handle
- UV doesn't require accident insurance, ventilation or storage requirements to mitigate the risk of gas leaks or liquid spills
- UV has no negative effect on water quality – even at high doses

Compact UV Reactors Can Fit into Existing Post-Filtration Pipe Galleries

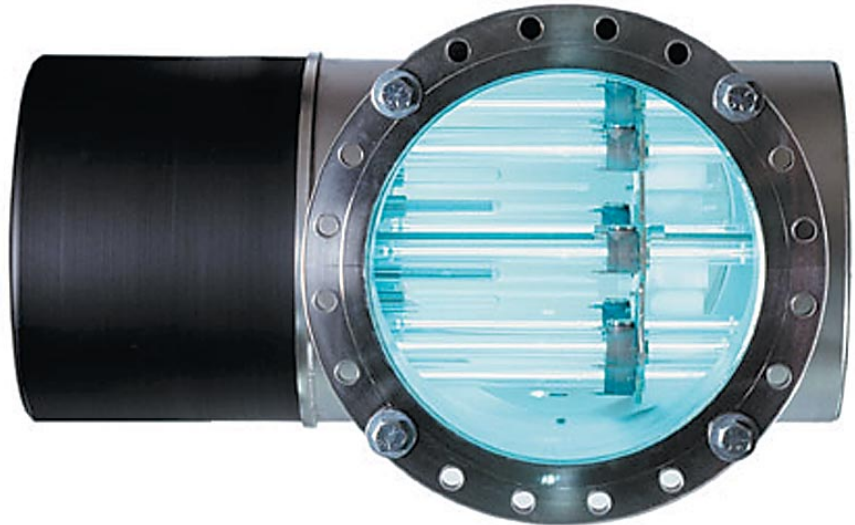
- UV offers lower cost pipe gallery installations that don't require the plant to shutdown during installation
- No requirement for a new building to house disinfection equipment
- More flexible, cost-effective redundancy and less impact to the plant when service is required



Design is well suited for space constrained locations such as retrofitting into individual filter applications

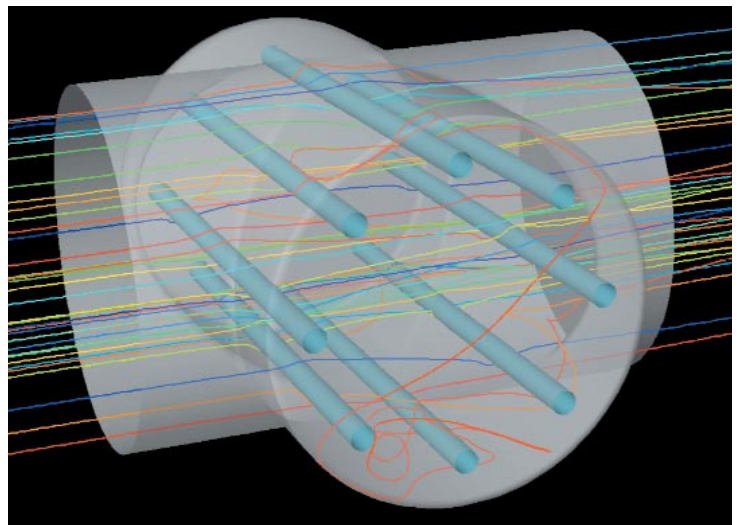
The Most Thoroughly Developed UV Disinfection System

- Trojan's vast experience in more than 3,000 municipal water and wastewater installations was utilized in the design
- Designed from the ground up with extensive input from Consulting Engineers, Plant Operators and Regulators
- Advanced engineering, including Computational Fluid Dynamics (CFD), was used extensively to develop the reactor and control system



Reactor Design with Robust Components

- Reactor design is based on extensive computer based analysis, CFD, and rigorous bioassay testing, which results in superior hydrodynamic performance and increased efficiency
- Reactor design eliminates potential short circuiting paths
- Reactor design minimizes head-loss through the system which significantly reduces pumping power costs
- Built for trouble-free UV disinfection from the highest quality components inside and out

