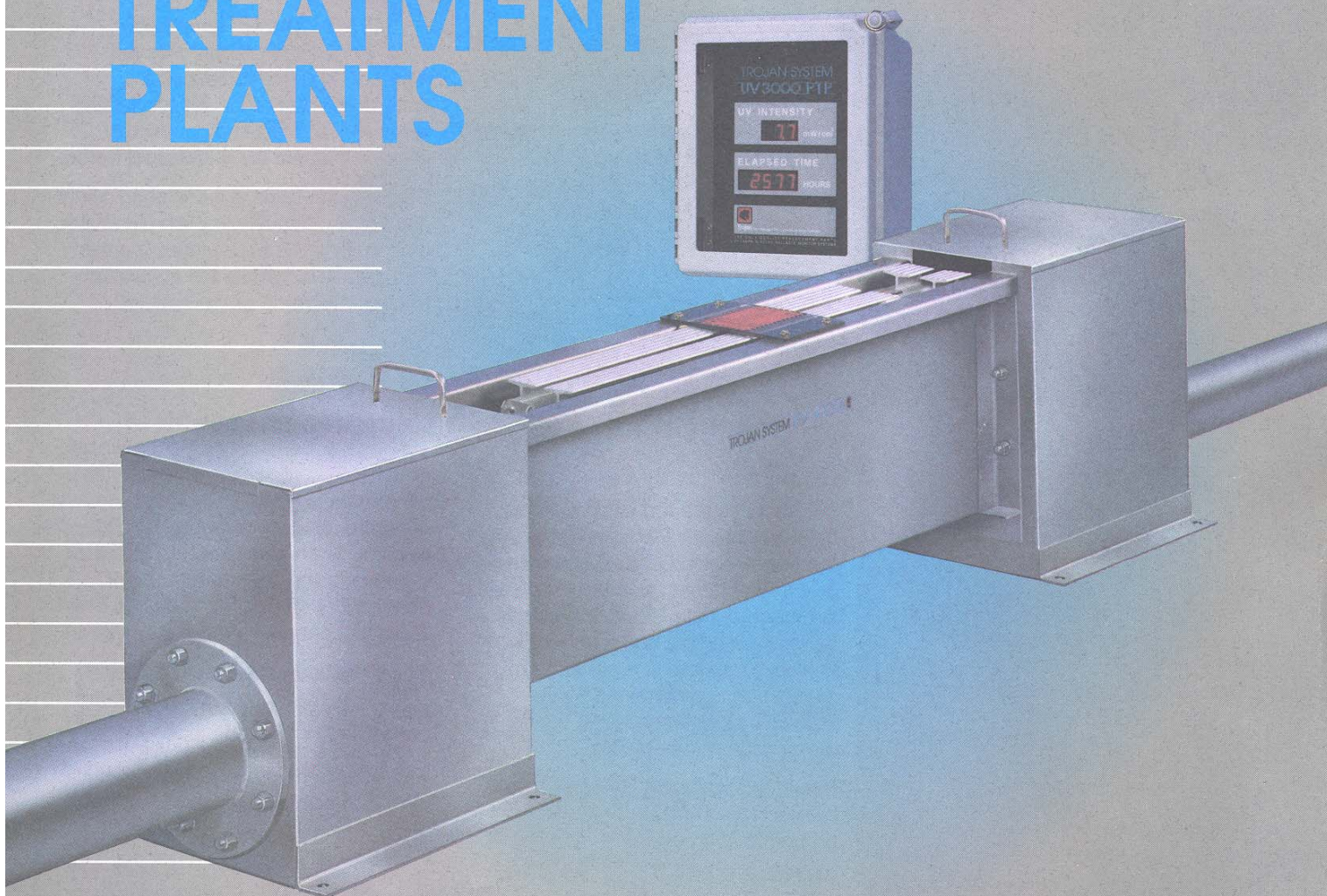




Trojan

PACKAGED UV TREATMENT PLANTS



TROJAN SYSTEM

UV 3000 PTP

a Safe, Efficient
Ultraviolet Treatment System for
Disinfecting Water and Wastewater

Ultraviolet light has become the right choice for disinfection for several important reasons:

- *UV disinfection is environmentally positive - NO chemicals are needed.*
- *Greater safety for operators.*
- *Fast treatment times (typically less than 10 seconds).*
- *Reduced operating costs versus chemical disinfection costs.*
- *Reduced liability insurance premiums.*
- *Reduced capital costs.*
- *Minimal system maintenance requirements.*

During the 1980's, Trojan developed and refined the concept of open channel ultraviolet light disinfection systems for water and wastewater treatment. With over 800 permanent and highly successful systems now in operation, Trojan UV systems have clearly defined the leading edge of UV system design.

