Triangularwave Technologies Inc. (TWT<sup>®</sup>)

# **TWT® PATENTED DEPOSIT CONTROL TECHNOLOGY**

Technologically Advanced Method for Water & Fluid Management Providing Comprehensive End-To-End Solutions



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

TWT<sup>®</sup> The Ultimate in Alternative Energy, Water Treatment & Conditioning

Go Green - \$ave Green!



## Triangularwave Technologies, Inc. (TWT®)

Versatile Fluid Management Products & Systems To Effectively Meet The Needs Of Any Industry & Application

- Control Scale
   Deposits
- Bacteria
- Corrosion
- Algae
- Colloids

In All Fluid Based Systems

Potable Water, Process and Waste Water Treatment & Conditioning

#### PROTECTION FOR NEW EQUIPMENT

TWT provides new equipment with the ability to enhance the product features and benefits

#### TREATMENT FOR EXISTING EQUIP-MENT

Retrofit existing equipment to improve its operating efficiency and life cycle

#### ENHANCE PRODUCT LINE

Enter new markets and broaden customer satisfaction

#### **CUSTOM DESIGN**

Let TWT, Inc. custom design a fluid management system to meet any industry specific application

- Residential
- Commercial
- Industrial

Versatile Fluid Management Products & Systems To Effectively Meet The Needs Of Any Industry and Application Commercial • Industrial & Residential

TWT, Inc. is focused on providing a complete selection of top quality water treatment, purification and conditioning solutions to discriminating consumers who demand the very best in water quality. Our mission is to provide you, the consumer, with direct access to premium water treatment technology solutions for you in your residential, industrial and commercial applications

TWT, Inc. offers a full range of products & systems designed to address fluid problems wherever fluid flows. From patented deposit control technology to pre and post filtration, ionization, iron removal, disinfection, and ultraviolet purification treatment and conditioning, TWT has the versatile, efficient, cost-effective methods to solve your fluid management problems end to end.

- Controls scale, bio-film & corrosion
- Enhance operating efficiency & life-cycle of equipment
- Saves water & energy
- Protect new equipment: TWT provides new equipment with the ability to enhance it's features and benefits
- Treatment for existing equipment: Retrofit existing equip ment to improve its operating efficiency and lifecycle

#### HOW TO CHOOSE THE RIGHT SYSTEM: Choosing the right system depends on these things...

- The water treatment requirements dictated by thebase water quality and environmental factors found in your geographic location.
- The levels of chemical/biological contaminants found in your personal water source as revealed in an independent water quality test.
- The pipe size and material of the water pipe feeding your home, office, facility or processing equipment.
- The minimum amount of water measured in gallons per minute

(GPM) necessary to satisfy your peak water usage.

Power/Current source available in your part of the world.

At TWT we feel the simplest way to choose a system depends on your personal situation. Home/office and facility owners with well water have different water treatment requirements than users who rent an apartment in a city.People with municipal water may choose to rely on a scaled down system that meets their current needs, while people drinking untreated ground or surface water need to fully account for all aspects of water treatment in order to guarantee the purity of their water. Contractors and architects building large projects or facilities managers responsible for maintaining expensive H.V.A.C. equipment have unique water treatment requirements as well. **If you need guidance choosing the right system, contact us.** 

#### LOOKING FOR A CUSTOM SYSTEM SPECIFI-CATION?

- Regardless of the size of your home/facility, or your budget, TWT has the right water treatment products at the right price that will enable you to get the quality water you deserve.
- For clients managing a household or office who are looking for a

custom system tailored to a specific set of requirements, TWT offers a FREE CUSTOM SYSTEM SPECIFI-CATION. Designing and implementing custom integrated "All-in-One" systems is one of our specialties, so if you are looking for a comprehensive custom water treatment solution for your home/office or facility, you have come to the right place.

 For clients with moderate water usage requirements, TWT can guide you in selecting the right combination of Point-of-Use products (Counter Top, Under Counter, Shower Heads)... to ensure that all of the water you drink, wash with and cook with is safe for your consumption.

In order to ensure the greatest level of performance and satisfaction in your work with the TWT products & systems, we recommend that you review Frequently Asked Questions and Alphabetical Listings of Topics on the TWT website. You may also 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.

• All products & systems are shipped with easy to follow installation and application guidelines.

### SATISFACTION GUARANTEED

Although Triangularwave Technologies, Inc. has attempted to ensure the accuracy of the content of this publication, and it's website, it is possible that they may contain technical inaccuracies, typographical, or other errors. Triangularwave Technologies,Inc. assumes no liability for any error in its publications, and for damages, whether direct, indirect, incidental, consequential or otherwise.

Triangularwave Technologies, Inc. provides these publications "as they are" without warranty of any kind, either express or implied, but not limited to implied warranties of merchantability or fitness for a particular purpose.

The published information in the publication and on the website are subject to change without notice. Triangularwave Technologies, Inc. reserves the right to make changes in the products, systems, design and layout without notification to its customers.

#### 2

# Technologically Advanced Method for Water & Fluid Management, Providing Comprehensive End-To-End Solutions.

TWT<sup>®</sup> Offers A Bold Series Of Chemical-Free Products & Systems Designed To Meet The Demanding Challenge In Fluid Management

Filtration • Patented Deposit Control Technology • Disinfection • Purification

Potable Water, Process and Waste Water Treatment & Conditioning Residential • Commercial • Industrial

Triangularwave Technologies, Inc. products and systems provide technologically advanced methods for water and fluid management that are both efficient and cost-effective. Components and subsystems chosen from across the range of treatment methods can be combined in different configurations to provide custom solutions specific to any industry, site or application.

TWT systems work to consistently deliver high quality water and fluids, reduce scale and bio-fouling in plumbing systems, and to increase efficiency of both once-through and re-circulating HVAC, process cooling, agriculture, industrial processing, wastewater and other fluid based systems. Each product line offers a variety of both standalone and comprehensive treatment solutions for end-to-end fluid management, for all types of applications.

#### Specializing in:

- Protection for new Equipment: TWT provides new equipment with the ability to enhance the product features and benefits.
- Treatment for Existing Equipment: Retrofit existing equipment to improve its operating efficiency and life cycle
- Chemical-Free Deposit Control Technology Products & Systems
- Improving Operating Efficiency & Life Cycle of Equipment
- Control Scale Deposits/Bacteria/Corrosion/Algae and Colloids in Pipes, Fixtures and Equipment
- Ultraviolet and/or Ozone Disinfection Systems / Ionization
   Purification Systems
- Pre & Post Water Filtration Products
- Custom System Design & Integration to Create Solutions for Your Own Industry-Specific Situation

- Value Added & Retrofit Programs
- Economical & Cost Effective
- Energy & Water Savings

#### Applications: P.O.E. / P.O.U.

#### Commercial • Industrial • Residential

- Cooling Towers Heat Exchangers Condensers & Chillers
- Food Processing Equipment Swimming Pools & Spas
- Manufacturing Processing Equipment Boilers/Water Heaters
- Spray Systems
   Small Water-Fed Appliances
- Residential / Office Plumbing Medical / Dental Laboratory
- Agriculture Laundry Car Wash Waste Water Treatment And All Other Water And Fluid-Based Industries

Industrial Specific and full product, technical information available upon request

TWT Deposit Control Systems enhance other treatment technologies as well, including chemicals, ozone, ultraviolet, separators and other filtration systems, keeping them clean and enhancing their operation. In this way, their full treatment benefits are realized, with reduced maintenance requirements. Consider using TWT Deposit Control Systems in conjunction with any fluid treatment systems as a complementary technology.

TWT products make sense from operational, economic, and safety points of view. Ownership of the TWT System will afford you and your customers significant savings over a short period of time and even greater savings over the life cycle of the equipment.



Versatile Products & Systems To Effectively Meet The Needs Of Any Industry & Application Control Scale Deposits • Bacteria • Corrosion • Algae • Colloids In All Fluid Based Systems



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

TWT<sup>®</sup> The Ultimate in Water Treatment & Conditioning





# WHAT IS IN YOUR WATER? ARE YOU PREPARED?

# DO YOU HAVE AN EFFECTIVE WATER TREATMENT SYSTEM?

Are you suffering from the scaling effects of hard water?

Is there potentially harmful bacteria in your water?

Do you have toxic chemicals in your water?

Is rust staining your bathroom and fouling your expensive appliances?

Are you concerned about the level of chlorine/fluoride in your water?

Does your water smell bad?

Do you have multiple concerns about the quality of your water?

Are you uncertain about the quality of your water?

Well water users: are you choosing the right solutions?

The good news is, there is something you can do to solve all of the problems you may encounter with your water

#### TWT<sup>®</sup> provides consumers and contractors with direct access to the highest quality water treatment and purification technology solutions commercially available

# TWT<sup>®</sup> Products & Systems

Introduction	2-3
Index	4-5
Product Summary	6-11

# Patented Deposit Control Technology

Hard Water Conditioning & Treatment

Deposit control technology works by producing a complex frequency-modulated waveform. This creates a de-ionizing effect, induced by physical means, which increases the solubility of the minerals and colloids in the liquid and changes the shape, size, and texture of the calcium carbonate crystals. Hard water conditioning & treatment technology.

TWT Chemical-Free Deposit Control Systems	12-18
Accessories (For Deposit Control Applications)	19
Water Quality Test Kits	20
Copper Pipe Signal Enhancer (Foe Copper Pipes Applications Only)	21
Reaction Chambers (Factory Wrapped Wire Coil Solenoid)	21-24

# **Chemical-Free All-In-One Water Treatment Kits**

Kits include Double Filtration, Deposit Control with Copper Pipe Signal Enhancer and UV Purification

# **Multi-Process Integrated Water Treatment Systems**

TWT Filtration, Microprocessor Deposit Control Technology, Reaction Chamber and UV Disinfection units are combined to provide a start to finish answer to simplified prevention, treatment and management of water line contamination dangers.

Multi-Staged Bacterial Reduction	Systems		6-28
----------------------------------	---------	--	------

Point-of-Use Water HVAC Treatment & Conditioning System......29

All-In-One Series Integrated Water Treatment Systems & Fresh	
Water/Rain Water Harvesting	30-44

Through ionization, disinfection, purification and deposit control technology control scale deposits, algae, bacteria and corrosion without the need for chemicals. Eliminate the bio-film that serves as a breeding ground for disease-causing bacteria, collecting in your piping, tubing, heating and other related equipment.

Multi-Process High Volume Ultraviolet Disinfection & Purification Systems. Plus Transportable Multi-Staged Water Treatment Systems.....50

# Ionization & Purification Technology

TWT advanced method for HVAC, Pool Management and Control. Through IonGuard disinfection, purification and deposit control technology, the system controls scale deposits, algae, bacteria and corrosion without the need for chemicals. Eliminate the bio-film that serves as a breeding ground for disease-causing bacteria, collecting in your pool, piping, tubing and equipment.

Multi-Process Staged Sediment ByPass Treatment Systems	51
IonGuard Purification Products & Systems	

## (Don't know what you need?) REQUEST A QUOTE FOR WATER & FLUID TREATMENT ON THE TWT WEBSITES CLICK ON CONTACT

#### REQUEST A QUOTE OR SEEK TECHNICAL INFORMATION

You may fill in the on line form and submit it to us, or you may print it, fill it in, and fax it to us at (201) 750-1096 Please note that all fields marked with a (red \*) must be completed in order to receive a response.

If you have trouble submitting the form via the online submit button, please send an e-mail to: info@triangularwave.com

#### or

triwaveinc@aol.com with all of your contact information.

TWT is happy to provide this quote and information request form to make your evaluation and purchase process as streamlined as possible. Your complete system quote and/or additional information will be provided to you by either TWT or an authorized TWT dealer or distributor, via e-mail (or fax, if requested). Please feel free to call us with any questions.

For additional technical and product information visit us at www.triangularwave.com www.twtwatertreatment.com



# TWT<sup>®</sup> Products & Systems (P.O.E. / P.O.U.) Index

### **Ultraviolet (UV) Technology**

As water passes through the UV chamber the UV light attacks and renders harmless bacterial, viral or spore contamination present in the treated water. The out put water is thus disinfected and offers exceptionally high quality for processing, human consumption and use.

Ultraviolet Purifiers Products, S	Systems & Accessories .	57-69
-----------------------------------	-------------------------	-------

# **Ozone Disinfection & Purification Technology**

The Ozonator is a natural, safe way to purify water in many different applications. It eliminates the need for chemicals which can be irritating to people and costly to budget.

<b>Ozone Products</b>	& Systems.		<b>'</b> 0-72
-----------------------	------------	--	---------------

#### **Filtration**

Filters are designed to trap various kinds of debris and organic particles that will otherwise enter your equipment and/or plumbing system; restrict flow and create a breeding ground for bacteria.

Under Counter Ultra-Violet Disinfection/Purification with Filtration...... 82

#### NOTE:

Product and system engineering, design, weight, size and component assembly may vary, based on TWT, Inc.engineering review, water conditions, application, industry and/or customer specific requirements.

All TWT products and systems can be used for either P.O.E.(point-of-entry) and/or P.O.U. (point-of-use) water conditioning & treatment

All products and systems are shipped to customers with application, installation and maintenance information (manuals).

Product & System current source:110/20V • 220/30V, other. (must specify at time of purchass for all projects).

# Sensing Environmental Needs with Intelligent Solutions

TWT<sup>®</sup> The Ultimate in Water Treatment & Conditioning

Go Green - \$ave Green!

# TRIANGULARWAVE TECHNOLOGIES, INC. (TWT®) PRODUCT SUMMARY

Sorted by Technology P.O.E. Point-of-Entry • P.O.U. Point-of-Use Residential • Commercial • Industrial

TWT, Inc. offers a full range of products & systems designed to address fluid problems wherever fluid flows. From patented deposit control technology to pre and post filtration needs, ionization, iron removal, disinfection, and ultraviolet purification treatment and conditioning, TWT has the versatile, efficient, cost-effective methods to solve your fluid management problems end to end.

- Versatile fluid management systems to effectively meet the needs of any industry and application
- Controls scale, bio-film & corrosion
- Enhance operating efficiency & life cycle of equipment
- Saves water & energy
- Protection for new equipment: TWT provides new equipment with the ability to enhance it's features and benefit
- Treatment for existing equipment: Retrofit existing equipment to improve its operating efficiency and lifecycle

**TWT® Patented Deposit Control**–Technologically Advanced Method for Water & Fluid Management Providing Comprehensive End-To-End Treatment & Conditioning (chemical-free)

#### **TWT Patented Deposit Control System:**



Hard water problems solved easily. Control scale deposits, bacteria, corrosion, algae, colloids in all fluid based systems. Providing comprehensive end-to-end treatment & conditioning (chemical-free).



The basic component in the TWT

systems is the deposit controller. It is comprised of a microprocessor, solenoid coil wrap and/or a reaction chamber. The microprocessor is a patented controller that functions like a small computer to relay a continuous electrical power supply to the solenoid coil and/or reaction chamber. The reaction chamber is plumbed into the main water in-take line and/or just before each piece of vital processing equipment, and provides a factory-wrapped wire coil forming a solenoid. The solenoid conveys the Triangularwave signal at the appropriate power level (as allowed by the model chosen) to the water passing through the chamber. This signal constantly changes the polarity, frequency, and amplitude of the current entering the water. This Triangularwave treatment produces several benefits. It increases the capability of the water to hydrate scale ions and other colloidal particles. In effect, the surface charge of the hydrogen molecules is enhanced and the water is made "wetter". This "hydrated" water can dissolve

- Value added technology
- System integration
- Retrofit programs
- Industry-specific custom design
- Consulting, training and service before, during and after sales.
- Enter new markets and broaden customer satisfaction

unwanted particles, suspend them in solution, and allow them to be easily filtered out or flushed from the system. Accordingly, the mineral and biological particles that cause scale, deposits, and corrosion are dissolved and washed away. This means that the breeding environments for bacteria, such as biofilm and corrosion, are eliminated. The agitation created in the reaction chamber also disrupts the conditions essential for the normal reproduction of bacteria and they die, thus allowing them to be harmlessly flushed out of the system.

#### **TWT Reaction Chamber:**

The TWT Reaction Chamber is part of the patented TWT Deposit Control Technology, the function of which is to control scale and bio-film in the plumbing infrastructure, fixtures, and water-fed appliances found in the facility being treated. The Reaction Chamber provides a chamber through which the water flows and is exposed to the Triangularwave signal that lies at the heart of the deposit control technology. As the fluid passes through, it is treated and then carries that treatment



downstream, to condition the rest of the plumbing system, nonchemically and reliably.

To use in conjunction with the TWT Deposit Control Systems when required, Triangularwave Technologies, Inc. has developed a line of factory-wrapped wire Reaction Chambers to address magnetic pipe environments. – *Typically, wire coil cannot be installed on any magnetic pipe, such as steel, galvanized steel, ductile iron, or cast iron.* If a coil is applied to such a pipe, the pipe becomes a shield and prevents the wave energy from entering the fluid path. The TWT Reaction Chambers solve this problem by providing an easily installed section of non-magnetic pipe to provide the proper pipe material for the Deposit Control System to work as designed. The TWT Reaction Chambers are fully sealed, protecting their two layers of factory-wrapped coil. The PVC, Stainless Steel and the Industrial Reaction Chamber systems are designed and manufactured to meet the highest quality specifications.

## **Copper Pipe Signal Enhancer:**

# Copper pipes, although acceptable, are one of the more difficult of materials to work with. To overcome this...

TWT has developed its Copper Pipe Signal Enhancer. This unit is placed between the Deposit Controller and the solenoid coil on the copper pipe. The function of the signal enhancer is to provide a proper impedance match and to ensure maximum energy transfer

between the controller and the solenoid, which, in turn, ensures enhanced treatment of the fluid.

Magnetic pipe materials such as steel, galvanized steel, iron, ductile iron or cast iron become shields and prevent the proper energy transfer to the fluid path. For magnetic pipe applications



we offer a full line of factory wrapped wire coil Reaction Chambers. TWT products are designed to provide comprehensive solutions to water and fluid management problems. The Copper Pipe Signal Enhancer and its equivalent for the magnetic pipe environment, TWT Reaction Chambers, offer the answer to limited signal penetration, ensuring optimal results. *The copper signal enhancer is a passive signal / impedance matching circuit. This device provides a power boost to the conditioning signal in copper pipes.* 

**Special Note:** Copper pipe signal enhancers are to be used on copper pipes only.

**Ionization**–for bacteria, algae, fungus control in Pools, Spas, HVAC



#### IonGuard Purification System- All-In-One package solution, TWT Ionization, Purification, Disinfection, Deposit Control Technology:

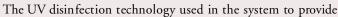
The IonGuard Purification System is an electrolytic copper /silver ion generator. The system units contain specially cast copper/silver alloy electrodes.

These electrodes are mounted in a housing designed for easy access (HVAC & Pool Environments). The IonGuard Purification System purifies water through a process called ionization. This process utilizes a low voltage direct current (DC) to place precise and minute amounts of copper and silver ions into water systems. Copper ions kill algae and silver ions kill bacteria (integrate with TWT deposit control technology for enhanced results).

# Ultraviolet Disinfection / Purification

High intensity bacteria control for potable water, waste water, food service, sanitary, pharmaceutical applications and anywhere the need for safe water required.

### Ultraviolet Disinfection/ Purification Systems:



safe, potable drinking water, free of disease-causing pathogens. As water passes through the UV chamber, UV light will attack and render harmless any bacterial, viral or spore contamination present in the treated water. "High intensity UV light destroys these contaminats with a 99.9% or greater kill rate". The output water is thus disinfected and offers exceptionally high quality for human consumption.

# **Ultraviolet Sterilization Technology**

Ultraviolet disinfection systems are mysterious to many people – how can "light" kill bacteria? But the truth is it can. Ultraviolet (UV) technology has been around for over 50 years, and its effectiveness has been well documented both scientifically and commercially. It is nature's own disinfection/purification method. With consumers becoming more concerned about chlorine and other chemical contamination of drinking water, more dealers are prescribing the ultraviolet solution suitable for both small flow residential applications as well as large flow commercial projects.

Ultraviolet is a means of killing or rendering harmless microorganisms in a dedicated environment. These microorganisms can range from bacteria and viruses to algae and protozoa. UV disinfection is used in air and water purification, sewage treatment protection of food and beverages, and many other disinfection and sterilization applications. A major advantage of UV treatment is that it is capable of disinfecting water faster than chlorine without cumbersome retention tanks and harmful chemicals. UV treatment systems are also extremely cost efficient!

# What is UV and how does it work?



Ultraviolet is one energy region of the electromagnetic spectrum, which lies between the x-ray region and the visible region. UV itself lies in the ranges of 200 nanometers (nm) to 390 nanometers (nm). Optimum UV germicidal action occurs at 260 nm.

Since natural germicidal UV from the sun is screened out by the earth's atmosphere, we must look to alternative means of producing UV light. This is accomplished through the conversion of electrical energy in a low-pressure mercury vapor "hard glass" quartz lamp. Electrons flow through the ionized mercury vapor between the electrodes of the lamp, which then creates UV light.

As UV light penetrates through the cell wall and cytoplasmic membrane, it causes a molecular rearrangement of the microorganisms DNA, which prevents it from reproducing. If the cell cannot reproduce, it is considered dead.

# **Design and Dosage**

The design of an ultraviolet sterilizer has an extremely important bearing on how the UV Dose is delivered and Dosage is the most critical function of UV disinfection. As individual UV lamps emit a set amount of ultraviolet energy, it is important that a system be sized correctly. Flow rates are the determining factor and must not be overstated. Contact time, which is the time the water is within the sterilization chamber, is directly proportional to Dosage, which is the amount of energy per unit area (calculated by dividing the output in watts by the surface area of the lamp), and thus the overall effectiveness of microbial destruction in the system. This product of intensity and time is known as the Dose and is expressed in microwatt seconds per centimeter squared (uWsec/cm2). Divide by 1000 to express the dose in mJ/cm2, the preferred notation. DOSE = time (sec) x output (watts) area (cm2)

For maximum UV transmission a "hard glass" quartz sleeve is recommended for two main reasons. It isolates the lamp from the water to offer more uniform operating temperatures and allows for higher UV output into the water.

A variety of optional features may be added on to the UV sterilizers. They include UV monitoring devices that measure the actual UV output, solenoid shutoff devices that will stop the water flow in the event of a system failure, flow control devices to properly limit the water flow in the units, audible and visual alarms (both local and remote) to warn of lamp failures, high temperature sensors to monitor excessive temperatures in the reactor chamber or control panel, and hour meters to monitor the running time of the UV lamps.

# Advantages of UV Sterilization

Following are the advantages of UV sterilization:

- Environmentally friendly, no dangerous chemicals to handle or store, no problem of overdosing (it's impossible).
- Low initial capital cost as well as reduced operating expenses when compared with similar technologies such as ozone, chlorine, etc.
- Immediate treatment process, no need for holding tanks, long retention times, etc.
- Extremely economical, hundreds of gallons may be treated for each penny of operating cost.
- No chemicals added to the water supply no by-products (i.e. chlorine + organics = trihalomethanes).
- No change in taste, odor, pH or conductivity or the general chemistry of the water.
- Automatic operation without special attention or measurement, operator friendly.
- Simplicity and ease of maintenance, periodic cleaning (if applica-

ble) and annual lamp replacement, no moving parts to wear out.