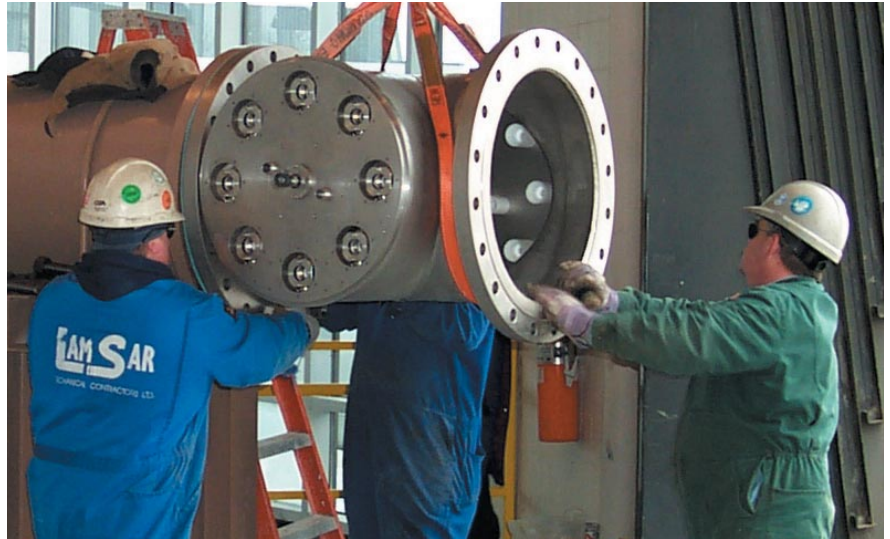


Why the Trojan UVSwift™?

Compact Reactor Footprint

- Benefits:**
- Superior reactor design and hydrodynamic performance leads to dose reliability eliminating any potential for short-circuiting through the reactor (public safety).
 - Less equipment results in lower capital installation, and maintenance costs.

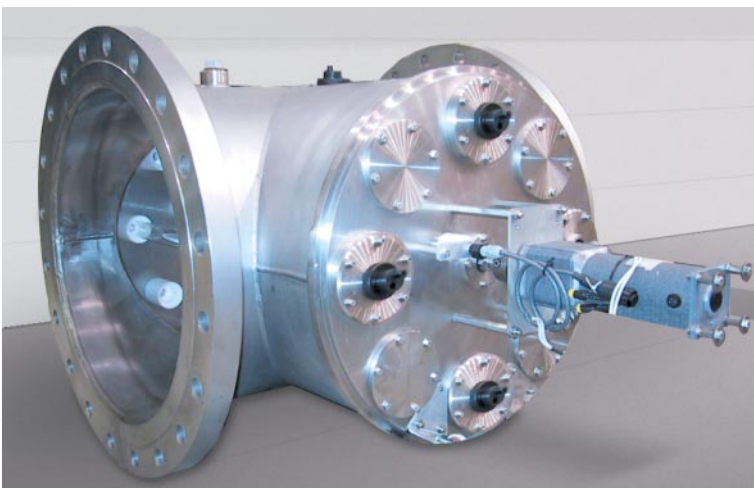
- Engineered to fit into restrictive pipe galleries by incorporating medium-pressure, high-intensity lamps, superior hydraulics and a minimal head-loss design
- New building not required to house UV equipment
- Full service access from only one side of the reactor for all maintenance, cleaning system upgrades and addition of extra lamps
- Design is well suited for retrofitting into individual filter applications



The compact design of the Trojan UVSwift™ can significantly reduce installation costs compared to low-pressure UV systems or other medium-pressure systems, which may require new building construction to accommodate much larger reactors

A Flexible Platform that Enables Upgrades

- Benefits:**
- Flexibility for upgrading provides peace of mind that the system can be retrofitted to address changing conditions.
 - Lower future capital expenses to meet regulatory changes or changes in water quality.



