

**Trojan Technologies**



**TROJAN  LOGIC**

# The leading UV technology for industry

What is more important than your product quality? Your company banks its reputation – and its revenues – on upholding the standards that have you where you are today. We can help you safeguard your product quality... and your bottom line. Trojan Technologies manufactures ultraviolet (UV) systems that disinfect water and other fluid systems. Trojan systems may also be utilized to remove residual ozone from water and reduce total organic carbon (TOC) from ultra-pure water. Trojan UV systems – the logical choice for industry.

## How Does UV Disinfection Work?

*Ultraviolet is the portion of the electromagnetic light spectrum where the wavelengths are between 100 and 400 nanometers (nm). Germicidal wavelengths are located in the spectral region of 200nm to 300nm.*

*UV light is produced by germicidal lamps submerged in water. As the water flows past the UV lamps, the microorganisms in the water are exposed to a lethal dose of UV energy.*

*Microorganisms are inactivated by UV light as a result of photochemical damage to their genetic material (DNA). This process effectively prevents cell replication by the bacteria, viruses and other microorganisms, and results in cell death.*

*UV light is also capable of reducing ozone and TOC levels where required.*



### Trojan UVLogic™ – The sensible UV technology for industry

With the arrival of Trojan UVLogic™, food and beverage companies, semiconductor manufacturers, pharmaceutical firms, and other industrial organizations can all now benefit from the water quality improvements that Trojan's advanced UV technology offers.

Whether you require microbe-free water, reduced or non-existent residual ozone levels in your water purification processes, or TOC levels below 1.5 parts per billion (ppb) in your ultra-pure water loop, you can depend on Trojan UVLogic™ systems to produce consistently exceptional results, reliably and cost effectively.

### Compact and easy to install

Simple to install in space restricted areas, Trojan UVLogic™ systems consume less space, cost less to operate, and perform more efficiently than any other UV product. You get a powerful UV solution that easily integrates with your existing treatment systems.

### More efficient than conventional UV systems

Computational fluid dynamic modeling has resulted in an innovative reactor that is twice as efficient as a conventional "U" or "S" shaped reactor, thus reducing both footprint and lamp requirements. It also permits both vertical and horizontal reactor installations to minimize space requirements and installation costs.

### New lamp technology reduces space requirements and costs

Compared with conventional UV products, Trojan UVLogic™ systems use fewer lamps to generate a given UV performance level, a function of our powerful new UV lamp technology. What does that mean to you? A smaller footprint, simplified maintenance, and lower operating costs.

### Trojan lamp laboratory facilitates validation

Trojan's new state-of-the-art lamp laboratory allows us to validate UV lamp output and operating characteristics in water-based environments – so you know your lamps will work properly. Our testing laboratory also enables us to provide you with validated replacement lamps, ensuring your Trojan UVLogic™ system operates over time as effectively as it did on day one.

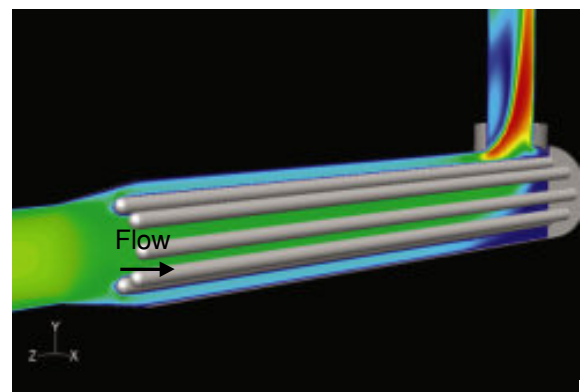
### Standard features

Trojan UVLogic™ provides many features as standard, that others consider as optional.

- UV intensity monitor
- 4-20 mA UV output
- Remote ON/OFF
- Elapsed time indicator
- Electropolished finish
- Lamp failure indicator

### Trojan UVLogic™ industrial applications

- Food and Beverage
- Bottled Water
- Bio-Pharmaceutical
- Semiconductor
- Cooling Towers
- Aquaculture
- Swimming Pools
- Automotive Industry
- Water Reuse Applications



*Trojan's innovative reactor reduces hydraulic interruptions thus increasing the efficiency of the system.*



# Trojan UVLogic™ Specifications

Model	Disinfection US GPM (m <sup>3</sup> /hr)*	TOC/Ozone Destruct US GPM (m <sup>3</sup> /hr)**	# of Lamps	Power (VA)	Full Load Current (AMPS)	Voltage	Chamber Flange Size ANSI (DIN)
01AM10	40 (9)	15 (3.0)	1	174	3.0	120V/60Hz or 240V/50 or 60Hz, Single Phase	1.5" (38mm)
01AM15	65 (15)	26 (6.0)	1	174	3.0		2.0" (50mm)
02AM15	110 (25)	46 (10)	2	288	3.0		2.0" (50mm)
02AM20	155 (35)	66 (15)	2	288	3.0		4.0" (100mm)
03AM20	230 (52)	98 (22)	3	402	4.0		4.0" (100mm)
03AS20	350 (80)	150 (34)	3	616	6.0		4.0" (100mm)
04AS20	480 (110)	200 (45)	4	922	7.0		6.0" (150mm)
03AL20	560 (130)	240 (54)	3	1075	8.0		6.0" (150mm)
06AS20	695 (160)	290 (65)	6	1228	9.0		6.0" (150mm)
04AL20	780 (189)	325 (73)	4	1330	10.0		6.0" (150mm)
08AS20	875 (200)	350 (79)	8	1534	10.0	6.0" (150mm)	
06AL20	1120 (255)	470 (106)	6	1840	15.0	6.0" (150mm)	
08AL20	1345 (306)	560 (127)	8	2350	15.0	6.0" (150mm)	

\* 30mJ/cm<sup>2</sup> @ 95% UVT, after 9000 hours of operation  
 \*\* 90mJ/cm<sup>2</sup> @ 99% UVT, after 9000 hours of operation

## Basic specifications:

- Chamber material: 316L stainless steel
- Max. operating pressure: 150 PSI / 10 Bar
- Max. operating temperature: 120°F / 49°C
- Control panel material: 304 stainless steel
- Control panel rating: NEMA 4X type

## Options:

- Sanitary Fittings
- 15 RA Internal Surface Finish
- Sleeve Cleaning Mechanism

## Trojan Technologies: a pioneer and global innovator

Since 1976, Trojan Technologies has been leading the world's switch to safe, efficient ultraviolet light systems to disinfect water and wastewater, remove residual ozone, and reduce TOC levels.



With thousands of installations worldwide and offices in Canada, the United States and Europe, Trojan is the global leader in UV disinfection today. Constantly re-engineered to incorporate state-of-the-art technology, Trojan's expanding product line can accommodate virtually any UV application.

Behind the company's products stand the most experienced and knowledgeable professionals in the industry. Comprising internationally recognized experts in microbiology, chemistry, and engineering, Trojan's research and development team creates many of today's most successful UV technology innovations.



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