- No handling of toxic chemicals, no need for specialized storage requirements, no WHMIS requirements.
- Easy installation, only two water connections and a power connection.
- Compatible with all other water processes (i.e., RO, filtration, ion exchange, etc.)

# **Centrifugal Separators**

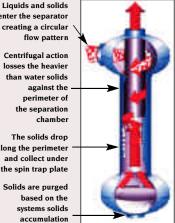


enter the separator creating a circular flow pattern

**Centrifugal** action losses the heavier than water solids against the perimeter of the separation chamber

The solids drop along the perimeter and collect under the spin trap plate

Solids are purged based on the systems solids accumulation



# **Ozone Disinfection**

The Ozonator is a natural, safe way to purify water in many different applications. It eliminates the need for chemicals which can be irritating to people and costly to budget. The Ozonator converts Oxygen (O<sub>2</sub>) into (O<sub>3</sub>) by the action of the corona discharge system. Ozone is then injected into the water where it destroys viruses, bacteria and many other micro-organisms. taste, odor and color disappear and iron oxide, hydrogen sulphide, lignite and tannin are precipitated out, leaving your water pure and clean.

Filtration Systems-Commercial • Industrial • Residential

• Regardless of the type of water filtration required, basic filtration, separation or reverse osmosis. TWT has the filtration system and media suitable for your application. Filters are available in various micronic sizes providing flexibility & adaptability to meet the needs of all fluid conditions & applications.

Filters are designed to trap various kinds of debris, dirt and organic particles that will otherwise enter your equipment and/or plumbing system, restrict your water flow and create a breeding ground for bacteria. Filtration is the first line of defense for residential, commercial, industrial facilities, where the source of water may be ponds, wells, streams or other water sources that have high exposure to contamination from airborne pollutants, surface runoff, agricultural or industrial waste or similar dangers.

The first step in achieving clean water is to install a filtration device that effectively removes particulate matter and similar debris. Filtration is an important step in water treatment, especially for water



intended for human consumption. Filtration systems provide a bacteriostatic environment and are designed to remove, volatile organic chemicals, hydrogen sulfide and sulfur, herbicides, pesticides, chemical fertilizer residues, trihalomethanes and many other pollutants. Regardless of the type of water filtration required, basic filtration, separation or reverse osmosis. TWT has the filtration system and media suitable for your application. Filters are available in various micronic sizes providing flexibility & adaptability to meet the needs of all fluid conditions & applications.





### **Chemical-Free Iron Removal Systems**for 12 to 50 ppm iron.

The Rust-Erase iron filter system is designed to effectively eliminate rust from your water supply economically and thoroughly. No more unsightly rust stains in the toilet, tub and sink., the laundry will be cleaner, too! The Rust-Erase Iron Filter works automatically. Every drop of water coming through the line is filtered to remove rust and other particles. The pre-set timer periodically activates the back-wash mechanism which keeps the filter medium fresh and effective for many years. Media is good for approximately 3 - 5 years or more depending on water conditions.

Effects of iron and manganese in water – When exposed to air, dissolved iron or manganese reacts with oxygen and is converted by oxidation to a colored, solid material that settles out of the water. Iron changes

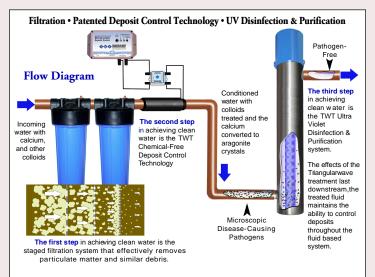
to white, then yellow and finally to a reddish-brown color. Manganese forms a black residue. High concentrations of these sediments cause reddish-brown or black stains on laundry and facility fixtures. Another result of iron and manganese in water is the presence of harmless bacteria in soil, shallow groundwater supplies and some surface water that secrete large amounts of red-brown (iron) or black-brown (manganese) slime that stain toilet tanks.

### TWT<sup>®</sup> Multi-Process Modular Treatment System All-In-One Unit :

TWT<sup>®</sup> Filtration, Micro- processor Deposit Controller, Reaction Chamber, and UV Disinfection units are combined to provide a start-to-finish answer to simplified prevention, treatment and management of water line contamination dangers. *"The Competitive Edge"* 

#### • The TWT All-In-One fluid management water filtration, disinfection and purification systems are unique, compact, self-contained units (easy installation & operation).

• In effect, a clean, corrosion-free delivery system is restored and maintained in an environmentally safe and chemicalfree manner.



# Integrated Water: Treatment & Conditioning Systems:

#### **MD** Series Integrated Water Treatment Systems

TWT® technologically advanced method for water management. Triangularwave Technologies, Inc. All-In-One fluid management

systems, the ultimate in water treatment & conditioning TWT<sup>®</sup> systems are factory engineered and assembled, applying all of the needed elements for maximum fluid protection, management, and peace of mind in one simple packaged solution. TWT<sup>®</sup> Filtration, Micro-processor Deposit Controller, Reaction Chamber, and UV Disinfection units are combined to provide a start-



to-finish answer to simplified prevention, treatment and management of water line contamination dangers. The TWT All-In-One Fluid management water disinfection/ purification systems are unique, compact, self-contained units for the treatment of water. (well and ground water application)

### **DP Series Integrated Water Treatment Systems**

Technologically advanced method for water management. Triangularwave Technologies, Inc. TWT Patented Deposit

Control/Ultraviolet Disinfection / Purification systems, TWT® systems are factory engineered and assembled, applying the needed elements for maximum fluid protection, in one simple packaged solution. TWT Microprocessor Deposit Controller,



Reaction Chamber, and UV Disinfection units are combined to provide a simplified prevention, treatment and management of water line contamination dangers. The TWT water disinfection/ purification systems are unique, compact, self-contained units for the treatment of water. (municipal water application)

# **Bacterial Reduction Systems**

Technologically Advanced Fluid Treatment Methods for the Meat, Poultry and Other Related Processing Industries.



- Filtration Deposit Control Technology
- Ozone and/or UV Disinfection / Purification Combined for maximum effectiveness. (bacteria reduction guaranteed)



# **Total Water Control Systems**

For large cooling system applications - TWCS controlled system

featuring Deposit Controller, Ultra-violet Disinfection or Ionguard and Filtration. Low pressure systems to 6,000 gpm, high pressure systems to 36,000 gpm for cooling tower, process water and other industrial applications.



## **Transportable Water Treatment Systems**

The most economical and efficient way to produce safe drinking water in temporary situations

The TWT Transportable Water Treatment System is an integrated system of exactingly selected components customized to remedy specific water treatment problems in temporary installations, remote areas or crisis situations. First developed for use in military camps related to the 1996



UN peace-keeping mission in Bosnia, the TWT treatment systems are well suited to a wide range of applications. TWT systems are designed to produce safe drinking water, dependably and economically, from a wide range of problem input sources. The selfcontained, transportable system filters out contaminants such as heavy metals, pesticides and parasites from any non-salt water source and kills all micro-organisms including virulent bacteria and viruses.

# Mobile Solar Powered...Renewable Energy On Wheels:

Explore new innovative ideas using mobile solar power with TWT® chemical-free water treatment technology. The most economical and

effective way to produce safe drinking water anywhere... any time! Sensing and solving environmental needs with intelligent solutions. conserves energy, clean, quite and transportable All-In-One Systems.

Mobile solar powered units are system integrated, engineered and designed to produce safe drinking water dependably and economically from a wide range of problem input



sources. The systems are well suited for various applications in areas with no power and poor water quality.

Mobile solar powered, water treatment systems are portable and well suited for various applications. Disaster Relief, Emergency

Preparedness, remote **Construction Sites, Small** Villages, Areas With No power And Poor Water Quality.



Email:info@triangularwave.com • triwaveinc@aol.com • Websites:www.Triangularwave.com • www.twtwatertreatment.com



# TRIANGULARWAVE TECHNOLOGIES, INC. (TWT®) PRODUCT SUMMARY

P.O.E. Point-of-Entry • P.O.U. Point-of-Use Residential • Commercial • Industrial

# Custom Engineered Systems To Your Exacting Specifications:

TWT has extensive design, engineering, manufacturing, consulting and training ability to work with customers worldwide, and to use its products and/or systems in whole or component form, as a component assembly, or as an accessory to their primary product. Take advantage of our outstanding manufacturing and

marketing expertise — let TWT custom design a product and/or system to meet your specific application, system integration, and/or retro-fit program needs.



Our unique capabilities and custom design expertise have and continue to successfully solve a

wide variety of problems for a wide variety of customers (Commercial • Industrial • Residential ).

- From Ideas to Final Production
- Efficient Engineering Design Team State -Of-The-Art Production Equipment And Facility To Meet The Ever Challenging Production Requirements
- Technical And Test Department With Outstanding Quality Control Guaranteed
- Cost effective and delivered on time
- In order to ensure the greatest level of performance and satisfaction in your work with twt products and systems, we recommend that you contact our engineering staff, who will be pleased to work closely with you to determine the optimal installation for your industry specific needs.

Custom Engineered Multi-Process Modular Water Treatment System, Designed to Customer's Specifications

Sensing Environmental Needs with Intelligent Solutions TWT<sup>®</sup> The Ultimate in Water Treatment & Conditioning

Go Green - \$ave Green!



Thank you for your time, interest in our products, systems and technology. We at TWT, Inc. look forward to being a valued part of your operation.

#### Notes:

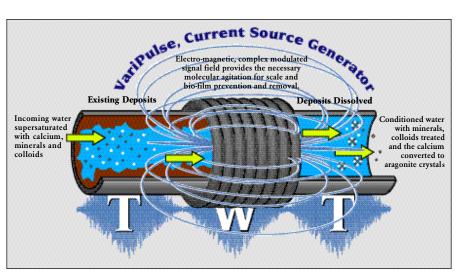
- Systems and/or subsystems of larger sizes/capacities or alternate materials available by special order.
- Accessories, spare parts and consumables for all products and systems available upon request
- Worldwide distribution

To learn more about TWT<sup>®</sup> products, systems and technologies visit Triangularwave Technologies, Inc. comprehensive websites. The valuable technical resource for all involved in water and fluid management. • www.Triangularwave.com • www.twtwatertreatment.com

Control Lime Scale and Bio-fouling throughout all of the plumbing in your / office / facility without the use of SALT or CHEMICALS

#### How are the scale deposits removed?

The patented, chemical-free TWT Deposit Controller takes this negative and turns it into a positive (no pun intended!). The induced molecular agitation generated by the TWT Deposit Controller causes the unstable mineral ions to collide with each other and precipitate out of solution. Impurities in the water such as alumina or silica provide initial nucleation sites for further precipitation of adjacent mineral ions. A "snowball effect" starts, resulting in the growth of many crystals, each consisting of numerous mineral ions. The resulting insoluble crystal salts become large in size and float; they do not stick to the metal surfaces, since the crystals do not have charges at the surface anymore. Essentially, the mineral ions become attracted to each other rather than to the metal surfaces.



APPROX SHIP **ITEM NUMBER &** PRODUCT **PRODUCT DESCRIPTION:** DIMENSIONS WEIGHT **TWT-5C8-472** 6.5"W x 3.75"H x 1.375"D 2 lbs. Residential/Light Commercial Deposit Control System for Pipes up to 1" or less Voltage: 9 vdc Amperage: Draws less than 1 Amp Coil length: 4" Solenoid Coil Included, Pipe Wrapping Required. **TWT-5C8-473** 5.5"W x 5.5"H x 2.5"D 3 lbs. Residential/Commercial Deposit Control System for Pipes up to 1" or less Voltage: 120 vac Amperage: Draws less than 1 Amp Coil length: 4" Solenoid Coil Included, Pipe Wrapping Required. **TWT-5C8-401** 6.5"W x 7.75"H x 4.75"D 3 lbs. Commercial/Industrial Deposit Control System for Pipes up to 1.5" or less Voltage: 120 vac Amperage: Draws less than 1 Amp Coil length: 4" Solenoid Coil Included, Pipe Wrapping Required.

Factory wrapped wire coil (solenoid) Reaction Chambers recommended (See Reaction Chambers pages 18 to 21)

DISCOUNTS: Available upon request for volume purchasers on a case by case basis

PRODUCT

DIMENSIONS

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

APPROX SHIP

3 lbs.

WEIGHT

#### **ITEM NUMBER & PRODUCT DESCRIPTION:**

## TWT-5C8-402

7.75"W x 6.5"H x 3.75"D Commercial/Industrial Deposit Control System for Pipes up to 2" or less Voltage: 120 vac Amperage: Draws less than 2 Amp Coil length: 7" Solenoid Coil Included, Pipe Wrapping Required Factory wrapped wire coil (solenoid) Reaction Chambers recommended (See Reaction Chambers pages 18 to 21)

#### **TWT-5C8-403**

10"W x 7.5"H x 4.5"D 5 lbs.

Commercial/Industrial Deposit Control System for Pipes up to 3" or less Voltage: 120 vac Amperage: Draws less than 2 Amps Coil length: 7" Solenoid Coil Included, Pipe Wrapping Required. Factory wrapped wire coil (solenoid) Reaction Chambers recommended (See Reaction Chambers pages 18 to 21)

Other voltage source available upon request

TWT-5C8-404 10"W x 7.5"H x 4.5"D Commercial/Industrial Deposit Control System for Pipes up to 4" or less Voltage: 120 vac Amperage: Draws less than 2 Amps Coil length: 7" Solenoid Coil Included, Pipe Wrapping Required. Factory wrapped wire coil (solenoid) Reaction

Chambers recommended (See Reaction Chambers pages 18 to 21) Other voltage source available upon request

#### **TWT-5C8-406**

11.5"W x 8.5"H x 6"D

6 lbs.

Commercial/Industrial Deposit Control System for Pipes up to 6" or less Voltage: 120 vac Amperage: Draws less than 3 Amps Coil length: 4.5" Solenoid Coil Included, Pipe Wrapping Required.

Factory wrapped wire coil (solenoid) Reaction Chambers recommended (See Reaction Chambers pages 18 to 21)

Other voltage source available upon request

On copper pipe applications a Copper Pipe Signal Enhancer is Recommended (See page 18)











#### ITEM NUMBER & PRODUCT DESCRIPTION:

PRODUCT DIMENSIONS

#### APPROX SHIP WEIGHT

TWT-5C8-408

10"W x 7"H x 8"D

7 lbs.

Commercial/Industrial Deposit Control System for Pipes up to 8" or less Voltage: 120 vac Amperage: Draws less than 3 Amps Coil length: Contact TWT directly for solenoid winding instructions Solenoid Coil Included, Pipe Wrapping Required.

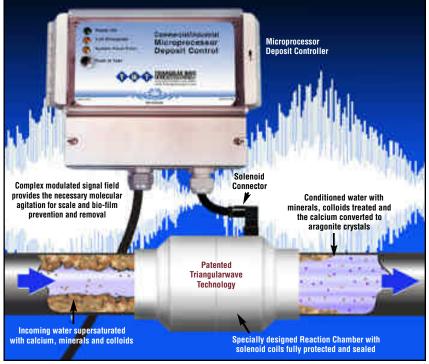
Factory wrapped wire coil (solenoid) Reaction Chambers recommended (See Reaction Chambers pages 18 to 21)

Other voltage source available upon request

TWT-5C8-41014.5"W x 13"H x 6.5 "D10 lbs.Industrial Deposit Control ( Pipes up to 10" or less )Voltage: 120 vacAmperage: Draws less than 3 AmpsCoil length: Contact TWT directly for solenoid winding instructionsSolenoid Coil Included, Pipe Wrapping Required.

Factory wrapped wire coil (solenoid) Reaction Chambers recommended (See Reaction Chambers pages 18 to 21)

Other voltage source available upon request







**TWT® System Packaging Contents** 

- A. TWT Microprocessor Deposit Control Unit
- B. Wire for onsite wiring & solenoid coil hookup
- C. Hardware kit: Screws, wire ties
  - D. Controller mounting kit: Mounting brackets & wire ties
  - E. System registration card
- F. Owners Manual

Not included, sold separately:

Contact your dealer and/or TWT, Inc. before installation of system if application requires a– TWT Copper Pipe Signal Enhancer TWT factory wrapped Reaction Chamber Teflon coated wire



Residential/Light Commercial Hard Water Conditioning & Treatment System Fully Assembled Plumb Plug & Play Units

ITEM NUMBER &	PRODUCT
PRODUCT DESCRIPTION:	DIMENSIONS
<ul> <li>TWT5C8-472PVCPP</li> <li>Applications for pipes up to 1" or less in diameter</li> <li>PACKAGING CONTENTS</li> <li>A. TWT-5C8-472 DC plate mounted unit with pipe mounting clamps &amp; wire connectors</li> <li>B. Factory wrapped 1"X 10" PVC (IRC) industrial reaction chamber</li> <li>C. Electrical transformer</li> <li>D. Owners manual</li> <li>E. System registration card</li> </ul>	18.5" X 6"

- Optional:110/20V or 220/30V
- (Custom built to order only)

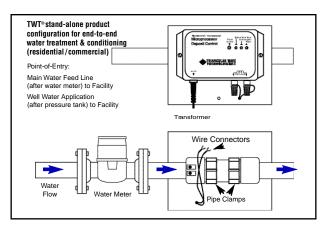
#### Product # TWT5C8-472CSECPP

Applications for pipes up to 1" or less in diameter

PACKAGING CONTENTS

- A.TWT-5C8-472 DC plate mounted unit with pipe mounting clamps & wire connectors
- B. Factory wrapped 1" X 11" (ICRC) industrial copper pipe reaction chamber
- C. Electrical transformer
- D. Owners manual
- E. System registration card
- Optional:110/20V or 220/30V

(Custom built to order only)



Installation: Licensed plumber and/or contractor suggested for application and installation of equipment.

#### Four Simple Steps:

1. Plumb the reaction chamber into water feed line.

2. Run and connect the provided wire to the reaction chamber as illustrated.



APPROX SHIP

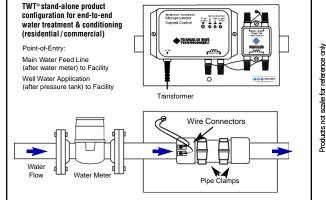
WEIGHT



#### 10.5" X 6"

TBD





3. Clamp the TWT plate mounted controller onto pipe installed reaction chamber 4. Plug the unit in to electrical outlet.

Optional: St/St industrial reaction chambers available upon request No maintenance required as long as current is provided to unit at all times. Deposit controllers are designed be self tested (see owners manual).

Triangularwave Technologies Battery Powered Microprocessor Deposit Control

Control Scale and Biological Deposits in Homes, Mobile Homes, RV's, Boats, Trucks, Off Road Equipment & more. Plumbing Systems • Coolant Systems & Fuel Systems

#### TWT-163-12VDC

Battery Powered Microprocessor Deposit Control (Pipes up to 1" or less) Voltage: 12VDC Amperage: Draws less than 1 Amps Coil length: 3.5" Solenoid Coil Included, Pipe Wrapping Required Residential/Commercial

High Temperature Applications for Triangularwave Technologies Deposit Control Systems 176°F and above (Teflon Wire Required) 3.375"W x 6.5"H x 1.375"D 2 lbs.

Optional: Battery back-up system for all treatment kits 12 volt or 24 volt DC to AC inverter converts DC current into conventional AC electricity.Connect one of

these units directly to a battery to operate.Connect treatment kit to near by power source or inverter for battery power operation



# DEPOSIT CONTROL with Copper Pipe Signal Enhancer (for copper pipe applications only)

#### ITEM NUMBER & PRODUCT DESCRIPTION:

TWT-5C8-472-CSE2TWT Deposit Controller and Copper PipeSignal Enhancerfor pipes up to 1" or lessAmperage: Draws less than 1 AmpCoil length: 4"Solenoid Coil Included, Pipe Wrapping Required.

(9V Transformer)

#### TWT-5C8-473-CSE

3 lbs

TWT Deposit Controller and Copper Pipe Signal Enhancer for pipes up to 1" or less Voltage: 120 vac Amperage: Draws less than 1 Amp Coil length: 4" Solenoid Coil Included, Pipe Wrapping Required.

Current Source: Universal Power Supply





**TWT® Copper Pipe Signal Enhancer** The copper pipe signal enhancer is a passive signal/ impedance matching circuit. This device provides a power boost to the conditioning signal in copper pipes (for copper pipe applications only). APPROX SHIP WEIGHT 2 lbs.