- Extra lamps can be added to meet new requirements for cost-effective increases in dose delivery or system redundancy
- Upgradeable to add ActiClean™, an automatic on-line cleaning system, in response to sleeve fouling or to reduce maintenance demands

The Trojan UVSwift™ reactor can be configured to accept additional lamps to allow cost-effective increases in dose or system redundancy

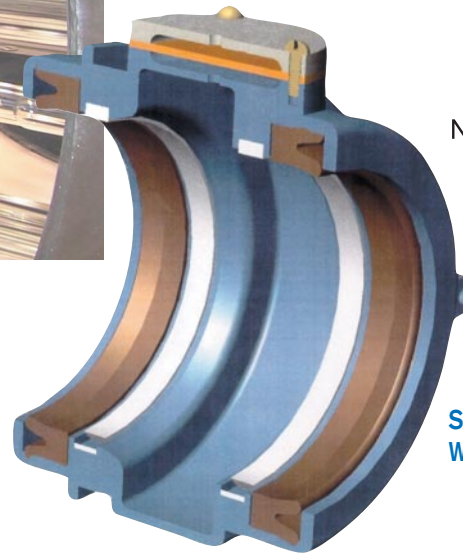
Why the Trojan UVSwift™?

Dual-Action Automatic Cleaning of the ActiClean™ System

- Benefits:
- Clean sleeves ensure more reliable delivery of dose.
 - Clean sensor sleeves ensure more reliable measurement of UV intensity.
 - Elimination of fouling reduces equipment sizing requirements and power consumption, as well as lowering O&M costs for manual cleaning.



- Chemical and mechanical cleaning ensures dose efficiency by eliminating fouling and residue
- Advanced wiper collar design houses Trojan ActiClean™ Gel, an NSF 60 approved food-grade cleaning agent for maximum cleaning effectiveness
- No operator involvement required



NSF International

Sleeve
Wiper Collar

Trojan's AccUVSensor™ Technology Maximizes Dose Accuracy

- Benefits:
- Robust design ensures system is delivering its target dose and providing public health protection.
 - Cleaning of sensor sleeve ensures accurate measurement of UV intensity is provided.
 - More reliable UV measurement allows accurate safety margin – reducing equipment and O&M costs.

- The new AccUVSensor™ is reliable, having minimal degradation even after prolonged UV exposure
- System accommodates one sensor per reactor or one sensor per lamp for maximum dose accuracy
- Automatic cleaning prevents fouling of the sleeves containing Trojan's photodiode sensor
- Sensor verification is made easy by a calibrated Trojan reference sensor that can be exchanged with each duty sensor



Why the Trojan UVSwift™?

Bioassay Validation

- Benefits:**
- Performance target data is generated for range of flows, UVTs and doses providing physical verification that the system will perform as expected (public safety).
 - Understanding of system performance results in less equipment (no need to oversize or overdose due to uncertainty in performance). Performance is predictable and consistent.

Validation that Exceeds and Redefines Industry Standards

- Trojan's exhaustive validation includes bioassay testing over a complete operating range of:
 - flow rates
 - UVT
 - doses
 - "lamp-out" conditions
 - multiple power levels
 - use of MS-2 microphage as Challenge Organism
 - generation of performance and head-loss curves
 - validation of CFD and Trojan UV Dosimeter™ models
- An Independent Consultant was retained as a third-party witness to supervise, monitor and verify all procedures
- An Independent CAEAL certified laboratory provided the Challenge Organism and performed all sample analyses

