Triangularwave Technologies, Inc.(TWT®)

TWT-UV-5007 (220 GPM) Ultra Violet Water Purification System

The TWT-UV-5007 sterilizer will ensure a ready supply of safe, pathogen-free water for manufacturing processes or human consumption. Applications include water bottling plants, breweries, waste water treatment or any other type of liquid processing requiring bacterial reduction. With the capacity to remove disease-causing micro-organisms effective to a 99.9% or greater kill rate at 220 G.P.M. (820 L.P.M.),

you can eliminate the need for chemicals and reduce high overhead costs. TWT water treatment systems are ruggedly constructed for exceptional performance. The rugged self-contained design, component assembly and Stainless Steel body / frame of these systems ensure that the system will enjoy a long and reliable life cycle when properly cared for.



Conserve Water, Save Energy...Non-Chemical, Safe, Cost-Effective Water Treatment Systems

TWT® The Ultimate in Water Treatment & Conditioning

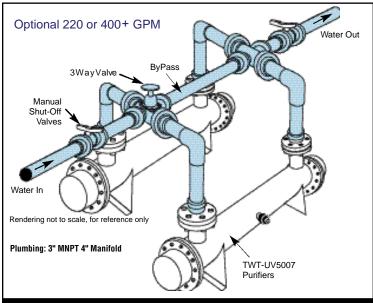
The Green Way



TWT-UV-5007 (220 GPM) **Ultra Violet Purifier System**

The UV-5007 System contains an array of 7 low-pressure, high output UV lamps in a 316L stainless steel reaction chamber. It is equipped with a control panel that has an integrated UV Monitor to monitor the UV light intensity in real time.

The UV monitor will alarm if the UV power delivered to the water is inadequate. A powered contact on the monitor can be used to drive a solenoid-type valve (not included) to shut off the flow of water. Additional features for this UV system can be ordered, such as a thermo-sensitive purge valve at the out port to prevent over-heating in no-flow conditions, or volt-free contacts on the ballast for remote signaling. UV System may be connected in series or in parallel for dual or redundant system operation and/or for high-dose, highvolume applications.



Optional: Plumbing Configuration for High Volume System Operation

Piping Configuration as Illustrated: Manifold, piping, 3 way valve, manual shut-off valves and other related equipment needed to and from system owners responsibility. (Can build to suit if requested) Sizing/Footprint: Plumbing configuration may vary and be determined by installer, according to point of use area allocated for system installation.

Installation: Licensed plumber and/or contractor is recommended. Must have enough room on all sides for UV replacement & maintenance

Features

- 7 UV Lamp Array
- Single UV Monitor
- 316L Stainless Steel
- Compact Footprint
- Rugged Construction
- NEMA Control Panel
- · Individual Lamp Indicators

Additional Features (Optional)

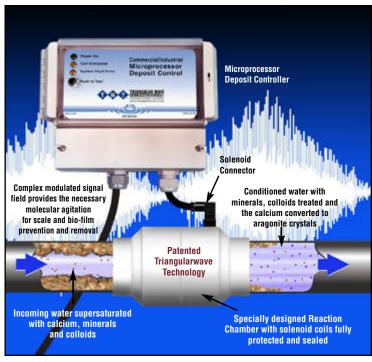
- 3" Actuated Butterfly Valve
- (PVC or SS) for Fail-Safe
- · Operation, Triggered by UV Monitor
- Electronic Deposit Control System with PVC or Stainless Reaction Chamber

- Volt-Free Contacts on Control
- · Panel for Remote Signaling of Operations
- Integrated Surge Protector

Benefits

- High Volume Disinfection, Low Cost per
- Extreme UV Dose Available for Many Applications
- · Larger Flow Rates Possible with
- May be Configured for Redundant Operations
- Systems May be Skid Mounted for Ease of Transport and Installation
- Extremely Simple to Use and Maintain

TWT, Inc. has the technical expertise to assess your water problems and when needed, pre-filtration and TWT® deposit control technology may be added to the TWT-UV-5007 sterilizer for enhanced results. Environmental safety is our priority, therefore no chemicals are added and the pH balance of the water is unaffected by UV sterilization.



Test proves Triangularwave Technologies, Inc. (TWT®) Deposit Control System reduces the fouling effects caused by "hard water" on the quartz sleeve and UV lamp inside the disinfection/purification unit while maintaining the residual effects downstream chemically free.

TWT-UV-50007 (220 GPM)

- Rated Flow: 833 Liters per minute 220 Gallons per minute. 50,000 litres/hour (50 m3/h), 1,200 m3/day (13,200 gallons/hour, 316,800 gallons/day)
- Rated Flow UV Dose: 95% UVT,40, 400 mw/sec or 40.4 mJ/cm2 at 220
- Number of lamps: 7
- Lamp wattage: 88 Watts
- Ballast: Electronic Ballast (7) (Part # 4-13B-PN) w/ Lamp Out Alarm (1), Power LED (7)
- Electrical Supply: 120-130V / 50 Hz 3 Amp 220-240V / 60 Hz
- Maximum Operating Temperature: 37°C (98.6°F)
- Maximum Operating Pressure: 125 psi - 8.6 Bar
- Plumbing:3"flange In-Out (4"optional)

- Unit Dimensions: 56"Lx 12.5"Wx 20"H
- Controller Dimensions: 30" x 24" x 10"
- Control Panel: NEMA 4 complete., 24" x 20"x10" inches, 67 lbs, Enamel Coated, Includes Lamp LEDs, Power Switch, UV Monitor Meter Face
- Unit Weight: 130 lbs (59 kg)
- Controller Weight: 60 lbs (27 kg)
- · Body: 316 Stainless Steel
- UV lamp replacement: To ensure adequate disinfection/purification of water line contamination, replace UV lamps every 12 months (or sooner depending on water use, quality and

Note: TWT Inc.recommends that an initial supply of replacement products e.g., UV lamps etc.be stored at owners facility at all times, that will insure uninterrupted service and treatment

In order to ensure the greatest level of performance and satisfaction in your work with the TWT products & systems, we recommend that you contact our engineering staff, who will be pleased to work closely with you to determine the optimal application and installation for your industry specific needs.