#### **DEPOSIT CONTROLLER SYSTEM with REACTION CHAMBER – For Water Fed Appliances**

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

#### **ITEM NUMBER & PRODUCT DESCRIPTION:**

**PRODUCT DIMENSIONS & APPROX SHIP WEIGHT** 

#### **TWT-5C8-460-FGRC**

Residential/Light Commercial Deposit Control System with food grade PVC Reaction Chamber for Water-Fed Appliances (For pipes .5" or less) **Reaction Chamber Installation Required** 

(See Deposit Control pages 10 to 15 & Reaction Chambers pages 18 to 21)

#### **TWT-5C8-472-FGRC**

Residential/Light Commercial Deposit Control System with food grade PVC Reaction Chamber for Water-Fed Appliances (For pipes .75" or less)

Current Source: 110/20 VAC 9V Transformer **Reaction Chamber Installation Required** 

#### TWT-5C8-472RC75

Residential/Light Commercial Deposit Control System, with 3/4" PVC Reaction Chamber for Water-Fed Appliances (For pipes 1" or less)

Current Source: 110/20 VAC 9V Transformer Reaction Chamber Installation Required

#### TWT-5C8-472RC1

Residential/Commercial Deposit Controller with 1" PVC Reaction Chamber for water feed appliances (For pipes 1" or less)

Current Source: 110/20 VAC 9V Transformer Reaction Chamber Installation Required

#### TWT-5C8-472SRC75

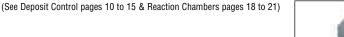
Residential/Commercial Deposit Controller with .75" St/St Reaction Chamber for water feed appliances (For pipes 1" or less)

Current Source: 110/20 VAC 9V Transformer Reaction Chamber Installation Required

#### **TWT<sup>®</sup> Reaction Chambers**

To use in conjunction with the TWT Deposit Control Systems when required Triangularwave Technologies, Inc. has developed a line of factory-wrapped wire Reaction Chambers to address magnetic pipe environments. Typically, wire coil cannot be installed on any magnetic pipe, such as steel, galvanized steel, ductile iron, or cast iron. The TWT

Reaction Chambers solve this problem by providing an easily installed section of nonmagnetic pipe to provide the proper pipe material for the Deposit Control System to work as designed. The TWT Reaction Chambers are fully sealed, protecting their two layers of factory-wrapped coil. The PVC, Stainless Steel and the Industrial Reaction Chamber systems are designed and manufactured to meet the highest quality specification













(See Deposit Control pages 10 to 15 & Reaction Chambers pages 18 to 21)

(See Deposit Control pages 10 to 15 & Reaction Chambers pages 18 to 21)

(See Deposit Control pages 10 to 15 & Reaction Chambers pages 18 to 21)



#### **DEPOSIT CONTROLLER SYSTEM with REACTION CHAMBER – For Water Fed Appliances**

#### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

#### ITEM NUMBER & PRODUCT DESCRIPTION:

#### **PRODUCT DIMENSIONS & APPROX SHIP WEIGHT**

(See Deposit Control pages1 0 to 15 & Reaction Chambers pages 18 to 21)

TWT-5C8-472SRC1 Residential/Commercial Deposit Controller with 1" St/St Reaction Chamber for Water-Fed Appliances (For pipes 3/4"/ 1" or less) Reaction Chamber Installation Required

#### **TWT-5C8-473-APVC**

Residential/Light Commercial Deposit Control System with 1" PVC Reaction Chamber for Water-Fed Appliances (For pipes 1" or less) Reaction Chamber Installation Required (See Deposit Control pages 10 to 15 & Reaction Chambers pages 18 to 21)

#### TWT-5C8-473-ST

Residential/Light Commercial Deposit Control System with 1" Stainless Steel Reaction Chamber for Water-Fed Appliances (For pipes 1" or less) Reaction Chamber Installation Required

Current Source: Universal Power Supply

(See Deposit Control pages 10 to 15 & Reaction Chambers pages 18 to 21)



#### TWT-5C8-401-IRC

Commercial/Industrial Deposit Control System for Pipes up to 1.5" or less with **TWT-IRC-1.5** Factory Wrapped Industrial *PVC* Reaction Chamber

#### TWT-5C8-401-ISRC

Commercial/Industrial Deposit Control System for Pipes up to 1.5" or less with **TWT-ISRC-1.5** Factory Wrapped Industrial **St/SIt** Reaction Chamber

#### **TWT-5C8-402-IRC**

Commercial/Industrial Deposit Control System for Pipes up to 2" or less with **TWT-IRC-2**" Factory Wrapped Industrial **PVC** Reaction Chamber

#### TWT-5C8-402-ISRC

Commercial/Industrial Deposit Control System for Pipes up to 2" or less with **TWT-ISRC-2**" Factory Wrapped Industrial **St/St** Reaction Chamber



**Reaction Chamber Installation Required** 



**Reaction Chamber Installation Required** 



ITEM NUMBER & PRODUCT DESCRIP TWT-HTK	<i>TION:</i> Hardness Test Kit	<b>CASE/</b> PACK 1	APPROX SHIP WEIGHT BOV
TWT-TDSHH1	Pocket Size Hand Held TDS Meter	2	BOV
TWT-TDSMIL2	In Line <b>TDS Meter</b>	1	BOV
High temperature 176°F and above (Te	e Applications for Triangularwave Techno eflon Wire)	ologies (TWT	Deposit Control Systems
TWT-WS-55	55 feet Wire Spool (18-20 awg)	6	BOV
TWT-WS-125	125 feet Wire Spool (18-20 awg)	6	BOV
TWT-WST100	100 ft.Wire spool-(Teflon)	6	BOV
TWT-WST200	200 ft.Wire spool-(Teflon)	6	BOV
TWT-WST300	300 ft.Wire spool-(Teflon)	6	BOV
TWT-PT-10	Set of 10 Plastic Ties	6	BOV
TWT-8449-25	Flex Tubing–25 ft	1	BOV
TWT-8449-50	Flex Tubing–50 ft.	1	BOV
TWT-8449-100	Flex Tubing–100 ft.	1	BOV
TWT-LP-70F	CSE Black Box (to mount & enclose a CSE unit)	6	BOV
TWT-8398 (2 pk)	Connectors for Flex Tubing/Black Box (above) Qty 2 for each CSE unit	6	BOV

#### **ACCESSORIES for DEPOSIT CONTROL SYSTEMS**

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### **DESIGNED SPECIFICALLY for TREATED WATER - EXCELLENT for COOLING TOWERS**

TWT-CTDSCM-02 Conductivity / TDS Controller / Meter Kit





#### SPECIFICATIONS:

- IP65/NEMA 4X water resistant & corrosion proof enclosure
- Clear, screw down lid allows great visibility while discouraging unauthorized adjustment
- Comes complete with an easily installed CSAR sensor, or for those more demanding jobs, the optional CS51R sensor.
- Single set point/alarm
- Easy knob adjustment of set point
- Led shows "above/below" Alarm/ Control status
- Adjustable set point hysteresis
- Includes power cords:One (1) input cord, Two (2) output plugs
- Ranges: 0-5000 µS (µM) / ppm 442™

- Display: Models CTC II & CTC IT:NONE Models CTC II D &CTC II TD:1/2 in./13 mm 31/2 Digit LCD;opt.31/2 or 41/2 Digit Backlit
- Accuracy: +1%of full scale
- Sensitivity: 0.05% of full scale
- Stability: 0.05% of full scale
- Repeatability: 0.1% of full scale
- Calibration Check: Built in
- Voltage Output: 0-10 VDC @5 mA max.(linear);
- standard all models
- Sensor Inputs: 1

In-Line Conductivity/TDS Controller/Meter Kit – Five (5) unit kit CTCIID-Controller

FSM - Flow switch & manifold

**FSMP** – Mounting panel (horizontal or vertical mounting)

MBV - Mini ball valve (sample port)

SQC0 - Quick-Connect, sensor cable

Other kits available upon request

- Control Function: Single Alarm / Controller fully adjustable 0 -100 % of full scale. Hysteresis:Adjustable from 0.3-6% of full scale. Indicators:Above (red) and below (green) set point LED. Contact Rating:SPDT 10 amp @125 VAC, 30 VDC Relay operates increasing reading.Fuse Output: 5 amp x 2
- Power: 115 /230 VAC,50 /60 Hz,±15% (user selectable)
   Max Power Consumption: @115V: 100 milliamps
- Dimensions: 4.7" H x 6.3" W x 4.7" D 120Hx 160 Wx120 D mm
- Construction: Full gasket heavy-duty ABS case; water resistant and corrosion proof IP65 /NEMA 4X rated
- Ambient Temperature Range: 32° to 140° F/0 °C to 60 °C
- Weight: 2 lbs./ 0,9 kg

ITEM NUMBER &	CASE/	APPROX SHIP
PRODUCT DESCRIPTION:	PACK	WEIGHT
TWT-TK10 Water Quality Test Kits	12	BOV

#### TWT-TK10 Water Quality Test Kits

We carry a wide range of water testing kits that are easy to use, fast and accurate. Great for use in the field and popular with retail customers

Text Name	Description	Range
Arsenic	Quick Check 2 test	0-500 ppb
Bacteria Test	2 Test	1 cfu Coliform
Bromine	Bottle of 50	0-5 ppm
Chloride Check	Bottle of 50	0-5 ppm
Chloride-Free	Bottle of 50	0-500 ppm
Chlorine - Total	Bottle of 50	0-10 ppm
Copper	Cu+1 / Cu+2	0-5 ppm
Chromium (Chromate)	Bottle of 50	0-50 mg/L
Hardness - Total	Bottle of 50	0-58 gpg
Hydrogen Sulfide	Bottle of 50	0-80 ppm
Iron Check (Fe+2)	Bottle of 25	0-5 ppm
Lead Water Test	2 Tests	15 ppb
Manganese	30 ptks of 1	0-1 mg / L
Mercury Check	Bottle of 50	50-1000 ppb
Nitrate/ Nitrate Nitrogen	Bottle of 50	0-10 ppm
Ozone Check	Bottle of 50	0-0.5 ppm
Peroxide (H202	Bottle of 50	0.5-100 ppm
PH Check	Bottle of 50	2-12
Phosphate	Bottle of 50 Strips	0-2500 ppb
Salt Water Check	Bottle of 50 Tests	0-150%
Silver Check	Bottle 50 Tests	50-1000 ppb
Sulfate	30 pkts of 1	0-500 ppm
Total Hardness	Bottle of 50	0-1000 & 0-58 Grains/Gallon
Zinc	Bottle 50 Tests	0-100 mg / L
4-in-1 City Water Check	Bottle 25	PH, Alkalinity, Hardness
Tap Check Test Kit	2 Tests of each	PH, TA, Iron, hardness, Chlorine
Well Water Check	2 Tests of Each	PH, Alkalinity, hardness, Nitrate, Nitrite
Complete Home Water	2 of each & 1 Bacteria	Iron, Copper, Chloride, Nitrate/Nitrite Nitrogen, Chlorine, Hardness, Free Chlorine, Sulfate, PH, Alkalinity, Hydrogen, Sulfide & Bacteria
Cyanide Emergency Kit		Kit Includes: (2) 2 ml Vials, (2) Cyanide Strip #1 Cyanide Strip #2, & (1) Instruction card in bag
Cyanide - SFK50		0:01-25 ppm (mg / L) - Visually
Aquaria Test 4	Fresh Bottle of 50	Nitrate, Alkalinity, PH, hardness
TWT-BTK-12	Bacteria Test Kit–On	

Simple and Easy-to-Use



### Accessories for Deposit Control Systems: Copper Pipe Signal Enhancer

#### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

The Copper Pipe Signal Enhancer is a passive signal/impedance matching circuit. This device provides a power boost to the conditioning signal in copper pipes

ITEM NUMBER & PRODUCT DESCRIPTION:	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	130
TWT-CSE-0227 Designed for Copper Pipes 2" or Less in Diameter To be used with Deposit Controller TWT-5C8-470 / 471 / 472 / 401	2"W x 2"H x 1.5"D	1 lbs.	
TWT-CSE-0229 Designed for Copper Pipes 4" or Less in Diameter To be used with Deposit Controller TWT-5C8-402 / 403 / 404 / 406	2.75"W x 2.75"H x 2"D	2 lbs.	
WT-CSE-0227K			

**KIT DESCRIPTION & COMPONENTS** 

#### For installation of copper pipes up to 2" only

- 1-1 CSE black housing box with pre-mounted CSE unit, and 4 pre-drilled 1/2" holes for easy assembly and installation. CSE kit may be mounted vertically or horizontally. Box dimensions: 6.25"W x 4.25"H x 1.75"D 2- 4 connectors for CSE housing box, controller and solenoid connections
- **3-** 2 plastic hole plugs (cover remaining holes)
- 4-1 15' length of flex tubing for connection from housing box to deposit controller
- 5-1 10' length of flex tubing from housing box to onsite solenoid connection
- 6-1 extra 55' extra spool of wire

#### TWT-CSE-0229K

#### **KIT DESCRIPTION & COMPONENTS** For installation of copper pipes up to 4" only

See TWT-CSE-0227K above for specifications: Box dimensions: 5.5"W x 4.625"H x 2.375"D Approx ship weight BOV

#### TWT-CSE-27LP70M

**Copper Pipe Signal Enhancer Housing & Unit** Components #1 and #3 above only-Designed for Copper Pipes 2" or Less in Diameter

#### TWT-CSE-29LP70M

**Copper Pipe Signal Enhancer Housing & Unit** Components #1 and #3 above only-Designed for Copper Pipes 4" or Less in Diameter

#### TWT<sup>®</sup> St/St Factory Wrapped Reaction Chambers with Dielectric Union (Couplings) for Copper Pipe Applications

Stainless Steel Reaction Chamber with Dielectric Unions (Couplings)

TWT-SRC-DU5 .5" Factory Wrapped <i>St/St</i> Reaction Chamber	.5" X 6" +DU*	2.75 lbs	. All
TWT-SRC-DU75 .5" Factory Wrapped <i>St/St</i> Reaction Chamber	.75" X6" +DU*	4.75 lbs	4
TWT-SRC-DU-1 1" Factory Wrapped <i>St/St</i> Reaction Chamber	1" X 12" +DU*	5.25 lbs	
TWT-SRC-DU-1.5 1.5" Factory Wrapped <i>St/St</i> Reaction Chamber	1.5" X 12"+DU*	8 lbs	é
TWT-SRC-DU-2 2" Factory Wrapped <b>St/St</b> Reaction Chamber	2" X 12"+DU*	12 lbs	- HEE
Industrial Stainless Steel Reaction Chamber with E	Dielectric Union (Coupling	s)	
.75" Factory Wrapped Industrial St/St Reaction Chamber	.75" X 6"+DU*	4.75 lbs	
TWT-ISRC-DU-1 1" Factory Wrapped Industrial <i>St/St</i> Reaction Chamber	1" X 12" +DU*	5.25 lbs	
TWT-ISRC-DU-1.5 1.5" Factory Wrapped Industrial <i>St/St</i> Reaction Chamber	1.5" X 12"+DU*	8 lbs	
TWT-ISRC-DU-2 2" Factory Wrapped Industrial St/St Reaction Chamber	2" X 12"+DU*	12 lbs	





BOV

The TWT Reaction Chamber is part of the patented TWT Deposit Control Technology, the function of which is to control scale and biofilm in the plumbing infrastructure, fixtures, and water-fed appliances found in the facility being treated. The Reaction Chamber provides a chamber through which the water flows and is exposed to the Triangularwave signal that lies at the heart of the deposit control technology. As the fluid passes through, it is treated and then carries that treatment downstream, to condition the rest of the plumbing system, non-chemically and reliably. To use in conjunction with the TWT Deposit Control Systems when required, Triangularwave Technologies, Inc. has developed a line of factory-wrapped wire coil Reaction Chambers to address magnetic pipe environments. –Typically, wire coil cannot be installed on any magnetic pipe, such as steel, galvanized steel, ductile iron, or cast iron. If a coil is applied to such a pipe, the pipe becomes a shield and prevents the wave energy from entering the fluid path. The TWT Reaction Chambers solve this problem by providing an easily installed section of non-magnetic pipe to provide the proper pipe material for the Deposit Control System to work as designed. The TWT Reaction Chambers are fully sealed, protecting their layers of factory-wrapped coil. The PVC, Stainless Steel and the Industrial Reaction Chamber systems are designed and manufactured to meet the highest quality specifications.

ITEM NUMBER & PRODUCT DESCRIPTION:	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
TWT-RC-05 .5" Factory Wrapped <i>PVC</i> Reaction Chamber	.5" x 6"	1 lbs	
TWT-RC-75 .75" Factory Wrapped <i>PVC</i> Reaction Chamber	.75" x 6"	1 lbs	
TWT-RC-1 1" Factory Wrapped <i>PVC</i> Reaction Chamber	1" x 6"	1 lbs	
TWT-RC-1.5 1.5" Factory Wrapped <i>PVC</i> Reaction Chamber	1.5" x 12"	2 lbs	
TWT-RC-2 2" Factory Wrapped <b>PVC</b> Reaction Chamber	2" x 12"	3 lbs	
TWT-RC-3 3" Factory Wrapped <i>PVC</i> Reaction Chamber	3" x 15"	6 lbs	
TWT-RC-4 4" Factory Wrapped <b>PVC</b> Reaction Chamber	4" x 15"	8 lbs	
TWT-RC-6 6" Factory Wrapped <b>PVC</b> Reaction Chamber	6" x 18"	10 lbs	
<b>TWT-RC-8</b> 8" Factory Wrapped <b>PVC</b> Reaction Chamber PVC indicates Schedule 40 Construction Material	8" x 18"	12 lbs	
<b>TWT-RC-05-80</b> .5" Factory Wrapped <b>PVC</b> Reaction Chamber	.5" x 6"	1 lbs	
<b>TWT-RC-75-80</b> .75" Factory Wrapped <b>PVC</b> Reaction Chamber	.75" x 6"	1 lbs	
TWT-RC-1-80 1" Factory Wrapped PVC Reaction Chamber	1" x 6"	1 lbs	PVC indicates Schedule 80 Construction Material Note:Larger
TWT-RC-1.5-80 1 1/2" Factory Wrapped <i>PVC</i> Reaction Chamber	1.5" x 12"	2 lbs	size reaction chambers and material available upon request
TWT-RC-2-80 2" Factory Wrapped <i>PVC</i> Reaction Chamber	2" x 12"	3 lbs	
TWT-RC-3-80 3" Factory Wrapped <i>PVC</i> Reaction Chamber	3" x 15"	6 lbs	
TWT-RC-4-80 4" Factory Wrapped <b>PVC</b> Reaction Chamber	4" x 15"	8 lbs	
TWT-RC-6-80 6" Factory Wrapped <b>PVC</b> Reaction Chamber	6" x 18"	10 lbs	
<b>TWT-RC-8-80</b> 8" Factory Wrapped <b>PVC</b> Reaction Chamber PVC indicates Schedule 80 Construction Material	8" x 18"	12 lbs	

# **INDUSTRIAL PVC REACTION CHAMBERS with Solenoid Connectors\***

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
TWT-IRC-75 .75" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	.75" x 6"	1 lbs
TWT-IRC-01 1" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	1" x 62"	1 lbs
TWT-IRC-1.5 1.5" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	1.5" x 12"	2 lbs
TWT-IRC-02 2" Factory Wrapped Industrial <b>PVC</b> Reaction Chamber	2" x 12"	3 lbs
TWT-IRC-03 3" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	3" x 15"	6 lbs
<b>TWT-IRC-04</b> 4" Factory Wrapped industrial <b>PVC</b> Reaction Chamber	4" x 15"	8 lbs
TWT-IRC-06 6" Factory Wrapped Industrial <b>PVC</b> Reaction Chamber	6" x 18"	10 lbs
<b>TWT-IRC-08</b> 8" Factory Wrapped Industrial <b>PVC</b> Reaction Chamber PVC indicates Schedule 40 Construction Material	8" x 18"	12 lbs

# **INDUSTRIAL PVC REACTION CHAMBERS with Solenoid Connectors\***

<b>TWT-IRC-75-80</b> .75" Factory Wrapped Industrial <b>PVC</b> Reaction Chamber	.75" x 6"	2 lbs	
TWT-IRC-1-80 1" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	1" x 6"	2 lbs	
<b>TWT-IRC-1.5-80</b> 1.5" Factory Wrapped Industrial <b>PVC</b> Reaction Chamber	1.5" x 12	3 lbs	
TWT-IRC-2-80 2" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	2" x 12"	4 lbs	
TWT-IRC-3-80 3" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	3" x 15"	7 lbs	
<b>TWT-IRC-4-80</b> 4" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	4" x 15"	10 lbs	
TWT-IRC-6-80 6" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	6" x 18"	12 lbs	]
TWT-IRC-8-80 8" Factory Wrapped Industrial <i>PVC</i> Reaction Chamber	8" x 18"	14 lbs	

PVC indicates Schedule 80 Construction Material

Note:Larger size reaction chambers and material available upon request

\*Factory wrapped and assembled with two head connectors, conduit and wire ready for each installation.

# **STAINLESS STEEL REACTION CHAMBERS with Solenoid Connectors\***

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
TWT-SRC-05 .5" Factory Wrapped St/St Reaction Chamber	.5" x 6"	2 lbs
TWT-SRC-75 .75" Factory Wrapped St/St Reaction Chamber	.75" x 6"	4 lbs
TWT-SRC-1 1" Factory Wrapped <i>St/St</i> Reaction Chamber	1" x 6"	4 lbs
TWT-SRC-1.5 1.5" Factory Wrapped <i>St/St</i> Reaction Chamber	1.5" x 12"	5 lbs
TWT-SRC-2 2" Factory Wrapped St/St Reaction Chamber	2" x 12"	8 lbs
TWT-SRC-3 3" Factory Wrapped St/St Reaction Chamber	3" x 15"	20 lbs
<b>TWT-SRC-4</b> 4" Factory Wrapped <b>St/St</b> Reaction Chamber	4" x 15"	35 lbs
TWT-SRC-6 6" Factory Wrapped <i>St/St</i> Reaction Chamber	6" x 18"	40 lbs
TWT-SRC-8 8" Factory Wrapped St/St Reaction Chamber	8" x 18"	50 lbs

# INDUSTRIAL STAINLESS STEEL REACTION CHAMBERS with Solenoid Connectors\*

<b>TWT-ISRC-75</b> .75" Factory Wrapped Industrial <b>St/St</b> Reaction Chamber	.75" x 6"	2 lbs	
TWT-ISRC-1 1" Factory Wrapped Industrial <i>St/St</i> Reaction Chamber	1" x 6"	4 lbs	
TWT-ISRC-1.5 1.5" Factory Wrapped Industrial <i>St/St</i> Reaction Chamber	1.5" X 12"	5 lbs	-
TWT-ISRC-2 2" Factory Wrapped Industrial St/St Reaction Chamber	2" x 12"	8 lbs	
TWT-ISRC-3 3" Factory Wrapped Industrial <i>St/St</i> Reaction Chamber	3" x 15"	20 lbs	
<b>TWT-ISRC-4</b> 4" Factory Wrapped Industrial <b><i>St/St</i></b> Reaction Chamber	4" x 15"	35 lbs	Participant -
TWT-ISRC-6 6" Factory Wrapped Industrial <i>St/St</i> Reaction Chamber	6" x 18"	40 lbs	
<b>TWT-ISRC-8</b> 8" Factory Wrapped Industrial <b><i>St/St</i></b> Reaction Chamber	8" x 18"	50 lbs	

TWT-ISRC-2 Reaction Chamber

St/ St indicates Stainless Steel Construction Material

Note: Larger size reaction chambers and material available upon request

\*Factory wrapped and assembled with two head connectors, conduit and wire ready for each installation.



# **#TWT-AIOKIT: 4 GPM** – Designed for pipes up to 3/4" in diameter **Kits Include:**

One (1) 10"Double Filter Set - Sediment & Carbon

One (1) Triangularwave Chemical–Free Deposit Controller with a Copper pipe signal Enhancer for copper pipe application only. #TWT-5C8-472CSE

One (1) 4-GPM Ultraviolet Purifier. #TWT-UV-250

Kits include double filtration with and extras set of replacement filters, filter wrench, chemical-free deposit control (hard water treatment) and ultra-violet purification technology.

**Note:** All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested. Note: If water feed lines at the facility are PVC / Pex or Non-magnetic material, you will not need the Copper pipe signal enhancer. Copper pipe signal enhancer optional, must specify if not required when placing purchase order.

(All pumps, pipes, fittings and other related plumbing equipment needed, owners responsibility).



#### **# TWT-AIOKIT: 8 GPM** – Designed for pipes up to 1"in diameter **Kits Include:**

One (1) 20"Slim-line Double Filter Set - Sediment & Carbon

One (1) Triangularwave Chemical–Free Deposit Controller with a Copper pipe signal Enhancer for copper pipe application only.# TWT-5C8-472CSE

One (1) 8-GPM Ultraviolet Purifier.# TWT-UV-700

Kits include double filtration with and extras set of replacement filters, filter wrench, chemical-free deposit control (hard water treatment) and ultra-violet purification technology.

Note:(A) All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested. **Note:** If water feed lines at the Z facility are PVC / Pex or Non-magnetic material, you will not need the Copper pipe signal enhancer.

Copper pipe signal enhancer optional, must specify if not required when placing purchase order.