Trojan UVSwift™ Reactor

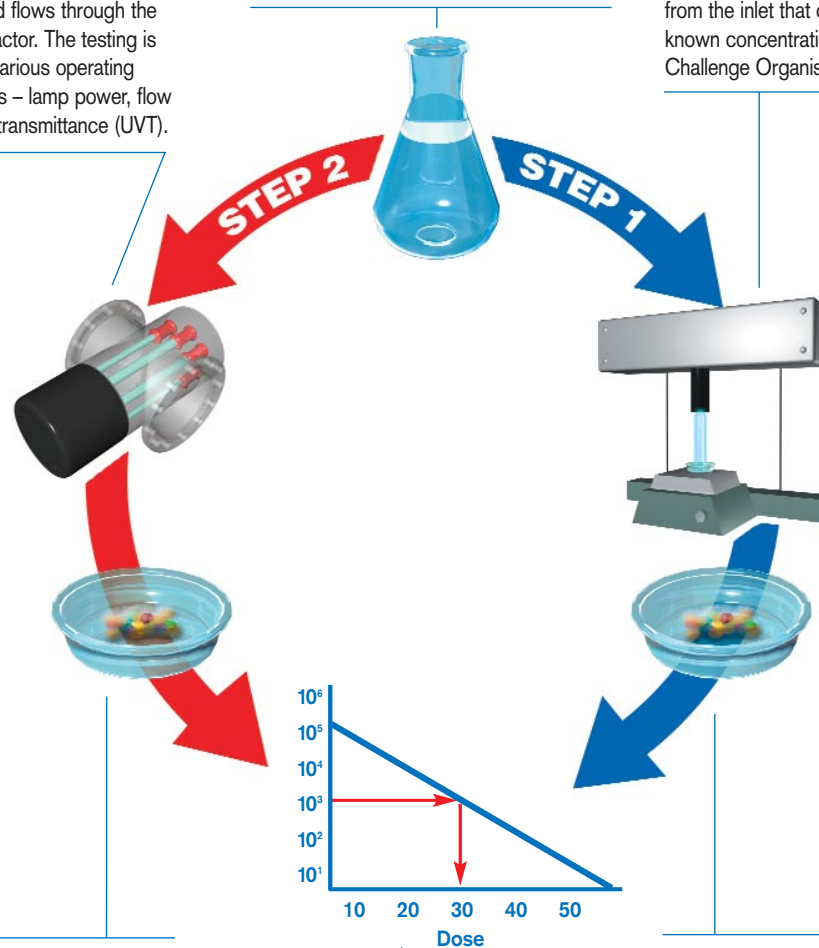
To validate the dose delivered by the reactor, a predetermined concentration of the Challenge Organism is added to the inlet water and flows through the active reactor. The testing is done at various operating conditions – lamp power, flow rate and transmittance (UVT).

Challenge Organism

Trojan's validation uses a Challenge Organism that is more resistant to UV to ensure inactivation of typical target pathogens.

Collimated Beam

This process uses specialized equipment to measure specific UV doses delivered to water samples from the inlet that contain known concentrations of the Challenge Organism.



Measured Inactivation of the Challenge Organism

Water samples that have passed through the reactor are measured to determine the degree of inactivation of the Challenge Organism and compared to the UV Dose Response established by the Collimated Beam process.

