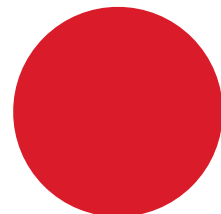
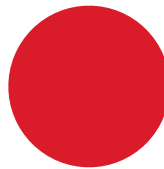


WASTEWATER DISINFECTION

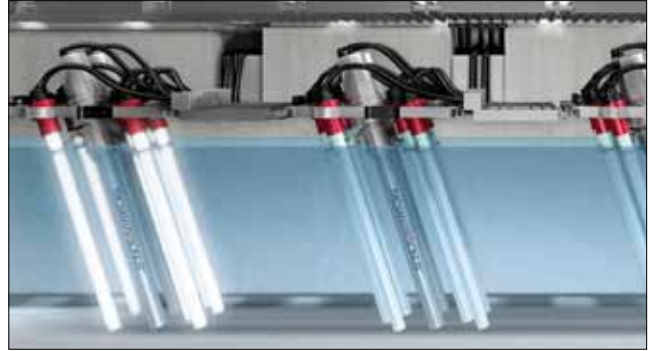


## Designed to Reduce Costs

Small footprint and flow pacing reduce cost

### Benefits:

- High-output TrojanUV Solo Lamps™ provide low lamp count, a compact footprint and reduced installation costs
- Automatic dose pacing adjusts lamp power when flow is low – reducing power consumption
- System modularity allows for easy future expansion to treat higher flows



*Dose pacing, automatically adjusts lamp power to reduce power consumption under average flow conditions.*

## Built for Easy Maintenance and Safety

Design features proven to reduce maintenance and ensure operator safety

### Benefits:

- The optional wiping system operates automatically without operator involvement and without interrupting the disinfection process
- Sleeves can be easily removed and manually wiped if no wiping system is installed
- Without disrupting disinfection, lamps can be replaced individually by only one operator
- Power automatically disconnects when lamp cables are unplugged, protecting operators from accidental exposure to electrical components



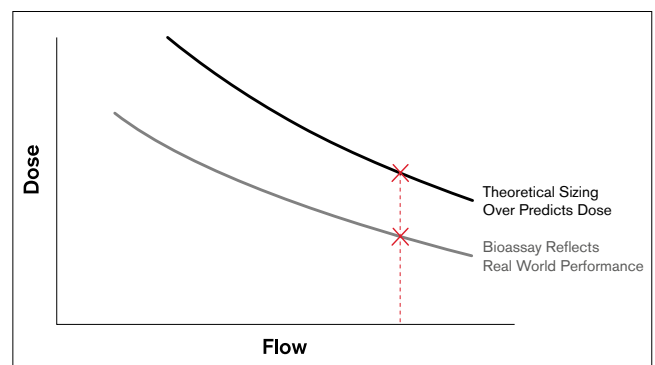
*The lamps and sleeves can be easily removed by a single operator. A safety electrical disconnect in the lamp plug prevents the removal of an energized lamp from the sleeve.*

## Regulatory-Endorsed Bioassay Validation

Real-world testing ensures accurate dose delivery

### Benefits:

- Real-world performance data is generated from bioassay testing over a range of flow rates, effluent quality and UVTs
- Bioassay validation is the only way to accurately incorporate the impact of actual lamp output, lamp spacing, ballast efficiency, flow hydraulics, quartz sleeve transmission and other variables that affect disinfection performance



*Theoretical calculations over-estimate the delivered dose – risking system performance.*

## Key Benefits

### TrojanUVSonus™

**Revolutionary Lamp Technology.** Significant cost and maintenance advantages using TrojanUV Solo Lamps™ with high electrical efficiency.

**Inclined Lamp Configuration.** Unique lamp arrangement, developed through computational fluid dynamics modeling, maximizes disinfection performance and minimizes headloss.

**Reduced Maintenance Time.** Without disrupting disinfection, lamps and sleeves are easy to access and can be replaced quickly by a single operator.

**Upgradeable System.** Choose from a selection of standard features and options that are tailored to individual budget and project requirements.

**Rapid Diagnostics.** LED status indicators on each lamp allow for rapid identification of lamp status.

**Simple Controls.** Microprocessor with easy-to-read visual symbols, less text and page scrolling.

**Operator Safety.** A disconnect in each lamp prevents accidental exposure to electrical components ensuring operator safety.

**Proven Disinfection.** Sized based on bioassay validation. Verified field performance data eliminates sizing assumptions resulting from theoretical dose calculations.

**Global Support. Local Service.** Trojan's comprehensive network of local certified service providers offers fast response for service and spare parts.

**Guaranteed Performance and Comprehensive Warranty.** Trojan systems include a Lifetime Disinfection Performance Guarantee. Ask for details.

# TROJAN UV SONUS™

Designed for efficient, reliable performance

## System Control Center (SCC)

The SCC monitors and controls all UV system functions, including flow pacing by turning modules on or off. The microprocessor controller (mounted on the PDC) features a LCD touchscreen showing bank status and common alarms. The controller features easy-to-read symbols to simplify diagnostics.