(All pumps, pipes, fittings and other related plumbing equipment needed, owners responsibility).



#### Optional: Battery back-up system for all treatment kits

12 volt or 24 volt DC to AC inverter converts DC current into conventional AC electricity. Connect one of these units directly to a battery to operate.Connect treatment kit to near by power source or inverter for battery power operation (Batteries not included)



# **#TWT-AIOKIT: 12 GPM** – Designed for pipes up to 1" in diameter

#### Kits Include:

One (1) 20"Big Blue Double Filter Set – Sediment & Carbon

One (1) Triangularwave Chemical–Free Deposit Controller with a Copper pipe signal Enhancer for copper pipe application only. # TWT-5C8-472CSE

One (1) 12-GPM Ultraviolet Purifier.# TWT-UV-1200

Kits include double filtration with and extras set of replacement filters, filter wrench, chemical-free deposit control (hard water treatment) and ultra-violet purification technology.

**Note:** (A) All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested.Note:If water feed lines at the facility are PVC / Pex or Non-magnetic material, you will not need the Copper pipe signal enhancer. Copper pipe signal enhancer optional, must specify if not required when placing purchase order.

(All pumps, pipes, fittings and other related plumbing equipment needed, owners responsibility).

TWT All-In-One Kits are available for larger pipe applications, GPM requirements and process technologies made be up-graded, changed to meet your specific water treatment requirements upon request.

Note: Kits are available in 110/20-V or 220/30-V Must specify with Purchase Order.

### Custom Engineered System Built to Order Only.

Technologically Advanced Fluid Treatment Methods for the Meat, Poultry and Related Processing Industries – For any Industry Requiring High Volume Bacterial Reduction

#### ITEM NUMBER & PRODUCT DESCRIPTION:

PRODUCT DIMENSIONS APPROX SHIP WEIGHT

#### TWT-BRS-73

TWT-BRS73 Central System for Multiple Injector Lines • Four Stage Filtration • Two Stage Deposit Control Technology • Triple Quattra 100 UV Disinfection & Purification (System Treatment Up To 1500 GPH) 110"W x 75"H x 40"D Approx 1500 lbs.



Four stage filtration configured to remove particulate matter that may inhibit the effectiveness of the UV system.



90"W x 72"H x 40"D



Triple Quattra 100 UV system configured to provide more exposure to the UV light, ensuring a higher kill rate of the bacteria.



Though simular in appearance the system component configuration is assembled according to treatment and application requirements

#### TWT-BRS-2

TWT-BRS/2 Central System for Multiple Injector Lines • Two Stage Filtration

- Deposit Control Technology
- Dual Quattra 50 UV Disinfection

& Purification (System Treatment Up To 1500 GPH)



Two stage filtration configured to remove particulate matter that may inhibit the effectiveness of the UV system.



TBD

Dual Quattra 50 UV system system configured to provide more exposure to the UV light, ensuring a higher kill rate of the bacteria.



### WIRE MESH FILTER BASKETS (not included, available upon request)

#### TWT-14HHPZ0T50M • TWT-14HHPZ0T100M • TWT-14HHPZ0T250M

- Stainless Steel wire mesh, wire cloth, brass wire mesh, and galvanized square wire mesh.
- Other micron sizes available upon request

Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase. *Note:* Above systems are fully integrated and factory assembled and mounted, offering end to endfluid management and treatment solutions **TBD:** To be determined, based on final system configuration at time of purchase.

### **Custom Engineered System Built to Order Only.**

Technologically Advanced Fluid Treatment Methods for the Meat, Poultry and Related Processing Industries – For any Industry Requiring High Volume Bacterial Reduction

#### **ITEM NUMBER & PRODUCT DESCRIPTION:**

#### **TWT-BRS-1**

Though simular in exterior design to the BRS3 component configuration is different

TWT-BRS/1 Central System for Multiple Injector Applications (Refrigerated) Filtration • Deposit Control Technology Ozone & UV Disinfection/Purification (System Treatment Up To 3000 GPH)

TWT-BRS/3 Central System for Multiple Injector Applications (Refrigerated) Filtration • Deposit Control Technology

PRODUCT DIMENSIONS APPROX SHIP WEIGHT

144"L x 76"H x 85"D 2600 lbs.



Though simular in appearance the system component configuration is assembled according to treatment and application requirements

TBD

**TWT-BRS-3** 

#### **TWT-BRS-4**

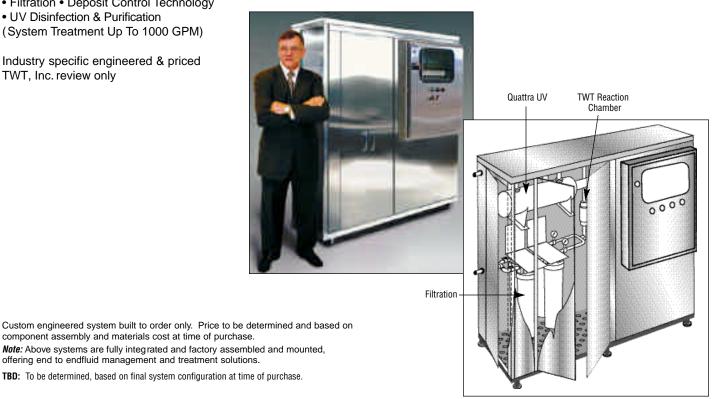
- TWT-BRS/4 Point-Of-Use Single Injection Application
- Filtration 
   Deposit Control Technology
- UV Disinfection & Purification

UV Disinfection & Purification

(System Treatment Up To 3000 GPH)

(System Treatment Up To 1000 GPM)

Industry specific engineered & priced TWT, Inc. review only

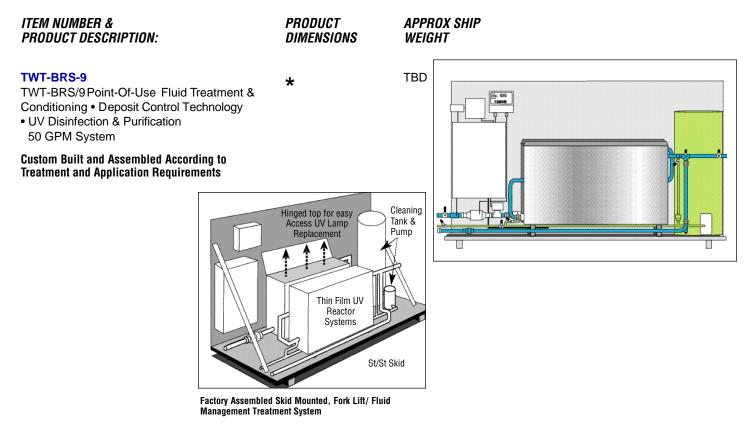


64"W x 50"H x 20"D

TBD: To be determined, based on final system configuration at time of purchase.

#### Custom Engineered System Built to Order Only.

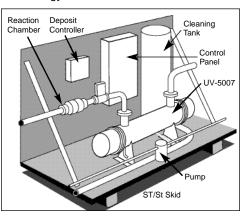
Technologically Advanced Fluid Treatment Methods for the Meat, Poultry and Related Processing Industries – For any Industry Requiring High Volume Bacterial Reduction



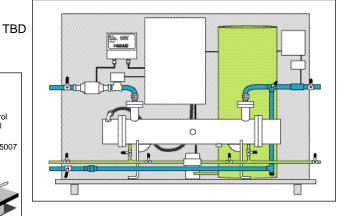
#### TWT-BRS-10

TWT-BRS/10 Point-Of-Use Fluid Treatment & Conditioning • Deposit Control Technology

 UV Disinfection & Purification 220 GPM System



\*



Factory Assembled Skid Mounted, Fork Lift/ Fluid Management Treatment System

Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase. *Nate:* Above systems are fully integrated and factory assembled and mounted, offering end to endfluid management and treatment solutions

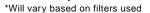
TBD: To be determined, based on final system configuration at time of purchase.

### ALL-IN-ONE MULTI-PROCESS P.O.U. / P.O.E. WATER TREATMENT & CONDITIONING SYSTEM

Filtration • TWT Deposit Control Technology • UV Disinfection/Purification

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
<b>TWT-POUS-300</b> 3 Stage Filtration: Sediment, Re For pipe size applications .75" of		26"W x 20"H x 10"D	*40 lbs
<b>TWT-POUE-400</b> 3 Stage Filtration: Sediment, Ca or pipe size applications .75" or		26"W x 20"H x 10"D	*40 lbs
TWT®the Ultimate in Water Treatment & Conditioning Technologically Advanced Fluid Treatment Method for P.O.U./P.O.E. Applications. Multi-Staged Filtration, Electro-Magnetic Fluid Conditioning and Flow Meter Combined for Maximum Effectiveness.			



ALL-IN-ONE MULTI-PROCESS P.O.U. / P.O.E. WATER TREATMENT & CONDITIONING SYSTEM Filtration • Optional Water Softening Filter • Deposit Control • UV Disinfection Purification System

50 lbs

TWT-POEPOUV-6001-2GPM26"W x 24" H x 10"DControl Scale Deposits/Bacteria Corrosion,<br/>Algae, Colloids in your Water-Fed System26"W x 24" H x 10"D

For pipe size applications .75" or less

Filters are interchangeable allowing you to meet your specific water treatment needs at all times. Must specify filters preference upon placement of purchase order

1. Sediment 5-10 Micron: Pleated Washable and reusable for sediment reduction/removal

2. Resin Filter: Water softening resin filter

3. GAC: Granulated activated carbon for taste, odor, organic chemicals and chlorine reduction/removal.

4. GAC/KDF-55: Granulated activated carbon with KDF-55, specially formulated copper/zinc alloy media designed to remove chlorine, lead, volatile organic chemicals,hydrogen sulfide, sulfur, herbicides, pesticides, chemical fertilizer residues and trihalomethanes

ALL-IN-ONE MULTI-PROCESS P.O.U. / P.O.E. WATER TREATMENT & CONDITIONING SYSTEM Multi-Stage Filtration • Electro-Magnetic Fluid Conditioning • Ultra Violet Disinfection Purification System

**TWT-POEPOUV-604SC2** 2 GPM 42"W x 28"H x 10"D 64 lbs 3 Stage Filtration: Sediment, Carbon, GAC/KDF or pipe size applications .5" or less

Filter mediums used in staged filter housings for the 2 and 4 GPM systems are configured as illustrated. Other filter mediums and micronic sizes are available upon request. Mediums to be determined and based upon input water quality and customer and/or industry specific treatment requirements.

# **TWT-POEPOUV-604SC** 4 GPM 44"W x 31"H x 10"D 67 lbs 3 Stage Filtration: Sediment, Carbon, GAC/KDF or pipe size applications .75" or less

#### **Self-Cleaning Sediment Filter**

Thefirst step in achieving clean water is a filtration system. 15 micron filter with a built-in manual flush valve to purge built-up sediments in the bottom of the filter. Flow rates up to 10 GPM. Filter will initially clean the water so the replacement sediment and other media cartridges will have a much longer service and life cycle.







For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER &	GPM	PRODUCT
PRODUCT DESCRIPTION:		DIMENSIOI

ENSIONS

APPROX SHIP WEIGHT

175 lbs

TWT-MD-10038 GPM37"W x 45"H x 8"D170 lbsWhole House/Office Treatment System Provides 5 Stages of Cleaning

Wall Mounted Water Treatment System • 3-Stage Filtration

• TWT<sup>®</sup> Deposit Control Technology • Ultra Violet Disinfection & Purification *Piping:* .75" In/Out of system

#### TWT-MD1003SC

8 GPM 49"W x 31"H x 8"D

- Wall Mounted Water Treatment System 3-Stage Filtration
- TWT<sup>®</sup> Deposit Control Technology Ultra Violet Disinfection & Purification
   Sediment Filter Carbon Filter GAC Filter-

#### **Self-Cleaning Sediment Filter**

The first step in achieving clean water is a filtration system.15 micron filter with a built-in manual flush valve to purge built-up sediments in the bottom of the filter. Flow rates up to 10 GPM. Filter will initially clean the water so the replacement sediment and other media cartridges will have a much longer service and life cycle. Filter mediums used in staged filter housings are configured as illustrated. Other filter mediums and micronic sizes are available upon request. Mediums to be determined and based upon input water quality and customer and/or industry specific treatment requirements.

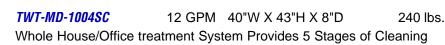
Piping: .75" In/Out of system

TWT-MD-100412 GPM40"W x 43"H x 8"D235 lbsWhole House/Office treatment System Provides 5 Stages of Cleaning

• Wall Mounted Water Treatment System • 3-Stage Filtration

• TWT® Deposit Control Technology • Ultra Violet Disinfection & Purification

Piping: 1" In/Out of system



- Wall Mounted Water Treatment System 3-Stage Filtration
- TWT<sup>®</sup> Deposit Control Technology Ultra Violet Disinfection & Purification

Self-Cleaning Sediment Filter (as described in system MD1003SC above)

Piping: 1" In/Out of system

TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.

Upgrades: Customized TWT® systems to meet your treatment applications available upon request



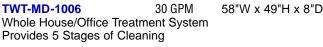






For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
TWT-MD-1005 Whole House/Office Treatme Provides 5 Stages of Cleani • Wall Mounted Water Treatme • 3-Stage Filtration • TWT <sup>®</sup> Deposit Control Tech • Ultra Violet Disinfection & I <i>Piping:</i> 1" In/Out of system	ng nent System nology	58"W x 49"H x 8"D	240 lbs



- Wall Mounted Water Treatment System
- 3-Stage Filtration
- TWT<sup>®</sup> Deposit Control Technology
- Ultra Violet Disinfection & Purification

Piping: 1.5" In/Out of system

# 246 lbs



### MULTI-PROCESS CHEMICAL-FREE FRESH WATER & RAIN WATER TREATMENT SYSTEMS

#### Modular systems, custom integrated and combined for maximum effectiveness

Nature's way of conserving water worldwide. Rainwater capture systems for homes, offices, schools, commercial, industrial facilities and anywhere the need for clean water is required!



Approximate Dimensions:28" H X 25" Wide

#### #TWT-RWH-4: 4 GPM TWT-RWH-2: 2 GPM (available upon request- not illustrated)

#### Modular Unit Includes:

- One (1) Self-cleaning sediment filter 
   One (1) 10"Double Filter Set Sediment & Carbon
- One (1) 4-GPM Ultraviolet Purifier Filter wrench PVC / flexible tubbing in/ out of system
- Units available in 110/20V / 220/30V
- Optional: One (1) inverter for battery powered operation (battery not included)
- Optional: Pressure gauges
- Treatment units are shipped to customers ready to put in place, connect & operate

**Note:** All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested. Battery, pumps, pipes, hose connections, fittings and other related plumbing equipment needed, owners responsibility.

Built to order only. Custom engineered, component assembled based on customer/industry specific requirements.



#### Optional: Battery back-up system for all treatment kits

12 volt or 24 volt DC to AC inverter converts DC current into conventional AC electricity.Connect one of these units directly to a battery to operate.Connect treatment kit to near by power source or inverter for battery power operation (Batteries not included)

#### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com



#### # TWT-RWH-8: 8 GPM

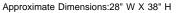
Modular Unit Includes:

- One (1) Self-cleaning sediment filter One (1) 20"Slim-line Double Filter Set -Sediment & Carbon
- One (1) 8-GPM Ultraviolet Purifier Filter wrench PVC / flexible tubbing in/ out of system
- Units available in 110/20V / 220/30V
- Optional: One (1) inverter for battery powered operation (battery not included)
- Optional: Pressure gauges pictured on unit not included
- Treatment units are shipped to customers ready to put in place, connect & operate..

Note: All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested.

Battery, pumps, pipes, hose connections, fittings and other related plumbing equipment needed, owners responsibility.

Built to order only. Custom engineered, component assembled based on customer/industry specific requirements.



#### #TWT-RWH-12: 12 GPM Modular Unit Includes:

- One (1) Self-cleaning sediment filter One (1) 20"Big Blue Double Filter Set - Sediment & Carbon
- One (1) 12-GPM Ultraviolet Purifier. Filter wrench PVC / flexible tubbing in/ out of system
- Units available in 110/20V / 220/30V
- Optional: One (1) inverter for battery powered operation (battery not included)
- Optional: Pressure gauges pictured on unit not included

Treatment units are shipped to customers ready to put in place, connect & operate

Note: All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested.

Battery, pumps, pipes, hose connections, fittings and other related plumbing equipment needed, owners responsibility.

#### Built to order only. Custom engineered, component assembled based on customer/industry specific requirements.

Approximate Dimensions:37" W X 38" H



#### Optional: Battery back-up system for all treatment kits

12 volt or 24 volt DC to AC inverter converts DC current into conventional AC electricity.Connect one of these units directly to a battery to operate. Connect treatment kit to near by power source or inverter for battery power operation (Batteries not included)



#TWT-RWH-15: 15 GPM Modular Unit Includes:

- One (1) Self-cleaning sediment filter One (1) 20"Big Blue Double Filter Set Sediment & Carbon
- One (1) 15-GPM Ultraviolet Purifier. Filter wrench Filter wrench
- PVC / flexible tubbing in/ out of system
- Units available in 110/20V / 220/30V
- Optional: One (1) inverter for battery powered operation (battery not included)
- Optional: Pressure gauges pictured on unit not included

Treatment units are shipped to customers ready to put in place, connect & operate

Note: All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested.

Battery, pumps, pipes, hose connections, fittings and other related plumbing equipment needed, owners responsibility.

Built to order only. Custom engineered, component assembled based on customer/industry specific requirements.



Approximate Dimensions:54" W X 50" H

Optional for units listed above: enclosure and/or weather proof cover recommended for year round protection from the elements if installed outdoors or in an unprotected area



Approximate Dimensions:54" W X 50" H

#### **# TWT-RWH-30: 30 GPM** Modular Unit Includes:

• One (1) Self-cleaning sediment filter • One (1) 20"Big Blue Double Filter Set - Sediment & Carbon

- One (1) 30-GPM Ultraviolet Purifier. Filter wrench PVC / flexible tubbing in/ out of system
- Units available in 110/20V / 220/30V
- Optional: One (1) inverter for battery powered operation (battery not included)
- Optional: Pressure gauges pictured on unit not included
- Treatment units are shipped to customers ready to put in place, connect & operate

**Note:** All products are shipped with easy to follow application, installation and maintenance materials. Handy man and/or licensed plumbing contractor application and installation suggested.

Battery, pumps, pipes, hose connections, fittings and other related  $% \left( {{{\rm{D}}_{{\rm{B}}}}_{{\rm{B}}}} \right)$ 

plumbing equipment needed, owners responsibility.

Built to order only. Custom engineered, component assembled based on customer/industry specific requirements.



12 volt or 24 volt DC to AC inverter converts DC current into conventional AC electricity. Connect one of these units directly to a battery to operate.

#### ALL-IN-ONE MD INTEGRATED WATER TREATMENT & CONDITIONING SYSTEMS P.O.E./P.O.U. Filtration • Deposit Control • UV Disinfection/Purification

TWT-SMD-1007\* Compact, Self-Contained, Skid-Mounted Fluid Mana 50 GPM 80" W x 60"H x 32"D

\*\* lbs

Skid-Mounted Fluid Management System • 2-Stage Filtration • TWT<sup>®</sup> Deposit Control Technology

Ultra Violet Disinfection & Purification

Two UV Lamps Required

Piping: 2" In/Out of system

#### Custom Engineered System Built to Order Only.

TWT-SMD-1007+1\*50 GPM68" W x 52"H x 30"D\*\* lbsCompact, Self-Contained, Skid-Mounted Fluid Management System

- 3-Stage Filtration TWT<sup>®</sup> Deposit Control Technology
- Ultra Violet Disinfection & Purification

Two UV Lamps Required

Piping: 2" In/Out of system

#### **Custom Engineered System Built to Order Only.** \*TWT-SMD-series upgrades for larger GPM requirements are available upon request

\*TWT-SMD-series upgrades for larger GPM requirements are available upon request \*\*TBD: To be determined, based on final system configuration at time of purchase. TWT Inc.recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc.be stored at owners facility at all times, that will insure uninterrupted service an treatment.Review product list for replacement filters and ultra-violet lamps.





For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER &	GPM	PRODUCT
PRODUCT DESCRIPTION:		DIMENSIONS

APPROX SHIP WEIGHT

270lbs

TWT-SMD-1007+2\* 50 GPM Compact, Self-Contained,

Skid-Mounted Fluid Management System

4-Stage Filtration • TWT<sup>®</sup> Deposit Control Technology

Ultra Violet Disinfection & Purification

Two UV Lamps Required

Piping: 2" In/Out of system

**Custom Engineered System Built** to Order Only.



#### TWT-SMD-50-JCH90

50 GPM 48" W x 52"H x 63"D

All-In-One Water Treatment: Filtration and UV Disinfection

• Stainless Steel Filter Housing w/Jumbo 5 Micron Sediment Filter Cartridge and Pressure Gauge • Stainless Steel Multi-Cartridge Filer Housing w/4 Carbon Cartridges • UV5000 Sterilizer 316 SS NEMĂ IV Control Panel • UV Monitor w/2 Sensors • Solenoid Valves

Manual Shut-Off Valves
 Skid Mounted on 304 SS

Two UV Lamps Required

Piping: 2" In/Out of system

Optional:TWT<sup>®</sup> Deposit Control Technology (Hard water conditioning & treatment)

#### **Custom Engineered System Built to Order Only.**

TWT-SMD50P-JCH90:

Single Stage Filtration

**50 GPM** UV Disinfection for Food Processing -

48" W x 55"H x 63"D

- Single Staged Filtration UV Disinfection On Board Pump
- NEMA IV Control Panel Sanitary Fittings and Pipes
- Manual Shut-Off Valves 
   Mounted on 304 SS Skid
- Two UV Lamps Required

Piping: 2" In/Out of system

Optional:TWT® Deposit Control Technology (Hard water conditioning & treatment)

#### **Custom Engineered System Built to Order Only.**

\*TWT-SMD-series upgrades for larger GPM requirements are available upon request \*\*TBD: To be determined, based on final system configuration at time of purchase. Custom Orders: Larger pipe size (GPM) applications available upon request TWT Inc. recommends that an initial supply of replacement products e.g., replacement liters. UV lamps etc. be stored at owners facility at all times. that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.