Determining Reactor Dose Delivery

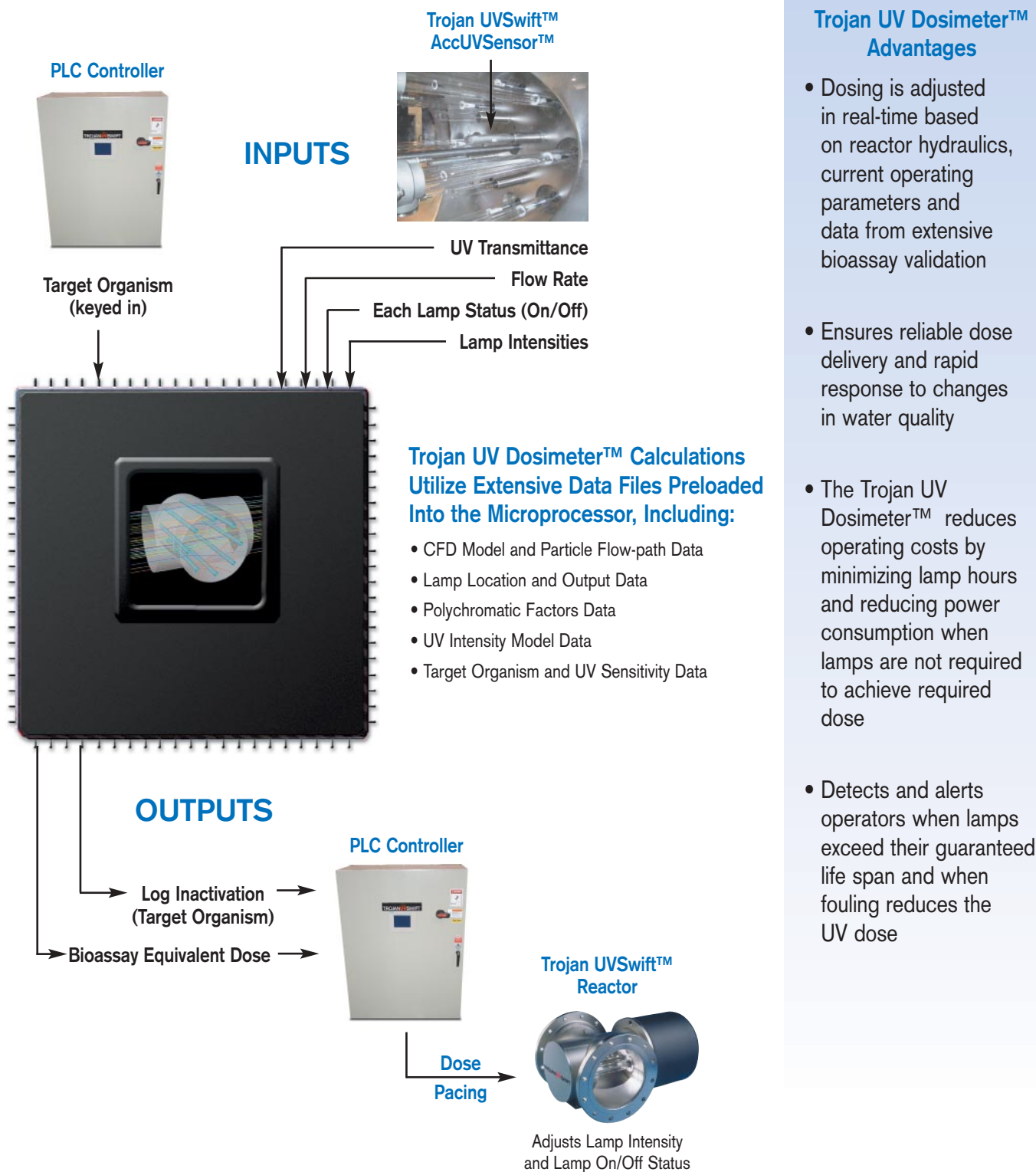
By plotting the reactor's Measured Inactivation of the Challenge Organism against the Dose Response Curve established by the Collimated Beam process, the dose delivered by the reactor can be accurately determined and validated for various operating conditions.

Determine UV Dose Response of the Challenge Organism

The inactivation of the Challenge Organism is measured and plotted for the different UV doses delivered by the Collimated Beam to establish the Dose Response of the Challenge Organism.

Reliable, Accurate Dose Delivery from the Trojan UV Dosimeter™

- Benefits:
- Demonstrated reliability eliminates the need for large safety margins in design which lowers capital and O&M costs.
 - Responds to changing water and equipment conditions.



Trojan UV Dosimeter™ Advantages

- Dosing is adjusted in real-time based on reactor hydraulics, current operating parameters and data from extensive bioassay validation
- Ensures reliable dose delivery and rapid response to changes in water quality
- The Trojan UV Dosimeter™ reduces operating costs by minimizing lamp hours and reducing power consumption when lamps are not required to achieve required dose
- Detects and alerts operators when lamps exceed their guaranteed life span and when fouling reduces the UV dose