For small scale treatment applications, a Packaged UV Treatment Plant by Trojan offers the optimum combination of design simplicity, durability and performance. Each System UV 3000 Packaged Treatment Plant is built to include these important features:

- *Optimized hydraulics within the UV system, with proper inlet and outlet flow conditions.*
- *UV modules constructed of Type 316 stainless steel with excellent corrosion resistance to cleaning solution.*
- *Compact, lightweight monitoring panel (no forced air cooling).*
- *Triple seal lampsockets which fully protect against moisture entry.*
- *Algae growth inhibition within channel and transition connections.*
- *Protection against unauthorized access to UV lamps.*
- *Compact design for simple installation.*

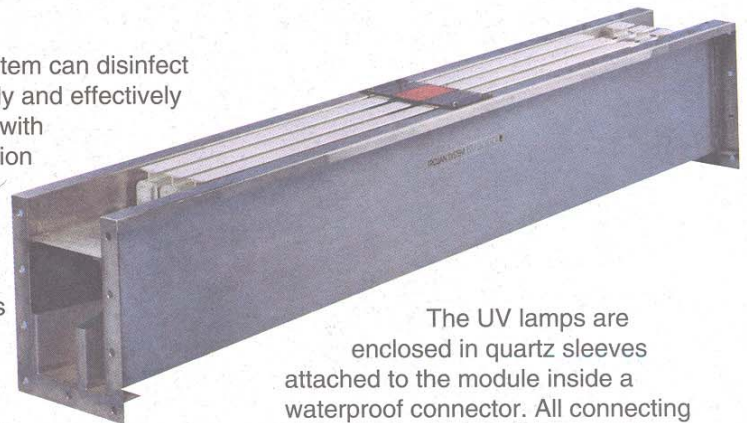
A Trojan UV system can disinfect more consistently and effectively than is possible with current chlorination procedures. UV treatment takes 6-10 seconds in a channel, while chlorine requires 15-30 minutes treatment in a contact tank.

The patented Trojan System UV3000 combines the benefits of efficient electronic ballast technology with the advantages of our open-channel modular design. The System UV3000 PTP series offers the essential features of large-scale Trojan UV Systems in a highly compact and easy to operate system, capable of treating up to one million gallons per day (40 l/s).

UV MODULES

UV Modules are the basic building blocks of the UV Package Treatment System. Disinfection takes place within an array of lamps, with the UV lamps submerged in the liquid and parallel to the flow. The size and number of UV modules required in a particular application is determined by the flowrate, water/wastewater quality and disinfection requirements.

Power supply to the UV Modules is provided through standard outdoor ground fault protected receptacles.



The UV lamps are enclosed in quartz sleeves attached to the module inside a waterproof connector. All connecting wires are isolated and completely protected inside the waterproof frame.

Electronic ballasts are enclosed within a waterproof housing which eliminates the need for separate ballast panels and greatly simplifies the installation and maintenance of the system.

UV CHANNEL

UV modules are mounted in a stainless steel channel. For flowrates of 0.4 MGD (10 l/s) or greater, either the stainless steel channel or a poured concrete channel can be used. An overflow weir maintains correct water depth over the complete range of flowrates to be treated. A built-in drain facilitates channel cleaning.