For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

\*\* lbs

ITEM NUMBER &	GPM	PRODUCT
<b>PRODUCT DESCRIPTION:</b>		DIMENSION

S

#### APPROX SHIP WEIGHT

TWT-SMD50P-JCH902: TBD **50 GPM** UV Disinfection for Food Processing - Dual Staged Filtration

Dual Filtration Stages
 UV Disinfection
 On Board Pump

- NEMA IV Control Panel Sanitary Fittings and Pipes
- Manual Shut-Off Valves 
   Mounted on 304 SS Skid

Two UV Lamps Required

Optional:TWT<sup>®</sup> Deposit Control Technology (Hard water conditioning & treatment)

Piping: 2" In/Out of system

#### **Custom Engineered System Built to Order Only.**

TWT-SMD50-BBBX1 50 GPM 52" W x 52"H x 65"D All-In-One Water Treatment: Micro Filtration and UV Disinfection

250lbs

- Polypropylene Filter Housing w/5 Micron Sediment Filter Cartridge and Pressure Gauge • Electronic Deposit Control • UV5000 Sterilizer 316 SS
- NEMA IV Control Panel
   UV Monitor w/2 Sensors
   Solenoid Valves
- Chemical Feed Pump Ph Sensor/Controller ORP Sensor/Controller
- Manual Shut-Off Valves Flange In/Out Ports Skid Mounted on 304 SS

Two UV Lamps Required

Optional:TWT® Deposit Control Technology (Hard water conditioning & treatment)

Piping: 2" In/Out of system

**Custom Engineered System Built to Order Only.** 

#### TWT-SMD50-BBBX2

50 GPM 42" W x 42"H x 62"D 270lbs

All-In-One Water Treatment: Micro Filtration and UV Disinfection

- Dual Filtration Stages (Sediment 20 and 5 Micron) in Polypropylene Filter Housings
- UV Disinfection with Monitoring System Solenoid Valve
- All Electronics inside NEMA IV Control Panel 
   Manual Shut-Off Valves
- Mounted on 304 SS Skid

two UV Lamps Required

Optional:TWT<sup>®</sup> Deposit Control Technology (Hard water conditioning & treatment)

Piping: 2" In/Out of system

#### **Custom Engineered System Built to Order Only.**

TWT Inc.recommends that an initial supply of replacement products e.g., replacement liters, UV lamps etc.be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.





For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

i or additional in		visit www.trianyatarwave.	om - D man. mjoet	riangularwave.com • triwavelnc@aol.co
ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
<ul> <li>TWT-SMD-50P-JCHX1</li> <li>All-In-One Water Treatment.</li> <li>Single Stainless Steel Filte Cartridge and Pressure Ga</li> <li>UV5000 Sterilizer 316 SS</li> <li>Manual Shut-Off Valves • 3</li> <li>Footprint: 48" X 52" X 63"</li> <li>Weight: 270 lbs.</li> <li>UV Monitor</li> <li>Solenoid Valves</li> <li>Optional:TWT<sup>®</sup> Deposit Contro (Hard water conditioning &amp; treat</li> <li>Custom Engineered System</li> </ul>	er Housing auge • Post • NEMA IV Skid Mount Skid Mount of Technology tment)	w/Jumbo Sediment Filter Filter in Big Blue Housing Control Panel ed on 304 SS	270 lbs	
TWT-SMD-50P-JCHX2 All-In-One Water Treatment • Dual Stainless Steel Filter and Pressure Gauge • Post Filter in Big Blue Hou • UV5000 Sterilizer 316 SS • NEMA IV Control Panel • Manual Shut-Off Valves • Skid Mounted on 304 SS • UV Monitor • Solenoid Val Optional:TWT® Deposit Contro (Hard water conditioning & trea Custom Engineered Syst	Housing w using ves of Technology tment)	/Jumbo Sediment Filter Cartı	270 lbs idge	

#### **TWT-SMD-1008\***

100 GPM 72" W x 52"H x 34"D

\*\* lbs

- Compact, Self-Contained , Skid-Mounted Fluid Management System
- 2-Stage Filtration TWT® Deposit Control Technology
- Ultra Violet Disinfection & Purification
- Four UV Lamps Required

Piping: 2" In/Out of system

#### **Custom Engineered System Built to Order Only.**

\*TWT-SMD-series upgrades for larger GPM requirements are available upon request \*\***TBD**: To be determined, based on final system configuration at time of purchase. *Custom Orders:* Larger pipe size (GPM) applications a vailable upon request *TWT Inc. recommends that an initial supply of replacement products e.g., replacement liters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.* 



# ALL-IN-ONE MD INTEGRATED WATER TREATMENT & CONDITIONING SYSTEMS P.O.E./P.O.U.

Filtration • Deposit Control • UV Disinfection/Purification

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS

#### TWT-SMD-1008+1\*

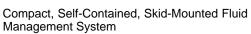
100 GPM 80" W x 60"H x 34"D

WEIGHT

590 lbs

APPROX SHIP

\*\* lbs



- 3-Stage Filtration TWT<sup>®</sup> Deposit Control Technology
- Ultra Violet Disinfection & Purification
- Four UV Lamps Required
- Piping: 2" In/Out of system

**Custom Engineered System Built to Order Only.** 



#### TWT-SMD-1008+2\*

100 GPM 80" W x 52"H x 34"D

Compact, Self-Contained, Skid-Mounted Fluid Management System

- 4-Stage Filtration TWT® Deposit Control Technology
- Ultra Violet Disinfection & Purification
- Four UV Lamps Required

Piping: 2" In/Out of system

#### **Custom Engineered System Built to Order Only.**



TWT-SMD-100P-BBBX3100 GPM36" W x 50"H x 53"DAll-In-One Water Treatment:Filtration and UV DisinfectionManagement System

- Triple Filtration Stages (Sediment 50, 20 and 5 Micron)
- Filter Housings with Pressure Gauges UV Disinfection On Board Pump
- All Electronics inside NEMA IV Control Panel Mounted on Stainless Steel Skid
- Four UV Lamps Required

Optional:TWT® Deposit Control Technology (Hard water conditioning & treatment)

Piping: 2" In/Out of system

### Custom Engineered System Built to Order Only.

Factory assembled and skid mounted on stainless steel skid. 3" line in/out of system.Filter medium and micronic sizes used in staged filter housings are configured as illustrated.Other filter medium andmicronic sizes are available and are based upon input water quality and customer and/or industry specific treatment requirements (medium TBT).Micronic sizes of filters are generally 20, 30, 50 microns, unless otherwise specified

\*TWT-SMD-series upgrades for larger GPM requirements are available upon request \*\***TBD**: To be determined, based on final system configuration at time of purchase. *Custom Orders*: Larger pipe size (GPM) applications available upon request



### ALL-IN-ONE MD INTEGRATED WATER TREATMENT & CONDITIONING SYSTEMS P.O.E./P.O.U. Filtration • Deposit Control • UV Disinfection/Purification

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

For additional	information:	visit www.triangularwave.	.com • E-mail: info@
ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
All-In-One Water Treatment UV Disinfection	:: Filtration and mbo 5 Micron 6 SS • 2 UV Solenoid Valv FNPT In/Out	n Sediment Filter Cartridge a Monitors w/4 Sensors ves	270 lbs
Custom Engineered Sys	tem Built to	) Order Only.	
TWT-SMD-150-UV3 UV Disinfection • Triple UV-5000 Sterilizer 3 • Power Bar w/Surge Protect • Rack Mounted • Six UV Lamps Required			270 lbs

Piping: 2" In/Out of system

Custom Orders: Larger pipe size (GPM) applications a vailable upon request

**Custom Engineered System Built to Order Only.** 

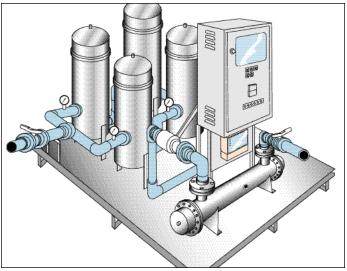
#### TWT-SMD-1009/4

#### 200 GPM 84"W X 72"H X 60"D

Compact, Self-Contained, Skid-Mounted Fluid Management System

- 4-Filter Housings Stage Filtration
- TWT<sup>®</sup> Deposit Control Technology
- Ultra Violet Disinfection & Purification
- Seven UV Lamps Required
- Piping: 3" In/Out of system

#### **Custom Engineered System Built to Order Only.**



\*TBD: To be determined, based on final system configuration at time of purchase.

ALL-IN-ONE MD INTEGRATED WATER TREATMENT & CONDITIONING SYSTEMS P.O.E./P.O.U. Filtration • Deposit Control • UV Disinfection/Purification

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### Custom Engineered System Built to Order Only.

84"W X 72"H X 60"D

ITEM NUMBER & GPM PRODUCT DESCRIPTION: PRODUCT DIMENSIONS APPROX SHIP WEIGHT

\*800 lbs

TWT-SMD-200+4 200 GPM Compact, Self-Contained, Skid-Mounted Fluid Management System

Staged Filtration

• TWT<sup>®</sup> Deposit Control Technology

• 7 Lamp Ultra Violet Disinfection & Purification

· Stainless Steel skid

Piping: 3" In/Out of system

Applies all the needed elements for maximum fluid protection, management, and peace of mind in one simple packaged solution. Technologically advanced method for water & fluid management, Staged Filtration, TWT<sup>®</sup> Microprocessor Deposit Controller, Reaction Chamber, and UV Disinfection/Purification units are combined to provide a start-to-finish answer to simplified prevention, treatment and management of water line contamination dangers.

#### Specifications:

Factory assembled and skid mounted on stainless steel skid (Size & weight may vary according to custom design). Filter medium and micronic sizes used in staged filter housings are configured as illustrated. Other filter medium andmicronic sizes are available and are based upon input water quality and customer and/or industry specific treatment requirements (medium TBT).

Micronic sizes of filters are generally 20, 30, 50 microns, unless otherwise specified.

**Please Note:** System engineering design, weight, size and system component assembly can vary based on TWT engineering review.

Pumps, piping, fittings, valves, and other material needed to and from system owners responsibility. The rugged self-contained design of this system ensures that the system will enjoy a long and reliable lifecycle when properly cared for.

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

#### Point-Of-Entry/Point-Of-Use Treatment System





Request TWT file #ATS98 for additional system information.

\*TWT-SMD-series upgrades for larger GPM requirements are available upon request Custom Orders: Larger pipe size (GPM) applications available upon request TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.

### All-In-One Multi-Process Ultra Treatment Systems Filtration • Ultra-Filtration • Deposit Control • UV Disinfection/Purification

### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

Ultra-Filtration removes impurities as small as .015 microns from the source water. Now, you can have continuous, crystal

clear safe water. It uses very little water during the flush cycle and does not add chemicals to the water.

### Custom Engineered System Built to Order Only.

ITEM NUMBER &	GPM	PRODUCT	APPROX SHIP
PRODUCT DESCRIPTION:		DIMENSIONS	WEIGHT
TWT-MD-1004UF	12 GPM	43"W X 56"H X 8"D	TBD

Compact, Self-Contained, Wall Mounted Fluid Management System

- 2-Filter Housings
- Stage Filtration
- Ultra-Filtration
- TWT<sup>®</sup> Deposit Control Technology
- Ultra Violet Disinfection & Purification
- 1 UV Lamp Required
- Piping: 1" In/Out of system

0 BILL UV-120012 GPM Ultra Violet Disinfection & Purification **Ultra** Filter Carbon Sediment or 10/20 GAC Micron Ο Filter Filter BB BB 6 X 20 TWT-MD/DP-2FS 6 X 20 PVC PVC Housing Housing Pre drilled holes for mounting frame bolt assembly Pre drilled 0 anchor holes for floor support

Concept rendering not to scale, for reference only.

**Optional:** Stainless steel frame supports for free standing floor installation. Two needed per system.

**TBD:** To be determined, based on final system configuration at time of purchase. *Custom Orders*: Larger pipe size (GPM) applications a vailable upon request *TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.* 

### All-In-One Multi-Process Ultra Treatment Systems

Filtration • Ultra-Filtration • Deposit Control • UV Disinfection/Purification • Ozone Oxidation

### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

Ultra-Filtration removes impurities as small as .015 microns from the source water. Now, you can have continuous, crystal clear

safe water. It uses very little water during the flush cycle and does not add chemicals to the water.

### Custom Engineered System Built to Order Only.

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
TWT-MD-1004/UFOZ Compact, Self-Contained, Wall Mounted Fluid Management System • 2-Filter Housings • Stage Filtration	12 GPM	56"W X 60"H X 8"D	TBD	
Ultra-Filtration				
<ul> <li>TWT<sup>®</sup> Deposit Control Technology</li> <li>Ultra Violet Disinfection &amp; Purification</li> <li>Ozone Oxidation</li> <li>1 UV Lamp Required</li> <li><i>Piping:</i> 1" In/Out of system</li> </ul>	Sedim 10/2 Micro Filte BB 6 X 2 PVC Housi	0 or on GAC r Filter 80 6 X 2 c PVC	- WM Ultra Violet ©	TWT-MD/DP-2FS for mounting frame bolt assembly.
Co	Incept rendering not to	e scale, for reference only.		Pre drilled anchor holes for floor support

**Optional:** Stainless steel frame supports for free standing floor installation. Two needed per system.

\*TWT-system upgrades for larger GPM requirements are available upon request

 $\label{eq:tbd:tbd} \textbf{TBD:} \ \ \textbf{To be determined, based on final system configuration at time of purchase.}$ 

Custom Orders: Larger pipe size (GPM) applications available upon request

TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.

### All-In-One Multi-Process Ultra Treatment Systems

Filtration • Ultra-Filtration • Deposit Control • UV Disinfection/Purification for HVAC, Cooling Tower/Condensers, Chillers

#### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

Ultra-Filtration removes impurities as small as .015 microns from the source water. Now, you can have continuous, crystal clear safe water. It uses very little water during the flush cycle and does not add chemicals to the water.

### **Custom Engineered System Built to Order Only.**

ITEM NUMBER &	GPM	PRODUCT	APPROX SHIP
PRODUCT DESCRIPTION:		DIMENSIONS	WEIGHT

30 GPM\* 65"W X 66"H X 31"D TBD

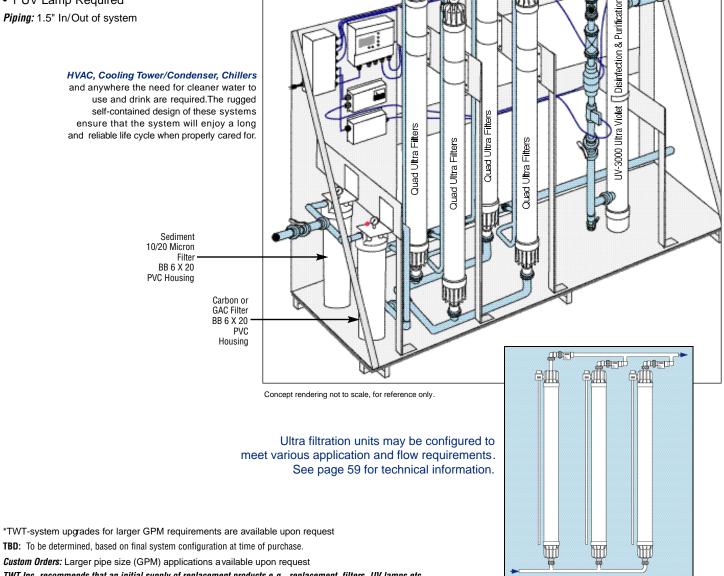
Compact, Self-Contained, Skid-Mounted Fluid Management System

- 2-Filter Housings Stage Filtration
- Quad Ultra-Filtration

**TWT-MD-1006/UF** 

- TWT<sup>®</sup> Deposit Control Technology
- Ultra Violet Disinfection & Purification
- 1 UV Lamp Required

Piping: 1.5" In/Out of system



TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.

### **TWT ALL-IN-ONE DP INTEGRATED WATER TREATMENT & CONDITIONING SYSTEMS P.O.U. / P.O.E.** Deposit Control • UV Disinfection Purification System–If Water Conditions Do Not Require Filtration

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER &	GPM	PRODUCT
PRODUCT DESCRIPTION:		DIMENSIONS

2 GPM

TWT-DP-01

30"W x 30"H x 10"D

Integrated Fluid Treatment System with High Intensity UV Light Kills 99.9% of all Bacteria

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification *Piping:* .5" In/Out of system

TWT-DP-02

4 GPM 34"W x 30"H x 10"D

Integrated Fluid Treatment System with High Intensity UV Light Kills 99.9% of all Bacteria

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification

Piping: .75" In/Out of system

#### TWT-DP-03

8 GPM 49"W x 42"H x 15"D

Integrated Fluid Treatment System with High Intensity UV Light Kills 99.9% of all Bacteria

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification *Piping:* .75" In/Out of system



The TWT-DP-03 and DP-04 series product line is simular in design and appearance. Weight, size and component assembly will differ based on GPM treatment requirements.

TWT-DP-04

12 GPM 49"W x 42"H x 15"D y

System with High Intensity UV Light Kills 99.9° of all Bacteria. Features TWT® Deposit Control Technology with Ultra Violet Disinfection & Purification. *Piping:* 1" In/Out of system



Custom Orders: Larger pipe size ( GPM ) applications available upon request

TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for filters and ultra-violet lamps.

Upgrades: Customized TWT® systems to meet your treatment applications available upon request

**TWT ALL-IN-ONE DP INTEGRATED WATER TREATMENT & CONDITIONING SYSTEMS P.O.U./ P.O.E.** Deposit Control • UV Disinfection Purification System

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & GPM PRODUCT APPROX SHIP PRODUCT DESCRIPTION: DIMENSIONS WEIGHT

TWT-DP-0515 GPM49"W x 42"H x 15"D180 lbsIntegrated Fluid treatmentSystem with High Intensity UV LightKills 99.9° of all Bacteria

Piping: 1" In/Out of system

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification.

TWT-DP-0630 GPM52"W x 57"H x 15"D185 lbsIntegrated Fluid treatmentSystem with High Intensity UV LightKills 99.9° of all Bacteria

Piping: 1.5" In/Out of system

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification.

**TWT-DP-07** 50 GPM 44"W x 58"H x 14"D 229 lbs

Integrated Fluid treatment System with High Intensity UV Light Kills 99.9° of all Bacteria

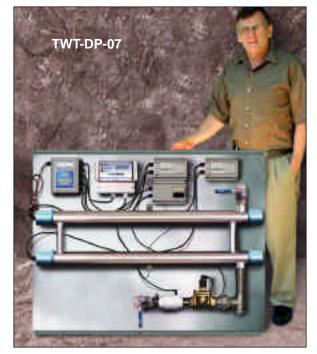
Piping: 2" In/Out of system

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification.

Two UV Lamps Required

TWT-DP-08100 GPM44"W x 58"H x 14"D235 lbsIntegrated Fluid treatmentSystem with High Intensity UV LightKills 99.9° of all BacteriaPiping: 2" In/Out of system

Features TWT<sup>®</sup> Deposit Control Technology with Ultra Violet Disinfection & Purification. Two UV Lamps Required



The TWT-DP series product line is simular in design and appearance. Weight, size and component assembly will differ based on GPM treatment requirements.

ACCESSORIES for INTEGRATED MD/DP TREATMENT SYSTEMS P.O.U. / P.O.E. Stainless Steel Frame Supports for Free Standing Installation – Two Per Unit Required

TWT-MD/ DP-2FS

Sized according to system

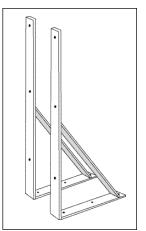
TBD

To use with the MD & DP floor mounted water treatment systems

Quote: Order based on price of material at time of purchase

**TBD:** To be determined, based on final system configuration at time of purchase. Custom Orders: Larger pipe size (GPM) applications available upon request

TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps. Upgrades: Customized TWT<sup>®</sup> systems to meet your treatment applications available upon request



### TWT- SOLAR POWERED TRANSPORTABLE WATER TREATMENT SYSTEM

### Filtration • Deposit Control • UV Disinfection/Purification

#### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

#### **TWT-SP-250-4 (4-GPM)**

Our Transportable Solar System combines High-Quality Pre-Filtration with our Hi-Power Ultra violet Purification Technology to Produce a Complete Water **Quality System** 

- Size: 32" x 30" X 55"
- Weight: 200 lbs
- · Heavy duty water treatment system
- Solar powered panels (maintenance free)
- · System battery pack (maintenance free)
- · Staged filtration: Sediment, carbon and other filter cartridge replacements
- Ultra violet disinfection & purification
- DC water pump (for deep well applications)
- Rated flow: 4 GPM
- 3.0 hours sun powered run time=approx. 720 gallon output
- · 8.0 hours charged battery pack, solar power run time= approx. 1920 gallons per day
- Initial UV dose at rated flow: 38 mj/cm<sup>2</sup> (38,000 uwsec/cm<sup>2</sup>)
- · Electrical: 12 volt solar power pack/panel-solar panel-55W

### H2ALL (1 panel) 285 W/h (588 W/h battery bank)

CATEGORY:	<b># PIECES</b>	Units/ Desc	Data US	40
Ext. Dimensions: LxWxH		(OPEN)	60" x 43" x 92"	10
Ext. Dimensions: LxWxH		(CLOSED)	same as above	212
Weight:		(DRY)	388 LBS	
Construction:		(MATERIALS)	Steel, Aluminum	
Solar Panels:	1	(TOTAL WATTAGE)	588 W/h	~
Batteries:	2	(CAPACITY)	1.2 KwH	
Inverter:		(VDC, WATTS)	Optional, 300 watts	
Charge Controller:	1	(TYPE, CURRENT)	MPPT, 15A	4.3
Wind Turbine (Optional)	1	(TOTAL WATTAGE)	N/A	

### MP-TRK (6 panel) 2.5 KW (15 KwH battery bank) **DUAL-AXIS tracking**

CATEGORY:	# PIECES	Units/ Desc	Data US
Ext. Dimensions: LxWxH		(OPEN)	168" x 83" x 96"
Ext. Dimensions: LxWxH		(CLOSED)	same as above
Weight:		(DRY)	3,400 LBS
Construction:		(MATERIALS)	Steel, Aluminum
Solar Panels:	6	(TOTAL WATTAGE)	660 W/h, W dual axis tracking
Batteries:	8	(CAPACITY)	15 KwH
Inverter:	1	(VDC, WATTS)	24VDC, 2.5KW, 120 V
Charge Controller:	1	(TYPE, CURRENT)	MPPT, 60A
Wind Turbine (Optional)	1	(TOTAL WATTAGE)	400 W/h









### MOBILE SOLAR POWER UNITS

Renewable Energy Systems on Wheels

### **Renewable Energy Systems on Wheels**<sup>™</sup>

• ZERO Fumes • ZERO Emissions • ZERO Noise • ZERO Fumes • Worldwide Mobility

### Sprint 6 ( 6 panel): 2.5 KW (7.3 KwH battery bank)

CATEGORY:	# PIECES	Units/ Desc	Data US
Ext. Dimensions: LxWxH		(OPEN)	106" x 83" x 96"
Ext. Dimensions: LxWxH		(CLOSED)	same as above
Weight:		(DRY)	2,800 LBS
Construction:		(MATERIALS)	Steel, Aluminum
Solar Panels:	6	(TOTAL WATTAGE)	1050 W/h, W/dual axis tracking
Batteries:	8	(CAPACITY)	7.3 KwH
Inverter:	1	(VDC, WATTS)	24VDC, 2.5KW, 120vac, 60 Hz
Charge Controller:	1	(TYPE, CURRENT)	MPPT, 60A
Wind Turbine (Optional)	1	TOTAL WATTAGE)	400 W/h



### Sprint 9 ( 9 panel): 2.5 KW (15 KwH battery bank)

CATEGORY:	# PIECES	Units/ Desc	Data US
Ext. Dimensions: LxWxH		(OPEN)	168" x 83" x 96"
Ext. Dimensions: LxWxH		(CLOSED)	same as above
Weight:		(DRY)	2,900 LBS
Construction:		(MATERIALS)	Steel, Aluminum
Solar Panels:	9	(TOTAL WATTAGE)	1575 W/h, W/dual axis tracking
Batteries:	8	(CAPACITY)	15 KwH
Inverter:	1	(VDC, WATTS)	24VDC, 2.5KW, 120vac, 60 Hz
Charge Controller:	1	(TYPE, CURRENT)	MPPT, 60A
Wind Turbine (Optional)	1	TOTAL WATTAGE)	400 W/h



### Sprint 12 (12 panel) 3 KW (15 KwH battery bank)

CATEGORY:	# PIECES	Units/ Desc	Data US
Ext. Dimensions:LxWxH		OPEN)	230"x88"x106"
Ext. Dimensions:LxWxH		(CLOSED)	same as above
Weight:		(DRY)	3,000 LBS
Construction:		(MATERIALS)	Steel, Aluminum
Solar Panels:	12	(TOTAL WATTAGE)	2,100 W/h
Batteries:	12	(CAPACITY)	15 KwH
Inverter:	1	(VDC, WATTS)	24VDC, 2.5KW
Charge Controller:	1	(TYPE, CURRENT)	MPPT, 60A



### MOBILE SOLAR POWER UNITS

### Renewable Energy Systems on Wheels

### Custom Engineered System Built to Order Only.

#### MP-3K (18 panel) 3 KW (30 KwH battery bank)

CATEGORY:	# PIECES	Units/ Desc	Data US
Ext. Dimensions: LxWxH		OPEN)	224"x190"x159"
Ext. Dimensions: LxWxH		(CLOSED)	224"x88"x98"
Weight:		(DRY)	6,200 LBS
Construction:		(MATERIALS)	Steel, Aluminum
Solar Panels:	18	(TOTAL WATTAGE)	3,150 W/h
Batteries:	16	(CAPACITY)	30 KwH
Inverter:	1	(VDC, WATTS)	48VDC, 3KW, 230 Vac, 50 Hz
Charge Controller:	1	(TYPE, CURRENT)	MPPT, 80A
Wind Turbine (Optional)	1	(TOTAL WATTAGE)	400 W/h





TWT has extensive design, engineering, and manufacturing ability to work with customers to use our products in whole or component form, as a component assembly, or as an accessary to their primary product. Take advantage of our outstanding manufacturing and marketing expertise – let TWT custom design a system to meet your specific application needs.