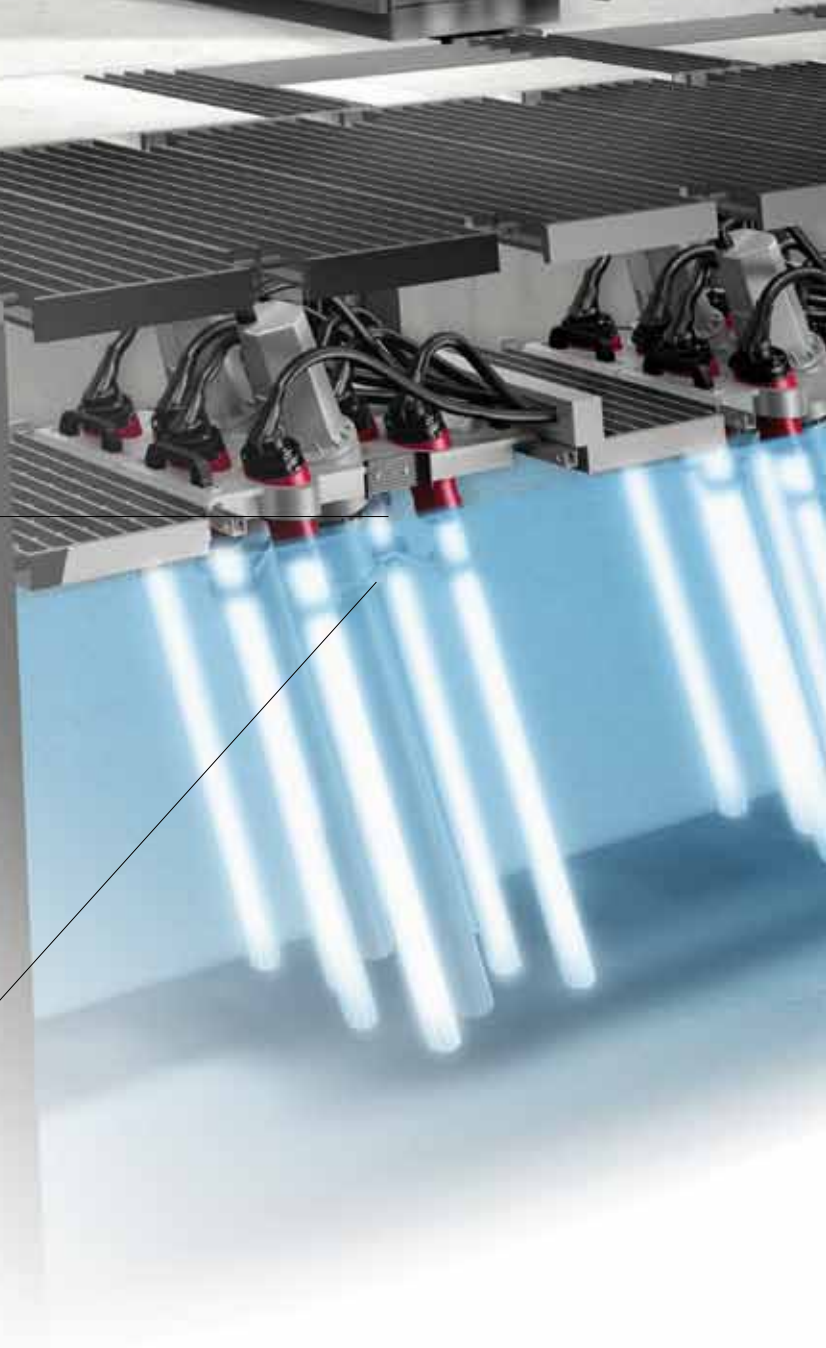
## UV Intensity Sensor

Each UV system can be configured with a UV intensity sensor that continually monitors lamp output.



## Sleeve Cleaning System

The automatic mechanical wiping system wipes the quartz sleeves without interrupting the disinfection process.



## Power Distribution Center (PDC)

The compact PDC panel contains the high-efficiency lamp drivers and power distribution components.



## UV Reactor

UV reactor can be installed indoors or outdoors in open channels. Each reactor is configured with four lamps and a wiper system (optional). A bank is made up of lamps placed in parallel across the channel width.

## Water Level Controller

A serpentine fixed weir is all that is required to maintain the appropriate water level in the channel. The weir ensures UV lamps remain submerged at all times.



## TrojanUV Solo Lamps™

With both high UV output and high electrical efficiency, the TrojanUV Solo Lamps™ provide cost and maintenance benefits by reducing total lamp count. Lamps are located within protective quartz sleeves and positioned in a staggered, incline configuration – improving disinfection efficiency and ease of lamp replacement.

System Specifications	
System Characteristics	TrojanUVSonus™
Typical Applications	300 - 2350 m <sup>3</sup> /h and a wide range of water quality
Lamp Type	TrojanUV Solo Lamp™ (amalgam)
Lamp Driver Type	Electronic, High-efficiency
Input Power Per Lamp	500 Watts
Lamp Configuration	Staggered, incline configuration
Lamp Increment	4 lamps (min. 8 lamps per bank)
UV Intensity Sensor	1 sensor per channel (optional)
Level Control Device	Fixed weir
Water Level Sensor	1 electrode low water level sensor per channel
Lamp Control	30 - 100% variable lamp power
Power Distribution Center (PDC):	
Panel Rating	TYPE 4 - IP65 Carbon steel
Installation Location	Outdoor or indoor
Sleeve Cleaning System:	
Cleaning System	Mechanical Wiping System (optional)
System Control Center:	
Controller	Microprocessor Monochromatic touch-screen HMI
Discrete Outputs (Typical)	Bank status and common alarms
Analog Inputs (Typical)	Flow (4-20 mA)
Trending	Flow, Dose (optional)
Electrical Requirements:	
Power Distribution Center	380Y/220V, 3 phase, 4 wire plus ground, 50/60 Hz

**Find out how your wastewater treatment plant can benefit from the TROJANUVSONUS™. Contact us today.**

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