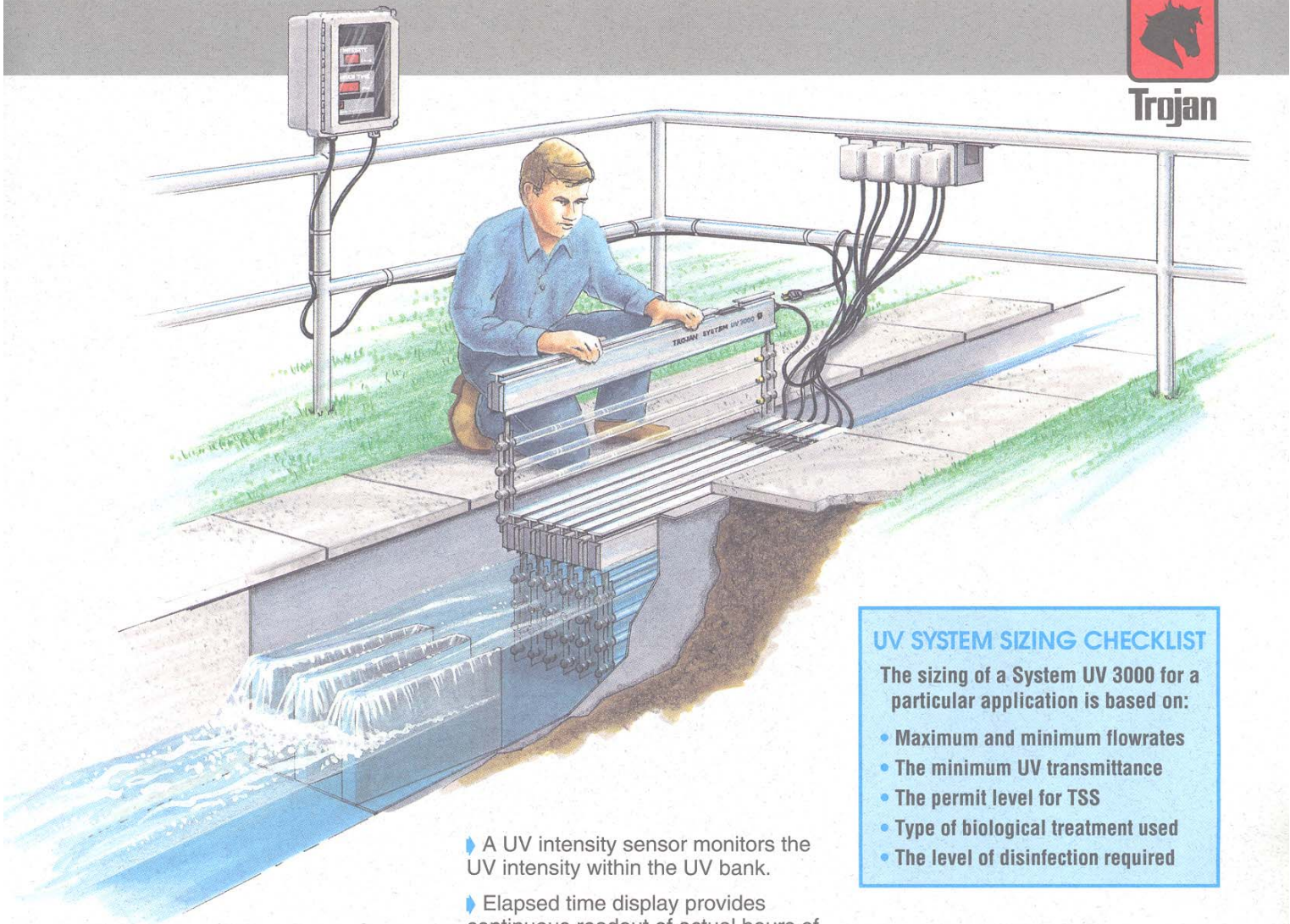
The UV channel can be installed:

- ◆ as a free-standing structure connected to flanged pipes.
- ◆ set or grouted into a poured concrete channel.





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UV SYSTEM SIZING CHECKLIST

The sizing of a System UV 3000 for a particular application is based on:

- Maximum and minimum flowrates
- The minimum UV transmittance
- The permit level for TSS
- Type of biological treatment used
- The level of disinfection required

- ▶ A UV intensity sensor monitors the UV intensity within the UV bank.
- ▶ Elapsed time display provides continuous readout of actual hours of operation.
- ▶ UV intensity and elapsed time are digitally displayed in a wall mounted panel.
- ▶ A dry contact is provided for remote sensing of low UV intensity.

TRANSITION CONNECTIONS

Stainless steel UV channels can be connected to flanged pipes by means of flanged transition connections (see cover photo). Transition connections are attached to channel ends and sealed by a neoprene gasket. Flange sizes conform to ANSI specifications.

OPTIONAL EQUIPMENT

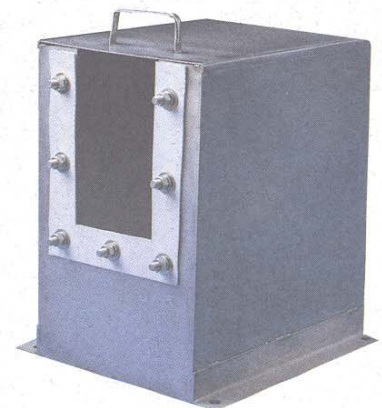
SYSTEM MONITOR

Where comprehensive system monitoring is required, the optional system monitor provides add-on monitoring capability for all models in the PTP Series. The monitoring system offers the following features:

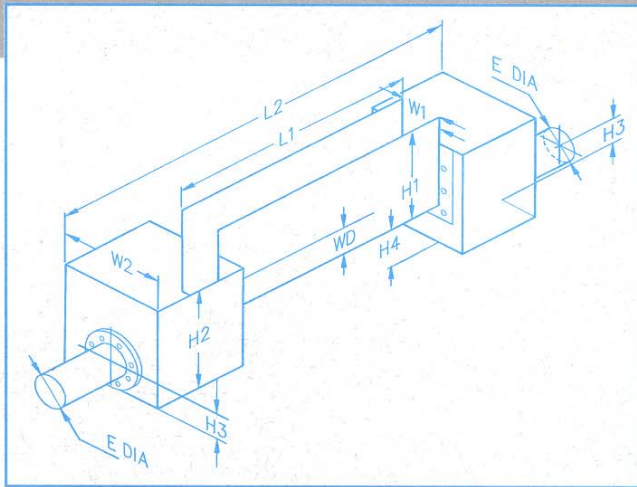


POWER DISTRIBUTION RECEPTACLES

Power is provided to the UV modules by means of standard duplex ground fault circuit interrupters. These are available as an option and are supplied mounted in receptacle boxes with a weatherproof cover.

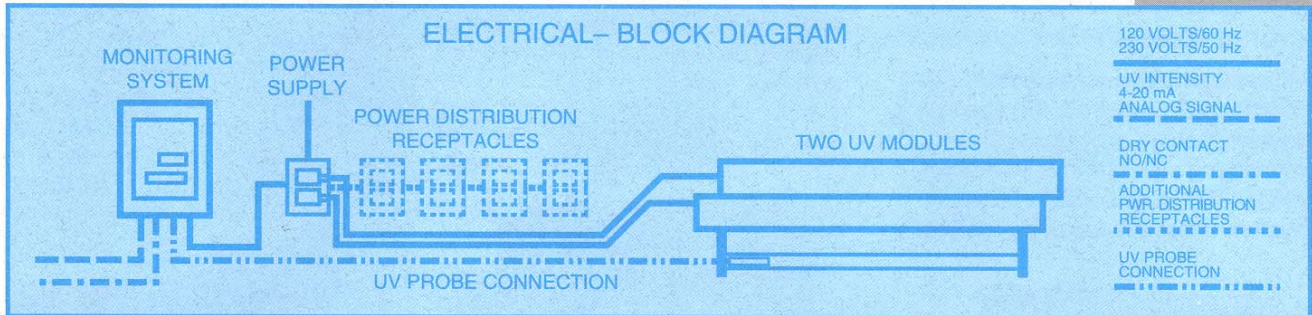


CAPACITIES, POWER REQUIREMENTS & DIMENSIONS



Patent Numbers:
 5,500,244 4,872,980 4,482,809
 1,163,086 0,008,780 2,174,989
 other patents pending

Model No.	Hydraulic Capacity (Gal./Day x 1000)	Rated Power Requirements (Watts)	Dimensions (Inches)									
			L1	L2	H1	H2	H3	H4	W1	W2	Wb	E DIA
3025K-PTP	25	100	48	84	14.87	19.60	5.50	9.06	3.00	9.00	6.00	4.00
3050K-PTP	50	200	48	84	14.87	19.60	5.50	9.06	6.00	12.00	6.00	6.00
3075K-PTP	75	300	48	84	14.87	19.60	5.50	9.06	9.00	14.00	6.00	6.00
3100K-PTP	100	400	96	132	14.87	22.10	8.00	11.81	6.00	14.00	6.00	8.00
3150K-PTP	150	600	96	132	14.87	22.10	8.00	11.81	9.00	15.00	6.00	8.00
3200K-PTP	200	800	96	132	14.87	22.10	8.00	11.81	12.00	16.00	6.00	8.00
3250K-PTP	250	1000	96	132	14.87	22.10	8.00	11.81	15.00	19.00	6.00	8.00
3300K-PTP	300	1200	96	132	14.87	22.10	8.00	11.81	18.00	22.00	6.00	8.00
3350K-PTP	350	1400	96	132	14.87	22.10	8.00	11.81	21.00	25.00	6.00	8.00
3400K-PTP	400	1600	115	163	20.63	33.10	9.50	16.13	12.00	19.00	12.00	8.00
3500K-PTP	500	2000	115	163	20.63	33.10	9.50	16.13	15.00	19.00	12.00	12.00
3600K-PTP	600	2400	115	163	20.63	33.10	9.50	16.13	18.00	22.00	12.00	12.00
3700K-PTP	700	2800	115	163	20.63	33.10	9.50	16.13	21.00	25.00	12.00	12.00
3800K-PTP	800	3200	115	163	20.63	33.10	9.50	16.13	24.00	28.00	12.00	12.00
3900K-PTP	900	3600	115	163	20.63	33.10	9.50	16.13	27.00	31.00	12.00	12.00
3001M-PTP	1000	4000	115	163	20.63	33.10	9.50	16.13	30.00	34.00	12.00	12.00



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