TWT<sup>®</sup> offers a bold series of chemical-free products & systems designed to meet the demanding challenge in fluid management. Technologically advanced methods for water, fluid treatment providing comprehensive end-to-end solutions.

Combined with solar energy, meeting the needs of any industry and application

### "The Competitive Edge"

### Specializing in: Chemical-Free Deposit Control Technology:

- Ultraviolet and/or Ozone Disinfection Ionization Purification Pre & Post Filtration
- Custom System Design & Integration
- To Create Solutions For Your Own Industry-Specific Situation
- Improving Operating Efficiency & Life Cycle of Equipment
- Economical & Cost Effective Energy & Water Savings

### Explore New Innovative Ideas Using Mobile Solar Power with TWT<sup>®</sup> Chemical-Free Water Treatment Technology. The Most Economical and Effective Way To Produce Safe Drinking Water Anywhere... AnyTime!

Mobile solar powered, water treatment systems are portable and well suited for various applications. Disaster Relief, Emergency Preparedness, remote Construction Sites, Small Villages, Areas With No power And Poor Water Quality.

Note:Mobile solar powered systems can be custom designed and integrated to meet your specific application requirements. Contact TWT, Inc. for additional information.



### TOTAL WATER CONTROL SYSTEMS (TWCS) For Industrial, Cooling Towers, and Process Water

(HVAC) Cooling Towers, Chillers, Condensers, (Chemical-Free) All-In-One: Water Conditioning and Treatment Systems. End-To-End Treatment Process Package Units.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### Custom Engineered System Built to Order Only.

TWCS are custom built according to customer system application, treatment and GPM requirements. Component assembly, size and system weight to be determined at at time of purchase based on completed proposal

MODEL NUMBER	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
TWT-TWCS-500	30	TBD	TBD	
Designed to treat 30 GF (TWT-UV5000) TWCS A Size, Height, Width & De Approx sump volume in Approx tonnage capacit Electrical power: 110/20	Approximate Dimension opth (TBD) gallons 0-4000 y (To Be Determined)		Q	
Rear View: System Con	nponents	These two the	nits are all similar in appearance, but have different ca	pacities.
TWT-TWCS-1000	50	TBD	TBD	
TWT-TWCS-1000–Desi of System (TWT-UV600 Size, Height, Width &Dep Approx sump volume in Approx tonnage capacity Electrical power: 110/20	0) TWCS Approximate th (TBD) gallons 4000-6000 / (To Be Determined)			

#### **Optional Components:**

- TDS meter 
   PH meter 
   Conductivity meter
- Blow Down Control Valve
- Diagnostics (Off-Site Remote Monitoring)
- System cover for outdoor installation
- Replaceable cartridge filtration system in place of media filtration when and if required

3

Custom Orders: Larger pipe size (GPM) applications available upon request

TWT Inc.recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc.be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.

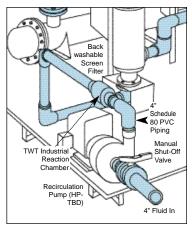
TBD: To be determined, based on final system configuration at time of purchase.

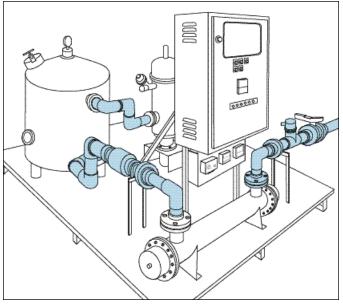
For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### Custom Engineered System Built to Order Only.

MODEL NUMBER	GPM	PRODUCT DIMENSIONS	APPROX WEIGHT
TWT-TWCS-2500	80	TBD	TBD

TWT-TWCS-2500–Designed to treat 80 GPM/4 inch In/Out of System (TWT-UV100-6) TWCS Approximate Dimensions: Size, Height, Width & Depth (TBD) Approx sump volume in gallons 6000-10,000 Approx tonnage capacity (To Be Determined) Electrical power: 110/20 VAC / 220/30 VAC





SHIP

Rear View: System Components

TBD



TWT-TWCS-5000–Designed to treat 120 GPM/6 inch In/Out of System (2–TWT-UV100-6) TWCS Approximate Dimensions: Size, Height, Width & Depth(TBD) Approx sump volume in gallons 10,000-15,000 Approx tonnage capacity (To Be Determined) Electrical power: 110/20 VAC / 220/30 VAC

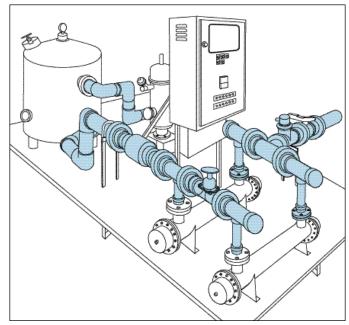
120

### **Optional Components:**

- TDS meter PH meter Conductivity meter
- Blow Down Control Valve

**TWT-TWCS-5000** 

- Diagnostics (Off-Site Remote Monitoring)
- System cover for outdoor installation
- Replaceable cartridge filtration system in place of media filtration when and if required



Custom Orders: Larger pipe size (GPM) applications a vailable upon request

TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment. Review product list for replacement filters and ultra-violet lamps.

**TBD:** To be determined, based on final system configuration at time of purchase.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### **Custom Engineered System Built to Order Only.**

### Safe drinking water anywhere...any time!

ITEM NUMBER & PRODUCT DESCRIPTI	ION:	GPM	PRODUCT DIMENSIONS	APPROX WEIGHT
TWT-UV-20 Disinfection System	I	20	TBD	TBD
TWT-UV-40 Complete Disinfection	on System	40	TBD	TBD
TWT-UV-60 Complete Disinfection	on System	60	TBD	TBD
Rated flow: Initial UV dose at rated flow: Electrical: Maximum operating temp: Maximum operating pressure: Plumbing: Chamber material: Filtration (in SS housings): Additional features:	(3600 gallons/hour, i 25 mJ/cm <sup>2</sup> (25,000 u 100-130V / 50-60 H 37°C (98.6F) 125 psi - 8.6 bar (ter 3" Flange In/Out 304L stainless steel	86400 gallons uwsec/cm <sup>2</sup> ) @ z / 192 VA • 2 sted to 500 p (316L a vailat d 1 micron ab	995% T 20-240V / 50-60 Hz / 154 ` si)	VA
TWT-UV-75		75	TBD	TBD

**TWT-UV-75 Complete Disinfection System** 

TWT-UV 20/40/60 Range 30 M to 50 M larger GPM systems







TWT-UV-200 Complete Disinfection	on System	200	TBD	TBD
Rated flow:	946 liters per minute (15,000 gallons/hour	( ),		,36 mil liters per day
Initial UV dose at rated flow:	35 mJ/cm <sup>2</sup> (35,000 u	wsec/cm <sup>2</sup> ) @	95% T	
Electrical:	100-130V / 50-60 Hz	• 220-240V /	50-60 Hz	
Approx. power usage	700 W			
Maximum operating temp:	37°C (98.6F)			
Maximum operating pressure:	125 psi - 8.6 bar (tes	ted to 500 psi	)	
Plumbing:	3" Flange In/Out			
Chamber material:	304L stainless steel			
Filtration (in SS housings):	50, 20 and 1A micror	n sediment filt	er, carbon filter con	siderations available
Additional features (optional):	Real time monitoring	of UV, TDS, O	ORP pressure gaug	es, test ports, solenoid valve

#### **Component List**

1. Stainless Steel Base Skid

- 2. One 10 H.P. pump with a 50 ft.Head, self-priming
- 3. One strainer basket
- 4. Two 10 micron bag filters
- 5. One stainless steel 30" carbon filter or One 40" stainless steel carbon filter for UV 40/60
- 6. One #90 Hurricane 5 micron filter
- 7. One #90 Hurricane 1 micron filter

### 8. One UV-5000 disinfection subsystem

- 9. One chlorine injector (optional)
- 10. TWT deposit control subsystem

### Skid Size

Skid size is approximately 48" x 66", crated, and ready to hook onto inlet and outlet with quick connect couplings. Unit is crated to fit into airplane cargo compartment.

TWT-UV-200

The TWT-UV-40 [40 gallons per minute] and the TWT-UV-60 (60 gallons per minute) are the same in operation, just proportionally larger. It takes just 14 hours for the UV-60 to fill a 50,000 gallon (190 cubic meters ) storage bladder.

Preparation and setup instructions, as well as maintenance and operating manuals are supplied with each unit.

### TWT MULTI-STAGED SIDESTREAM BYPASS TREATMENT SYSTEMS (custom quote only)

### Chemical-Free Conditioning & Treatment for the HVAC (Cooling) Industry. TWT<sup>®</sup> Ionization, Disinfection, Purification, Deposit Control Technology-

Filtration, deposit control, side-stream for (HVAC) cooling tower application. The TWT Bypass Fluid Treatment System is a fully integrated, factory-assembled and mounted treatment system combining patented TWT Deposit Control and IonGuard purification

technologies. Designed to provide a practical answer to large pipe diameter and recirculating fluid treatment problems. The Bypass System offers a much sought after solution at an economical price.

- Provides new equipment with the ability to enhance it's features and benefits.
- Retrofit existing equipment to improve its operating efficiency and life cycle.

\*Custom System Quote: Industry specific fluid treatment needs and up grades

Custom Installation: Pricing to be established based upon proposal submitted at time of sale based on materials cost at time of purchase Note: Above systems are fully integrated and factory assembled and mounted,

offering end to end fluid management and treatment solutions

TBD: To be determined, based on final system configuration at time of purchase.

Larger volume treatment systems available upon request

Enter new markets and broaden customer satisfaction.

#### **PRODUCT DESCRIPTION:**

ITEM NUMBER &	
DIMENSIONS	

APPROX SHIP

#### **TWT-BP-RC-1A**

Factory assembled 2-inch pipe solenoid with Deposit/Ionization Control Unit and recirculating pump for use with recirculating water systems. Designed to treat up to 1,650 gallons per hour This unit Wall Mounts [w/lonization]

TBD

PRODUCT

WEIGHT

TBD



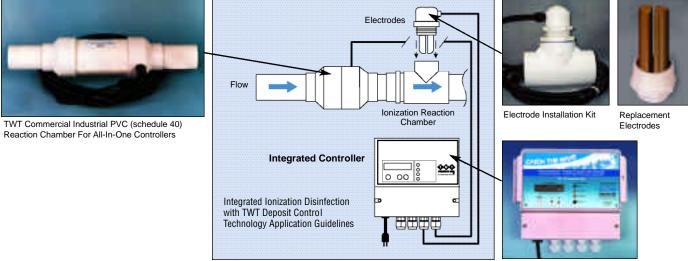
\*Custom built only according to customer system application and ByPass GPM requirements. Size and weight to be determined at time of purchase

### TWT IonGuard Disinfection, Purification with TWT Deposit Control Technology

#### **IonGuard Purification System:**

The IonGuard Purification System is an electrolytic copper /silver ion generator. The system units contain specially cast copper/silver alloy electrodes. These electrodes are mounted in a housing designed for easy access. The IonGuard Purification System

purifies water through a process called ionization. This process utilizes a low voltage direct current [DC] to place precise and minute amounts of copper and silver ions into water systems. Copper ions kill algae and silver ions kill bacteria ( integrate with TWT deposit control technology for enhanced results).



Three (3) Unit Application & Installation



Deposit & IonGuard All-In-One Controller

### IONGUARD IONIZATION & PURIFICATION SYSTEM for POOLS, SPAS & HVAC APPLICATIONS System Consists of: TWT Control Units & TWT ID Electrode Installation Kits & Replacement Electrodes

### Triangularwave Technologies Advanced Method for Fluid/Water Management and Control

Electrode Installation Kit

PRODUCT

DIMENSIONS

10"W x 7.5"H x 4.5"D

10"W x 7.5"H x 4.5"D

The TWT<sup>®</sup> lonGuard Purification System purifies water through a process called ionization. This process utilizes a low voltage direct current [DC] to place precise and minute amounts of copper and silver ions into water systems. The TWT<sup>®</sup> lonGuard Purification System releases controlled amounts of copper/silver ions into the water to kill algae, biofilm, fungi and other microorganisms.



TWT Commercial Industrial PVC (schedule 40) Reaction Chamber For All-In-One Controllers

ITEM NUMBER & PRODUCT DESCRIPTION:

#### TWT-5C8-277

Ionization/Purification System for the control of Algae & Bacteria. 0.5 Amp control unit (for pipes up to 2" or less) Designed to treat water volume up to 30,000 gallons

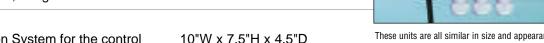
#### TWT-5C8-278

Ionization/Purification System for the control of Algae & Bacteria. 1.25 Amp control unit (for pipes up to 4" or less) Designed to treat water volume up to 80,000 gallons

#### TWT-5C8-279

Ionization/Purification System for the control of Algae & Bacteria. 2 Amp control unit Designed to treat water volume up to 160,000 gallons

Larger volume and pipe size application:Contact TWT, Inc. for recommendation Multiple units may be used for larger volume applications



Deposit & IonGuard All-In-One

Controller

These units are all similar in size and appearance, but have different capacities. Universal power supply

### IonGuard Disinfection, Purification and TWT® Deposit Control Technology All-In-One Package Unit

### TWTDCI-5C8-377

Integrated Ionization & Deposit Control System- 10"W x 7.5"H x 4.5"D 0.5 Amp Control Unit (for pipes up to 1 1/2" or less) Designed to treat water volume up to 30,000 gallons

### TWTDCI-5C8-378

Integrated Ionization & Deposit Control System- 10"W x 7.5"H x 4.5"D 1.25 Amp Control Unit (for pipes up to 2" or less) Designed to treat water volume up to 80,000 gallons

#### **TWTDCI-5C8-379**

Integrated Ionization & Deposit Control System- 10"W x 7.5"H x 4.5"D 2 Amp Control Unit (for pipes up to 3" or less) Designed to treat water volume up to 160,000 gallons

Larger volume and pipe size application:Contact TWT, Inc. for recommendation



These units are all similar in size and appearance, but have different capacities.

Universal power supply

### **REPLACEMENT PARTS for IONIZATION, CONDITIONING & TREATMENT SYSTEM**

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

#### ITEM NUMBER & PRODUCT DESCRIPTION:



**TWT-RE-0245** 1.5" Replacement Electrodes 1.5" W x 3.5"H

TWT-ID-0251



TWT-RE-0255 3" Replacement Electrodes 2.5" W x 4.5"H



**TWT-RE-0262** 6" Replacement Electrodes 2.5"W x 7.5"H

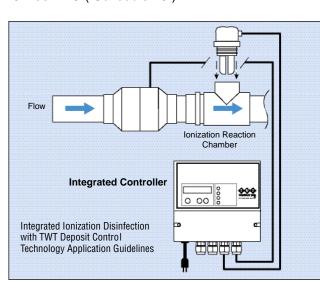


TWT-RE-0264P 6" – 4 Prong Replacement Electrodes 2.5"W x 7.5"H

T-Cap and Conduit for TWT-RE-0245 Replacement Electrodes	BOV	the second secon
<b>TWT-ID-0257</b> T-Cap and Conduit for TWT-RE-0255 Replacement Electrodes	BOV	
TWT-ID-0263 T-Cap and Conduit for TWT-RE-0262 Replacement Electrodes	BOV	
TWT-ID-0351 1 1/2" Tee PVC(Schedule 40)	BOV	
<b>TWT-ID-0357</b> 2" Tee PVC(Schedule 40)	BOV	
TWT-ID-0363 3" Tee PVC(Schedule 40)	BOV	
<b>TWT-ID-0369</b> 4" Tee PVC ( Schedule 40 )	BOV	
TWT-ID-0375		

6" Tee PVC (Schedule 40)

BOV



Three (3) Unit Application & Installation

Schedule 40 PVC (Schedule 80 available upon request)

Suggested System Integration / TWT Reaction Chamber & Deposit Control Units 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 specific needs.

BOV: Based on volume and/or related products ordered at time of purchase

## REPLACEMENT PARTS FOR IONGUARD ELECTRODE INSTALLATION KITS

ITEM NUMBER & PRODUCT DESCRIPTION:	APPROX SHIP WEIGHT	
TWT-IDK-0265115 ID Electrode Installation Kit: TWT-RE-0245 3" Electrode / 1 1/2" PVC Tee/ T-Cap and Conduit	3 lbs	Electrode included not to scale for reference only
TWT-IDK-0265122 ID Electrode Installation Kit:TWT-RE-0255 3" Electrode / 2" PVC Tee/ T-Cap and Conduit	5 lbs	Electrode included not to scale for reference only
TWT-IDK-0265123 ID Electrode Installation Kit: TWT-RE-0262 6" Electrode / 3" PVC Tee/ T-Cap and Conduit	8 lbs	Electrode included not to scale for reference only
TWT-IDK-0265124 ID Electrode Installation Kit:TWT-RE-0262 6" Electrode / 4" PVC Tee/ T-Cap and Conduit	9 lbs	Electrode included not to scale for reference only
<b>TWT-IDK-0265126</b> ID Electrode Installation Kit:TWT-RE-0262 6" Electrode / 6" PVC Tee/ T-Cap and Conduit	10 lbs	Electrode included not to scale for reference only
TWT-IDK-02651264P ID Electrode Installation Kit:TWT-RE-0264P 6" Electrode / 6" PVC Tee/ T-Cap and Conduit	10 lbs	

Larger volume and pipe size application: Contact TWT, Inc. for recommendation



Electrode included not to scale for reference only

### TWT-SPK01-1 / Four (4) Unit Kit for Spas



#### TWT-SPK01-1 / Four (4) Unit Kit

IonGuard Disinfection, Purification and TWT<sup>®</sup> Deposit Control Technology All-In-One package Unit. Designed to condition & treat water feed lines 1" or less in diameter. Universal power supply

#### Kit includes:

- TWTDCI-5C8-377 Integrated Ionization & Deposit Control System-0.5 amp control unit
- TWT-IDK-0265115 ID Electrode Installation Kit: 3" Electrode, 1 1/2" PVC Tee, Tee-Cap and Conduit
- TWT-IRC-01-1" Schedule 40 PVC Industrial Reaction Chamber
  - TWT-RE-0245-1 1/2" Replacement Electrodes

Alternate and clean electrodes periodically or enhanced life cycle and operating efficiency

#### TWT-SPK02-1.5 / Four (4) Unit Kit for Pools up to 30,000 gallons



#### TWT-SPK02-1.5 / Four (4) Unit Kit

IonGuard Disinfection, Purification and TWT<sup>®</sup> Deposit Control Technology All-In-One package Unit. Designed to condition & treat water feed lines 11/2" or less in diameter. Universal power supply

#### Kit includes:

- TWTDCI-5C8-377-Integrated Ionization & Deposit Control System-0.5 amp control unit
- TWT-IDK-0265122-ID Electrode Installation Kit: 3" Electrode , 2" PVC Tee, Tee-Cap and Conduit
- TWT-IRC-1.5 -1 1/2" Schedule 40 PVC Industrial Reaction Chamber
  - TWT-RE-0255-3" Replacement Electrodes

Alternate and clean electrodes periodically for enhanced life cycle and operating efficiency

#### TWT-SPK03-2/ Four (4) Unit Kit Pricing for Pools 40,000 / 80,000 gallons



#### TWT-SPK03-2 / Four (4) Unit Kit

IonGuard Disinfection, Purification and TWT® Deposit Control Technology All-In-One package Unit. Designed to condition & treat water feed lines 2" or less in diameter. Universal power supply

#### Kit includes:

- TWTDCI-5C8-378-Integrated Ionization & Deposit Control System-1.25 amp control unit
- TWT-IDK-0265123-ID Electrode Installation Kit: 6" Electrode, 3" PVC Tee, Tee-Cap and Conduit
- TWT-IRC-02-2" Schedule 40 PVC Industrial Reaction Chamber
- TWT-RE-0262-6" Replacement Electrodes

Alternate and clean electrodes periodically for enhanced life cycle and operating efficiency



#### TWT-SPK04-3/ Four (4) Unit Kit Pricing for Pools 90,000 / 120,000

TWT-SPK04-3 / Four (4) Unit Kit–Designed to treat water for Pools 90,000 / 120,000 gallons lonGuard Disinfection, Purification and TWT® Deposit Control Technology All-In-One package Unit. Designed to condition & treat water feed lines 3" or less in diameter.Universal power supply Kit includes:

- TWTDCI-5C8-379-Integrated Ionization & Deposit Control System-2 amp control unit for pipes up to 3" or less
- TWT-IDK-0265124P-ID Electrode Installation Kit: Two 6" Electrode, 3" PVC Tee, Tee-Cap and Conduit
- TWT-IRC-03 3" Schedule 40 PVC Industrial Reaction Chamber
- TWT-RE-0264P-6" Replacement Electrodes

Alternate and clean electrodes periodically for enhanced life cycle and operating efficiency



#### TWT-SPK05-4/ Five (5) Unit Kit Pricing for Pools 130,000 / 160,000 gallons

#### TWT-SPK05-4/ Five (5) Unit Kit

IonGuard Disinfection, Purification and TWT<sup>®</sup> Deposit Control Technology All-In-One package Unit. Designed to condition & treat water feed lines 4" or less in diameter. Universal power supply Kit includes:

- TWT-5C8-279-IonGuard Ionization/Purification System for the Control of Algae & Bacteria 2 amp control unit ( for pipes up to 6" or less )
- TWT-5C8-404 Commercial/Industrial Microprocessor Deposit Controller 2 amp control unit (for pipes up to 4"or less) – Controls mineral deposits and corrosion in all fluid based systems
- TWT-IDK-0265124P-ID Electrode Installation Kit: 6" 4 Prong Electrode, 4" PVC Tee, Tee-Cap and Conduit
- TWT-IRC-04-4" Schedule 40 PVC Industrial Reaction Chamber
- TWT-RE-0264P-6" Replacement Electrodes

Current source 110/20 VAC • Other current source available upon request Alternate and clean electrodes periodically for enhanced life cycle and operating efficiency



#### TWT-SPK06-6/ Eight (8) Unit Kit Pricing for Pools 160,000 / 240,000 gallons

#### TWT-SPK06-6/ Eight (8) Unit Kit

lonGuard Disinfection, Purification and TWT $^{\circ}$  Deposit Control Technology All-In-One package Unit. Designed to condition & treat water feed lines 6" or less in diameter.

Universal power supply

#### Kit includes:

- TWT-5C8-278-brQad Ionization/Purification System for the Control of Algae & Bacteria -1.25 amp control unit ( for pipes up to 6" or less)
- TWT-5C8-279–IonGuard Ionization/Purification System for the Control of Algae & Bacteria 2 amp control unit( for pipes up to 6" or less)
- TWT-5C8-406-Commercial/Industrial Microprocessor Deposit Controller-3 amp control unit (for pipes up to 6" or less)-Controls mineral deposits and corrosion in all fluid based systems
- TWT-IDK-0265126-ID Electrode Installation Kit: 6" Electrode, 6" PVC Tee, Tee-Cap and Conduit
- TWT-IDK-02651264P-ID Electrode Installation Kit: 6" 4 Prong Electrode, 6" PVC Tee, Tee-Cap and Conduit
- TWT-IRC-06-6" Schedule 40 PVC Industrial Reaction Chamber
- TWT-RE-0262-6" Replacement Electrodes
- TWT-RE-0264P-6" Replacement Electrodes

Alternate and clean electrodes periodically for enhanced life cycle and operating efficiency

Current source 110/20 VAC / Other current source available upon request

#### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

Ultra Violet water purification technology seeks to use the same process as nature to provide drinking water that is completely safe, clean and fresh. In nature, the sun produces UV rays which have a germicidal effect on disease causing pathogens in water. When these contaminates are exposed to UV light, they are rendered harmless and the output water is considered disinfected.

TWT UV water purifier products use the same technique. By exposing contaminated water to high-intensity UV light, disease-causing micro-organisms are rendered harmless. The water produced is safe, clean and fresh. The UV purifier does not add or remove anything from the water and is extremely cost effective by volume. Our UV units are installed in more than 20 countries around the globe, and our purifiers enjoy reputation for high quality and high effectiveness. UV purification affects waterborne contaminant's and disease-causing pathogens with a 99.9% kill rate or better.

The result is high quality water exceeding all health department standards. Employ UV purification anywhere there is a requirement for high quality, safe, clean drinking or process water at an exceptionally low cost per liter. Our purifiers are used in a wide variety of applications around the world including: Residential water supply, cottage water supply, municipal water treatment, relief agency camps, emergency preparedness, food processing, laboratories, international travel and bottling plants.

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
UV-1/QS4M-1 120V / 60 Hz Point of Use Ultraviolet Purifier	1-2	12.5" x 2.75" x 2.5"	4 lbs
UV-1/QS4M-2 230V / 50 Hz Point of Use Ultraviolet Purifier	1-2	12.5" x 2.75" x 2.5"	4 lbs
UV-1/QS4E-12 12V Point of Use Ultraviolet Purifier	1-2	12.5" x 2.75" x 2.5"	4 lbs
UV-1/QS4E-24 24V Point of Use Ultraviolet Purifier	1-2	12.5" x 2.75" x 2.5"	4 lbs

• Rated Flow: 4 Liters per minute/1 Gallon per minute • U.V. Dose @ Rated Flow: 42,000 mw/sec or 42 mJ/cm<sup>2</sup> at 1 GPM

Maximum Flow: 5.8 Liters per minute • Electrical Supply: 120 VAC/60Hz\* .2 Amp • Power Consumption: 12 Watt

• Maximum Operating Temperature: 37C • Maximum Operating Pressure: 125 psi - 8.6 Bar • Plumbing: 1/4" N.P.T. In-Out

Body: 304 or 316 Stainless Steel

#### UV-250/QD4M

Residential/Commercial UV Disinfection System

120V / 60 Hz Residential UV Purifier with Alarm 4 23"L x

23"L x 5.5"W x 2.5"H

#### UV-250/QD4M-2

230V / 50 Hz Residential UV Purifier with Alarm 4

23"L x 5.5"W x 2.5"H 8 lb

• Rated Flow: 15 Liters per minute / 4 Gallons per minute

Rated Flow UV Dose: 38,000 mw/sec or 38 mJ/cm<sup>2</sup> at 4 GPM

- Electrical Supply: 120 VAC/60Hz\*. 36 Maximum Operating Temperature: 37C (98.6F)
- Maximum Operating Pressure: 125 psi 8.6 Bar Plumbing: N.P.T. In-Out 3/4
- Body: 304 or 316 Stainless Steel

Custom Orders:	Prices quoted upon request for larger systems.
Case Pack:	All units packed individually
Replacement Lamps:	Generally lamps should be replaced every 10 to 12 months,
	depending on water use quality and conditions

\*Other voltage sources available upon request: 100V / 120V / 220/240V

#### **Alarm System**

The UV-1 and UV-250 systems above comes equipped with an alarm system which sounds an audible alarm if the UV lamp is not functioning properly.



### **TWT ULTRA-VIOLET DISINFECTION/PURIFICATION SYSTEM**

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

**APPROX SHIP** GPM PRODUCT **ITEM NUMBER & PRODUCT DESCRIPTION:** DIMENSIONS WEIGHT The TWT-UV-700 sterilizer is best suited for large households. Both and the PH of the water remains unchanged. TWT sterilizers operate the UV-700 and UV-1200 are efficient for small commercial and restaucontinuously and automatically with no need to heat or cool the source rant applications too. As water passes through the ultra-violet chamwater. They are inexpensive to operate, simple to install and practically ber, the powerful UV rays kill disease causing microorganisms, includmaintenance free. Lamp replacement is necessary every 12 months ing bacteria and viruses with a 99.9%kill rate. No chemicals are added and is a simple ten minute procedure. UV-700/QD4E-1 Residential/Commercial UV Disinfection System 120V / 60 Hz Residential UV Purifier with Alarm 8 41"L x 4.75"W x 3.5"H 8 lbs

#### UV-700/QD4E-2

230V / 50 Hz Residential UV Purifier with Alarm 41"L x 4.75"W x 3.5"H 8

- 8 lbs
- Rated Flow: 30 Liters per minute 8 Gallons per minute Rated Flow UV Dose: 62 mJ/cm<sup>2</sup> (62,000 uw Electrical Supply: 120VAC/60Hz, 55 Amp
   Approx. Power Usage: 40.8 Watt
   Maximum Operating Temperature: 37°C (98.6°F) • Maximum Operating Pressure: 125 psi - 8.6 Bar (tested to 500 psi) • Plumbing: 3/4" N.P.T. In-Out
- Body: 316 Stainless Steel

These two units are all similar in appearance, but have different capacities. The need for different flow rates will depend on the application and the nature of the installation. These TWT sterilizers provide clean, safe water to large operations for manufacturing processes or human consumption. All of our units are expertly constructed of # 316 stain

less steel to high guality control standards. The units operate continuously, automatically and inexpensively. Installation is easy and there is no need to heat or cool the water prior to sterilization. The germicidal lamp is effective for approximately 8,000 hours which means extremely cost effective water sterilization over the long term.

UV-1200/QD4E-1 Residential/Commercial UV Disinfection System	12	41"L x 6"W x 3.25"H	8 lb
120V/60 Hz Commercial UV Purifier with Alarm			
UV-1200/QD4E-2 230V/50 Hz Commercial UV Purifier with Alarm	12	41"L x 6"W x 3.25"H	8 lbs
Rated Flow: 45 Liters per minu	te /12 Gallor	ns per minute • Rated Flow UV Dos	e: 54 mJ/



uwsec/cm<sup>2</sup>) @ 95% T • Electrical Supply: 120V/60Hz .68 Amp • Approx. Power Usage 84 Watt • Maximum Óperating Temperature: 37°C (98.6° F) • Maximum Óperating Pressure: 125 psi - 8.6 Bar (testes to 500 psi) • Plumbing: 1" N.P.T. In-Out • Body: 304 or 316 Stainless Steel

UV-1500/QS4E-1 50"L x 6"W x 8"H 21 lbs 15 Commercial UV Disinfection System 120V / 60 Hz Commercial UV Purifier with Alarm UV-1500/QS4E-2 15 50"L x 6"W x 8"H 21 lbs 230V / 50 Hz Commercial

UV Purifier with Alarm

• Rated Flow: 57 Liters per minute • 15 Gallons per minute • Rated Flow UV Dose: 42 mJ/cm<sup>2</sup> (42,000 uwsec/cm<sup>2</sup>) @ 95% T • Maximum Flow: 80 Liters per minute / 21 Gallons per minute Electrical Supply: 120VAV/60Hz, 2 Amp • Approx. Power Usage 110 Watt • Maximum Operating

Temperature: 37°C (98.6°F) • Maximum Operating Pressure: 125 psi - 8.6 Bar (tested to 500 psi) • Plumbing: 1" N.P.T. In-Out • Body: 316 Stainless Steel

\*Other voltage sources available upon request: 100V / 120V / 220/240V

#### Alarm System

The UV-700, UV-1200 and UV-1500 systems above comes equipped with an alarm system which sounds an audible alarm if the UV lamp is not functioning properly.



For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APROX SHIP WEIGHT
<b>UV-2000/QD4E-1</b> 120V / 60 Hz Commercial UV Purifier with Alarm	21	50"L x 6"W x 8"H	21 lbs
UV-2000/QD4E-2 230V / 50 Hz Commercial UV 9Purifier with Alarm	21	50"L x 6"W x 8"H	21 lbs

• Rated Flow: 80 Liters per minute 21 Gallons per minute

- Rated Flow UV Dose: 31,000 mw/sec or 31 mJ/cm2 at 21 GPM
- Maximum Flow: 108 Liters per minute / 29 Gallons per minute
- Electrical Supply: 120V/60Hz, 2 Amp 240V/50Hz, 2 Amp
- Maximum Operating Temperature: 37°C (98.6°F)
- Maximum Operating Pressure: 125 psi 8.6 Bar (tested to 500 psi)
  Plumbing: 1.5" N.P.T. In-Out
- Body: 316 Stainless Steel



These two units are all similar in appearance, but have different capacities.

UV-3000/QS4E-1 Commercial UV Disinfection System	30	52"L x 8"W x 8"H	44 lbs		
120V / 60 Hz Commercial UV Purifier with Alarm					
<b>UV-3000/QS4E-2</b> 230V / 50 Hz Commercial UV Purifier with Alarm	30	52"L x 8"W x 8"H	44 lbs		
<ul> <li>Rated Flow: 117 Liters per minute, 30 Gallons per minute</li> <li>Rated Flow: UV Dose: 49 mJ/cm<sup>2</sup> 49,000 uwsec/cm<sup>2</sup>) @ 95% T</li> <li>Electrical Supply: 120V/60Hz, 2.1 Amp</li> <li>Approx. Power Usage 100 Watt</li> <li>Maximum Operating Temperature: 37°C (98.6°F)</li> <li>Maximum Operating Pressure: 125 psi - 8.6 Bar (tested to 500 psi)</li> <li>Plumbing: 1.5" N.P.T. In-Out</li> </ul>					

Body: 316 Stainless Steel

Custom Orders:	Prices quoted upon request for larger systems.
Case Pack:	All units packed individually.
Replacement Lamps:	Generally lamps should be replaced every 10 to 12 months, depending on water use quality and conditions

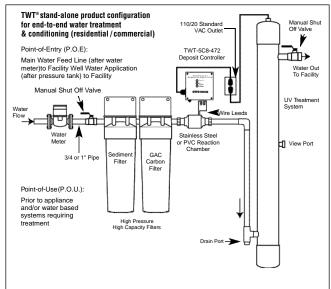
\*Other voltage sources available upon request: 100V / 120V / 220/240V

#### **Alarm System**

The UV-2000, and UV-3000 systems above comes equipped with an alarm system which sounds an audible alarm if the UV lamp is not functioning properly.



#### Filtration • Patented Deposit Control Technology **UV Disinfection & Purification**



TWT stand-alone products will vary in size, capacity and gpm treatment requirements (above schematic rendering not to scale, for reference only).

			USIOIE	MIT.0.2.71.0.0.
For additional information ITEM NUMBER & PRODUCT DESCRIPTION:	on: visit GPM	www.triangularwave. PRODUCT DIMENSIONS	.com • E-n APPROX WEIGHT	
UV-5000/QS4E-1 Commercial UV Disinfection System 120V / 60 Hz Commercial UV Purifier with Alarm	50	50"L x 13"W x 8"H	46 lbs	
UV-5000/QS4E-2 230V / 50 Hz Commercial UV Purifier with Alarm	50	50"L x 13"W x 8"H	46 lbs	
<ul> <li>Rated Flow: 189 Liters per minute 50 Gallo</li> <li>Rated Flow UV Dose: 61 mJ/cm<sup>2</sup> (61,000</li> <li>Maximum Flow: 290 Liters per minute 77 (7000000000000000000000000000000000</li></ul>	uwsec/cr Gallons p .6°F)	n້) @ 95% T er minute		These two units are all similar in appearance, but have different capacities.
UV-6000/QS4E-1 Commercial UV Disinfection System 120V / 60 Hz Commercial UV Purifier with Alarm	100	50"L x 16.5"W x 8"H	50 lbs	
UV-6000/QS4E-2 230V / 50 Hz Commercial UV Purifier with Alarm	100	50"L x 16.5"W x 8"H	50 lbs	
<ul> <li>Rated Flow: 375 Liters per minute 100 Galle</li> <li>Rated Flow UV Dose: 25,000 mw/sec or 25</li> <li>Number of lamps: 2</li> <li>Lamp wattage: 79 Watts</li> <li>Electrical Supply: 120V / 60Hz, 1.5 Amp</li> <li>Maximum Operating Temperature: 37°C (98</li> <li>Maximum Operating Pressure: 125 psi - 8.</li> <li>Plumbing: 2<sup>1</sup>/2" flange In-Out</li> <li>Body: 316 Stainless Steel</li> </ul>	mJ/cm <sup>2</sup> 8.6°F)	at 100 GPM		
<ul> <li>TWT-SYS-5100M</li> <li>Rack-Mounted Commercial UV Purifier</li> <li>Rated Flow: 378 liters per minute (100 GP 545,040 liters/day (6000 gallons/hour, 14</li> </ul>	100 M) 2271 4,000 ga	32"W x 48"D x 63"H 0 liters/hour, llons/day)	210 lbs	

- UV Dose 61mJ/cm<sup>2</sup> (61,000 uwsec/cm<sup>2</sup>) @95%T
- Electrical: 110-20V / 60 Hz or 220-30V / 50 Hz includes surge protector power packs
- Approx Power Usage: 440 W
- Maximum Operating Temp: 37º C (98.6º F)
- Maximum Operating Pressure: 125 psi 8.6 bar (tested to 500 psi)
- Plumbing: 3" MNPT in/out (Flanges optional)
- Chamber Material: 304L Stainless Steel (316L available)
- Additional Features (optional) UV-Monitor, Solenoid Valve, Filtration
   and/or Deposit Control Technology

\*Other voltage sources available upon request: 100V / 120V / 220/240V

#### Alarm System

The UV-5000, and UV-6000 systems above comes equipped with an alarm system which sounds an audible alarm if the UV lamp is not functioning properly.



GPM

### ITEM NUMBER & **PRODUCT DESCRIPTION:**

These systems are ideally suited for commercial/industrial and marine effluent applications. The Quattra UV has an automatic integrated pneumatic wiper system (external air supply required) to maintain lamp

APPROX SHIP

WEIGHT

50 \*\*32"L x 8"W x 11"H 150 lbs 50 \*\*32"L x 8"W x 11"H

PRODUCT

DIMENSIONS

UV-50 Quattra-1 (120V / 60 Hz) UV-50 Quattra-2 (230V / 50 Hz)

Compact Commercial / Industrial / Marine Industries Effluent Waste Water Treatment System

 High-Efficiency Ultra-Violet System for the Treatment of Effluents • Integrated Pneumatic Automatic Lamp Wiper System • Rated Flow 189 liters per minute (50 GPM) 11,340 liters/hour, 272,160 liters/day (3,000 gallons/hour,

- 72,000 gallons/day) Initial UV Dose at Rated Flow: 40 mJ/cm<sup>2</sup> (40,000 uwsec/cm<sup>2</sup>) @ 95% T
- Electrical: 110-130V / 50-60 Hz 220-240V / 50-60Hz Number of Lamps: 4 (at 44 watts each)
- Compact Size High-Power 4 Lamp Array Efficient Cost Effective 4 Lamp Array Inside Cylindrical Reaction Chamber
- Maximum Operating Temp: 40°C (104°F) Maximum Operating Pressure: 125 psi -8.6 bar (tested to 500 psi)
- Plumbing: 1<sup>1</sup>/4" MNPT In/Out Chamber Material: 304L Stainless Steel (316L available)
- Control Panel: Integrated UV- Monitor Additional Features (optional) Solenoid Valve, Electrical Deposit Control
- 1.5" In-Out Piping-Other Sizes Available Upon Request NEMA 4X Control Panel Available Upon Request

#### **Fail-Safe Operation**

The Quattra UV50 treatment system is equipped with a control panel that has an integrated UV Monitor to monitor the UV light intensity in real time. A solenoid valve (optional) can be driven by the monitor to shut off the flow of water if an inadequate UV power is detected.

This industrial water purification system offers very efficient water treatment at a low cost per unit volume. The system is designed for ease of installation and is fully tested prior to shipment.

efficiency and a proprietary UV reaction chamber, designed to increase the dwell time inside the chamber. Engineered and designed to provide a very high UV dose, extended dwell time at rated flow of 50 / 100 GPM .





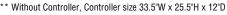
### UV-100 Quattra-1 (120V / 60 Hz) UV-100 Quattra-2 (230V / 50 Hz)

100 \*\*41"L x 8"W x 10.5"H 75 lbs 100 \*\*41"L x 8"W x 10.5"H 75 lbs

Compact Commercial / Industrial / Marine Industries Effluent Waste Water Treatment System

Case Pack: All units packed individually. 4 UV lamps required. Generally lamps should be replaced every Replacement Lamps: 10 to 12 months, de pending on water use quality and conditions

Custom System Quote: Industry specific fluid treatment needs and up grades Custom Installation: Pricing to be established based upon proposal submitted at time of sale based on materials cost a time of purchase





For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### **ITEM NUMBER & PRODUCT DESCRIPTION:**

**GPM** PRODUCT DIMENSIONS APPROX SHIP WEIGHT

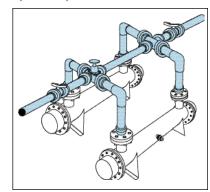
90 lbs

### **TWT-UV100-6**

100 46"L x 8"W x 10.5"H Commercial UV Disinfection System 100-240VAC / 50-60 Hz Commercial UV Purifier with Alarm

200

- Alarm System Fail Safe Rated Flow: 379 liters per minute (100 GPM) Rated Flow UV Dose: 37 mJ/cm<sup>2</sup> (37,000 uwsec/cm<sup>2</sup>) @ 70% T
- Electrical: 100-240V / 50-60 Hz (Universal)
- · Other voltage sources available upon request (must specify) • Lamp Power: 65 W
- Number of Lamps: 6
- Maximum Operating Temp: 37°C (98.6°F) Maximum Operating Pressure: 125 psi -
- 8.6 bar (tested to 500 psi)
- Plumbing: 2" MNPT (3" optional)
- Size: 46"L x 8"W in x 10.5"H
- Weight: 41 kg (90 lbs) with controller
- Chamber Material: 316L SS



Dual UV system application for redundant or higher flow rate requirements-200/400 GPM



The industrial size TWT-UV-5007 sterilizer can assure a ready supply of safe, pathogen-free water for manufacturing processes or human consumption. Applications include water bottling plants, breweries or any other type of liquid processing. With the capacity to remove diseasecausing microorganisms effective to a 99.9% kill rate at 200 G.P.M. (820

L.P.M.), you can eliminate the need for chemicals and reduce high overhead costs. TWT has the technical expertise to assess your water problems and when needed, pre-filtration systems may be added to the TWT-UV-5007 sterilizer. Environmental safety is our priority, therefore no chemicals are added and the PH balance of the water is unaffected by UV sterilization.

#### UV-5007/QS4E-1\*

Compact Commercial / High Volume Effluent Waste Water Treatment System

120V / 60 Hz Commercial UV Purifier with Alarm

#### UV-5007/QS4E-2\*

230V / 50 Hz Commercial UV Purifier with Alarm

- Rated Flow: 833 Liters per minute 200 Gallons per minute • Rated Flow UV Dose: 40 mJ/cm<sup>2</sup> (40.000 uwsec/cm<sup>2</sup>) @ 95% T
- Number of lamps: 7 (110 Watts each)
- Electrical Supply: 120V/60Hz, 3 Amp
- Maximum Operating Temperature: 37°C (98.6°F) Maximum Operating Pressure: 125 psi - 8.6 Bar (tested to 500 psi)
- Plumbing: 3" flange In-Out
- Unit Dimensions: 56" L x 12.5" W x 20" H
- Controller Dimensions: 33.6" x 25.2" x 12"
- Unit Weight: 130 lbs (59 kg)
- Controller Weight: 60 lbs (27 kg)
- Body: 316 Stainless Steel

#### \* Custom System Quote: Industry specific fluid treatment needs and up grades Custom Installation:

\*\* Without Controller, Controller size 33.6"W x 25.2"H x 12"D

200 \*\*56"L x 12.5"W x 19.5"H 130 lbs







7 UV Lamp System

UV units can be custom integrated to meet the GPM/flow rate for most industry specific sites and applications

\*\*56"L x 12.5"W x 19.5"H 130 lbs

### CUSTOM ENGINEERED & INTEGRATED (Fork Lift Skid-Mounted) HIGH VOLUME UV FLUID

**TREATMENT SYSTEMS** (For potable, process and/or waste water applications)

TWT® Patented Deposit Control Technology • Stainless Steel Reaction Chamber • UV Disinfection/Purification

Custom Engineered System Built to Order Only. See Pages 55/56 for Additional Application Information

ITEM NUMBER & PRODUCT DESCRIPTION:	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
TWT-CSMS-G1T-403-5007 220 GPM Treatment System	72" W x 36" D x 58" H	TBD	and the second se
<ul> <li>#1 Transportable Fork Lift St/St Skid-Mounted System</li> <li>220 (GPM) UV Disinfection / Purification Treatment System</li> <li>One (1) TWT-5C8-403 Deposit Control System</li> <li>One (1) TWT-UV-5007 Disinfection/Purification Systems</li> </ul>			
Efficiency: Expected 3 Log Reduction (99.9) for processing & drinking water Expected 1–2 Log Reduction for wastewater applications			
TWT-CSMS-G2T-404-5007 400/500 GPM Treatment System	48" W x 65" D x 55" H	270 lbs.	

56"L x 12.5"W x 19.5"H

48" W x 65" D x 55" H

TBD

System Control Pane

TBD

#### #2 Transportable Fork Lift St/St Skid-Mounted System

- 400/600 (GPM) UV Disinfection / Purification Treatment System
- One (1) TWT-5C8-404 Deposit Control System
- Two (2) TWT-UV-5007 Disinfection/Purification Systems

#### Efficiency:

Expected 3 Log Reduction (99.9) for processing & drinking water Expected 1–2 Log Reduction for wastewater applications

Custom built according to customer system application and GPM requirements. Size and weight to be determined at at time of purchase

### TWT-CSMS-G3T-406-5007

600/800 GPM Treatment System

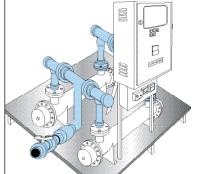
#### #3Transportable Fork Lift St/St Skid-Mounted System

600/800 (GPM) UV Disinfection/Purification Treatment System

- One (1) TWT-5C8-406 Deposit Control System
- Three (3) TWT-UV-5007 Disinfection/Purification Systems
- Controller Dimensions: 33.6" x 25.2" x 12"
- Efficiency:

Expected 3 Log Reduction (99.9) for processing & drinking water Expected 1–2 Log Reduction for wastewater applications

Custom built according to customer system application and GPM requirements. Size and weight to be determined at at time of purchase





#### TWT-CSMS-G4T-406-5007 800/1200 GPM Treatment System

#4Transportable Fork Lift St/St Skid-Mounted System 700/1200 (GPM) UV Disinfection/Purification Treatment System

One (1) TWT-5C8-406 Deposit Control System
 Four (4) TWT-UV-5007 Disinfection/Purification Systems

Efficiency:

Expected 3 Log Reduction (99.9) for processing & drinking water Expected 1–2 Log Reduction for wastewater applications

Custom built according to customer system application and GPM requirements. Size and weight to be determined at at time of purchase

Note: Above systems are fully integrated and factory assembled.

Custom Orders: Larger pipe size (GPM) applications available upon request

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. Review product list for replacement filters and ultra-violet lamps.Upgrades: Customized TWT® systems to meet your treatment applications available upon request. **TBD:** To be determined, based on final system configuration at time of purchase. Components for High Volume Fluid Treatment System. Not to scale for reference only

These systems can be custom component assembled and integrated in various ways to meet your pipe size application, GPM, foot-print and process requirements. The UVC series systems provides simplified prevention, treatment and management of water line contamination dangers. The TWT water disin-

and Automatic Solenoid Valve

fection/purification systems are unique, compact, self-contained units for the Purification of water.

ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
UVC-250 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	4	26"W x 18"H x 6"D	30 lbs
120V / 60 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm & UV Monitor			
UVC-250-2 230V / 50 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm & UV Monitor	4	26"W x 18"H x 6"D	30 lbs
Available 120V/60 Hz or 230V/50 Hz			
UVC-700 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	8	44"W x 20"H x 10"D	56 lbs
120V / 60 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm & UV Monitor			
UVC-700-2 230V / 50 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm & UV Monitor	8	44"W x 20"H x 10"D	56 lbs
UVC-1200 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria 120V / 60 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm, UV Monitor and Automated Solenoid Valve	12	44"W x 20"H x 10"D	60 lbs
UVC-1200-2 230V / 50 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm, UV Monitor and Automated Solenoid Valve	12	44"W x 20"H x 10"D	60 lbs
UVC-1500 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria 120V / 60 Hz Ultraviolet System with Manual Shut-Off Valves, Alarm, UV Monitor and Automatic Solenoid Valve	15	55"W x 20"H x 10"D	75 lbs
UVC-1500-2 230V / 50 Hz Ultraviolet System with Manua Shut-Off Valves, Alarm, UV Monitor	15	55"W x 20"H x 10"D	75 lbs







<image>

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

For additional information: visit w	ww.triang	ularwave.com • E-mail: in	to@triangularwave.com
ITEM NUMBER & PRODUCT DESCRIPTION:	GPM	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT
UVC-3000 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	30	55"W x 20"H x 10"D	92 lbs
120V / 60 Hz Ultraviolet System with Manua Alarm, UV Monitor and Automatic Solenoid		<sup>f</sup> Valves,	
UVC-3000-2 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	30	55"W x 20"H x 10"D	92 lbs
230V / 50 Hz Ultraviolet System with Manua Alarm, UV Monitor and Automatic Solenoid V		<sup>r</sup> Valves,	
UVC-5000 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	50	55"W x 25"H x 10"D	105 lbs
120V / 60 Hz Ultraviolet System with Manua Valves, Alarm, UV Monitor and Automatic So			
UVC-5000-2 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	50	55"W x 25"H x 10"D	105 lbs
230V / 50 Hz Ultraviolet System with Manua Valves, Alarm, UV Monitor and Automatic So	I Shut-Off plenoid Va	alve	
UVC-6000 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	100	55"W x 25"H x 10"D	115 lbs
120V / 60 Hz Ultraviolet System with Manua Valves, Alarm, UV Monitor and Automatic So			
UVC-6000-2 Integrated UVC Ultra Violet Disinfection System Kills 99.9% of all Bacteria	100	55"W x 25"H x 10"D	115 lbs
230V / 50 Hz Ultraviolet System with Manua Valves, Alarm, UV Monitor and Automatic So			



Case Pack: Al	I units packed individually.
---------------	------------------------------

Gallons per minute.

All products are 110/120V 60 Hz

All units packed individually.

For higher voltage sources contact TWT for pricing.

Two UV lamps required. Generally lamps should be replaced every

10 to 12 months, depending on water use quality and conditions

GPM:

Voltage:

Case Pack:

Replacement Lamps:

### ULTRA-VIOLET DISINFECTION/PURIFICATION REPLACEMENT LAMPS & QUARTZ DOMES

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com	• triwaveinc@aol.com
ITEM NUMBER &	APPROX SHIP
PRODUCT DESCRIPTION:	WEIGHT

UV-RL-MZ/CELL	Replacement Lamp Cell – Mini-zap	BOV
UV-RL-1/T5	UV Lamp with Quartz Sleeve for UV-1 Purifier	BOV
UV-RL-250/T5	UV Lamp 1 ended without Quartz Sleeve for UV-250 Purifier	BOV
	·	
UV-RL-250/T8	UV Lamp 2 ended without Quartz Sleeve for UV-250 Purifier	BOV
UV-RQS-250	Quartz Sleeve for 1 ended Lamp–UV-250 Purifier	BOV
UV-RQD-250	Quartz dome for UV-250 Purifier	BOV
UV-RL-700/T5	UV Lamp 1 ended without Quartz Sleeve for UV-700 Purifier	BOV
UV-RL-700/T8	UV Lamp 2 ended without Quartz Sleeve for UV-700 Purifier	BOV
UV-RQS-700	Quartz Sleeve for 1 ended UV Lamp–UV-700 Purifier	BOV
UV-RQD-700	Quartz Dome for UV-700 Purifier	BOV
UV-RL-1200/T5	UV Lamp 1 ended without Quartz Sleeve for UV-1200 Purifier	BOV
UV-RL-1200/T8	UV Lamp 2 ended without Quartz Sleeve for UV-1200 Purifier	BOV
UV-RQS-1200	Quartz Sleeve for 1 ended UV Lamp for UV-1200 Purifier	BOV
UV-RQD-1200	Quartz Dome for UV-1200 Purifier	BOV
UV-RL-15/20/50/T5	UV Lamp 1 ended without Quartz Sleeve for UV-1500, UV-2000 & UV-5000	BOV
UV-RL-15/20/50/T8	UV Lamp 2 ended without Quartz Sleeve for UV-1500, UV-2000 & UV-5000	BOV
UV-RQS-15/20/50	Quartz Sleeve for 1 ended UV Lamp – UV-1500, UV-2000 & UV-5000	BOV
UV-RL-30/60/T6	UV Lamp 1 ended without Quartz Sleeve for UV-3000 & UV-6000	BOV
UV-RL-30/60/T12	UV Lamp 2 ended without Quartz Sleeve for UV-3000 & UV-6000	BOV
UV-RQS-30/60	Quartz Sleeve for 1 ended UV Lamp – UV-3000 & UV-6000	BOV
UV-RL-5007/T5	UV Lamp 1 ended without Quartz Sleeve for UV-5007 Purifier ( 7 required-Price is for single lamp )	BOV
UV-RQS-5007	Quartz Sleeve for 2 ended UV Lamp – UV-5007 Purifier	BOV
UV-50-RL	Quattra replacement lamps – <i>CASE/PACK 4</i> ( 4 required-Price is for single lamp )	BOV
UV-100-RL	Quattra replacement lamps – <i>CASE/PACK 4</i> ( 4 required-Price is for single lamp )	BOV

Generally lamps should be replaced every 10 to 12 months, depending on water use quality and conditions

 $\ensuremath{\text{BOV}}\xspace$  Bove as a straight on the set of the product of the

### ULTRA-VIOLET DISINFECTION/PURIFICATION SYSTEM ACCESSORIES-TWT® MD/DP Systems

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com ITEM NUMBER & PRODUCT DESCRIPTION:

- TWT-4-UV/MS-1 Ultraviolet Monitoring System 120 / 60 Hz
- TWT-4-UV/MS-2 Ultraviolet Monitoring System 230 / 50 Hz
- TWT-4-UV/LD-12 Lite Detective 12 Volt
- TWT-4-UV/MS-12E Lite Detective 12 Volt (Euro Adapter)

### SOLENOID VALVE - STOPS the WATER FLOW in the EVENT of a SYSTEM FAILURE-TWT® MD/DP Systems

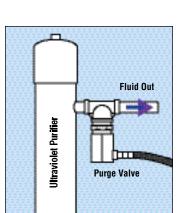
- TWT-4-SV500-1 .5" Solenoid Valve 120 V / 60 Hz
- TWT-4-SV500-2 .5" Solenoid Valve 230 V / 50 H
- TWT-4-SV750-1 .75" Solenoid Valve 120 V / 60 Hz
- TWT-4-SV750-2 .75" Solenoid Valve 230 V / 50 Hz
- TWT-4-SV1000-1 1" Solenoid Valve 120 V / 60 Hz
- TWT-4-SV1000-2 1" Solenoid Valve 230 V / 50 Hz
- TWT-4-SV1250-1 1.25" Solenoid Valve 120 V / 60 Hz
- TWT-4-SV1250-2 1.25" Solenoid Valve 230 V / 50 Hz
- TWT-4-SV1500-1 1.25" Solenoid Valve 120 V / 60 Hz
- TWT-4-SV1500-2 1.25" Solenoid Valve 230 V / 50 Hz
- TWT-4-SV2000-1
   2" Solenoid Valve 120 V / 60 Hz
- TWT-4-SV2000-2 2" Solenoid Valve 230 V / 50 Hz

### **PURGE VALVE for ULTRAVIOLET (UV) PURIFIER SYSTEMS**

TWT-UVPV-75

UV-Temperature Sensitive Automatic Purge Valve–Control water temperature in UV systems for enhanced results

- No electrical power required
- Purges water from chamber at 104F
- Temperature sensitive alloy provides the trigger
- Keeps system cool-no overheating and alarms
- 3/4" valve-fits into plumbing as pictured (T-fitting not included: available upon request)
- One TWT-UVPV-75 unit needed for most UV system applications
- 10' of tubing and barb fitting included (run to drain, sump or back to well)
- Longer length tubing available upon request
- Brass construction









### BALLAST UNITS FOR TWT° ULTRA VIOLET SYSTEMS

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com				
ITEM NUMBER & PRODUCT DESCRIPTION:		APPROX SHIP WEIGHT	CASE PACK	
TWT-4-BM/MZ-1	Ballast for Mini-Zap 120 V / 60 Hz	BOV	1	
TWT-4-BM/MZ-2	Ballast for Mini-Zap 230 V / 50 Hz	BOV	1	
TWT-4-BM/4-1	Ballast for UV-4 Purifier 120 V / 60 Hz	BOV	1	
TWT-4-BM/4-2	Ballast for UV-4 Purifier 200 V / 50 Hz	BOV	1	
TWT-4-12V	Ballast for UV-4 Purifier 12 Volt and Mini-zap 12 Volt	BOV	1	
TWT-4-24V	Ballast for UV-4 Purifier 24 Volt	BOV	1	
TWT-4-BM-250-1IL	Ballast In-Line with Alarm for UV-250 Purifier 120V / 60 Hz	BOV	1	
TWT-4-BM-250-2IL	Ballast In-Line with Alarm for UV-250 Purifier 230V / 50 Hz	BOV	1	
TWT-4-BE-700-1	Ballast cap & Harness with Alarm for UV-700 Purifier 120V / 60 Hz	BOV	1	
TWT-4-BE-700-2	Ballast cap & Harness with Alarm for UV-700 Purifier 230V / 50 Hz	BOV	1	
TWT-4-BE-12/15/50-1	Ballast cap & Harness with Alarm for UV-1200/1500/2000/5000 120V-60 Hz	BOV	1	
TWT-4-BE-12/15/50-2	Ballast cap & Harness with Alarm for UV-1200/1500/2000/5000 230V-50 Hz	BOV	1	
TWT-4-BE-30/60-1	Ballast cap & Harness with Alarm for UV-3000, UV-6000 120V-60 Hz	BOV	1	
TWT-4-BE-30/60-2	Ballast cap & Harness with Alarm for UV-3000, UV-6000 230V-50 Hz	BOV	1	
TWT-BE-5007-1	Ballast for UV-5007 Purifier 120V / 60 Hz	BOV	1	
TWT-BE-5007-2	Ballast for UV-5007 Purifier 230V / 50 Hz	BOV	1	
TWT-BE-509	Ballast for Quattra UV-50 Purifier	BOV	1	

 ${\rm BOV}:$  Based on volume, shipping weight, and other related products ordered to be packed at time of purchase



UV BALLAST

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRI	UV REPLACEMENT PARTS	CASE PACK	
TWT-10-WDF-10	3 Faucet assembly kit	4	
TWT-10-SV-6	Saddle valve assembly	4	
TWT-10-39	Diverter Valve for Mini-Zap	4	
TWT-7-15	Quartz view port disc	4 End Cap	
TWT-10-VPA	View port assembly kit	4 Comprospins Nut	
TWT-4-2	4 Pin lamp connector	4 Compression Nut	
TWT-4-S-2	Starter for the Old Style UV4 / UV250-T8	4 to Quartz Seal (O-Ring)	
TWT-4-S-10	Starter for the Old Style UV700-TB	4 4 Pin Lamp Connector	
TWT-8-34	Lamp retaining nut for Mini-Zap	4 View port / Lamp	
TWT-8-17	Lamp / Quartz compression nut for UV4	4 Cushion O-Ring	
TWT-8-51	Lamp / Quartz compression nut for UV250 / UV700 / UV1200	4 Quartz Sleeve	
TWT-8-53	Lamp / Quartz compression nut for UV1500 UV2000 / UV5000	4	
TWT-8-301	Lamp / Quartz compression nut for UV3000 UV6000	4	
TWT-8-9	View port compression nut for UV700 / 1200 / 1500 / 2000 / 3000/ 5000	4	
TWT-11-220	Hub seal for Mini-Zap	4	
TWT-11-9	Housing seal for the Old Style Mini-Zap	4 ( <b>0</b> -000-0)-()	
TWT-11-3	Quartz sleeve seal for MZ / UV4 / 250 / 700 /1200 / 1500 / 2000 / 3000/ 5000	4 View port / Lamp Cushion O-Ring	
TWT-11-10	Lamp O-ring for UV3000 / UV6000	4	
TWT-11-324	Quartz sleeve seal for UV3000 / Uv6000	4	
TWT-11-7	Outer Flange Seal for UV5007	4	
TWT-11-6	View port seal & lamp O-ring for UV250 / 700 / 1200 / 1500 / 2000/ 5000	4 4	
TWT-8-144142	Double bracket for 10" filter housings	4	
TWT-13-20	Mounting Bracket for UV4 System	4	┢

### **OZONE SYSTEMS and COMPONENTS**

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER &	PRODUCT	APPROX SHIP
PRODUCT DESCRIPTION:	DIMENSIONS	WEIGHT

Ozone ia a natural purifier, meaning no harmful chemical or by-products are created during purification

TWT-15-SW-400 Ozone Generator 0.4 grams/hr. 120V / 60Hz	13" x 13" x 4.5"	8 lbs	
TWT-15-SW-400-2 Ozone Generator 0.4 grams/hr. 230V / 50Hz	13" x 13" x 4.5"	8 lbs	6
<b>TWT-15-SW-800-1</b> Ozone Generator 0.8 grams/hr. 120V / 60Hz	15" x 15" x 6"	10 lbs	0.
<b>TWT-15-SW-800-2</b> Ozone Generator 0.8 grams/hr. 230V / 50Hz	15" x 15" x 6"	10 lbs	

#### TWT-OZ-SB038 Ozone & Venturi

Ozone Generator 0.38 grams/ hr. Ozone Generated by: 185 Nm UV lamp 110/20 VAC or 230 VAC

Venturi–Must Specify Size With P.O. 1/2" Venturi Injector or 1" Venturi Injector

2.375" x 4.75" x 12.25"



100200

<b>TWT-15-SVD1-1</b> Vacuum Drier – One-Tube 120V / 60Hz (for SW-400)	6" x 14" x 4.5"	4 lbs
<b>TWT-15-SVD1-2</b> Vacuum Drier – One-Tube 230V / 50Hz (for SW-400)	6" x 14" x 4.5"	4 lbs
<b>TWT-15-SVD2-1</b> Vacuum Drier – Two-Tube 120V / 60Hz (for SW-800)	13" x 6" x 15"	10 lbs
<b>TWT-15-SVD2-2</b> Vacuum Drier – Two-Tube 230V / 50Hz (for SW-800)	13" x 6" x 15"	10 lbs

#### **TWT-VI-50**

Venturi Injector .5"

#### TWT-VI-100 Venturi Injector 1"

Higher capacity systems available upon request



For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### Custom Engineered System Built to Order Only.

ITEM NUMBER & PRODUCT DESCRIPTION:

#### TWT-CD3-4 4 GPM

Portable Chiller: Custom Engineered and Assembled Side-Stream Multi-Process Treatment System (Mounted on Portable Skid/ Cart)

Multi-Staged • Ozone • Filtration • Electro-Magnetic Fluid Conditioning Ultra Violet Disinfection & Purification



### TWT-WOZ-800/3 3 GPM

This model can operate at up to 3 GPM. Larger systems (6, 8, 10 GPM) are available on request

#### **Applications Include:**

Drinking Water • Process Water • Wastewater • Dairy & Farm Use Aquariums • Aquaculture • Cooling Towers and More

Now You Can Offer your customers a compact and efficient ozone water purification system for home or small commercial business.

Ozone is a natural chemical-free method of purifying drinking and process water. Besides killing common water borne contaminants such as bacteria and viruses, this system can reduce odor and coloration in the water supply, providing high quality processed water for the end user.



For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### Custom Engineered System Built to Order Only.

ITEM NUMBER & PRODUCT DESCRIPTION:

#### TWT-COS-3 Custom Ozone System

System's may be sized to accommodate customers flow rates and purification requirements.

This model can operate at up to 3 GPM. Larger systems (4, 6, 8 GPM) are available on request



# TWT-CMWT–Custom Integrated Treatment System (15 GPM)

Cabinet Mount Water Treatment System Combines Iron Removal with UV Disinfection and Multi-level Filtration in a secure cabinet.

900 gallons per hour / 21,000 gallons per day

- Rated Flow: 57 liters per minute (15 GPM) 3420 liters/hour, 82,080liters/day (900 gallons/hour, 21,600 g/day
- Initial UV Dose at Rated Flow: 27mj/cm<sup>2</sup> (27,000 uwsec/cm<sup>2</sup>) @95%T100-130V / 50-60 Hz 220-240V / 50-60 Hz
- Maximum Operating Temp. 37°C (98.6°F)
- Maximum Operating Pressure: 125 psi 8.6 bar (tested to 500 psi)
- Plumbing: 1" MNPT In/Out
- Chamber Material: 304L Stainless Steel (316L available)
- Filtration: Backwashable Carbon Filter (2 cf of media)
- Ozone Injection: Air Dryer, Ozone Generator, Contact tank, Venturi Injector
- Polish Filtration: 20 and 5 Micron sediment, 10 M Carbon
- Optional: On Board Pump



For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### ITEM NUMBER & PRODUCT DESCRIPTION:

### TWT-5S-R050 GPD



### Features:

- Metal Storage Tank 
   Filmtec RO Membrane
- Long Reach Chrome Faucet Quick Connect Fittings



### TWT-6S-R050 GPD

### Features:

- Metal Storage Tank 
   Filmtec RO Membrane
- Long Reach Chrome Faucet 
   Quick Connect Fittings
- Powerful UV Disinfection

Bacteria and viruses and other microorganisms are killed by a powerful UV disinfection that will inactivate the pathogens at 99.99% inactivation rate.

RO systems listed above are shipped to customers with easy to follow application, installation and maintenance manuals.

TWT, Inc.recommends that an extra set of replacement membrane and cartridge filters be purchased with each system to ensure uninterrupted service and treatment.

### **Description:**

This residential Reverse Osmosis System is installed at the point of use (e.g. under the sink) and produces up to 50 gallons of purified water per day. It removes substantial amounts of most inorganic chemicals (such as salts, minerals, metals) and most (but not all) organic chemicals. The high quality membrane rejects successfully salts, sugars, proteins, particles, dyes, heavy metals, chlorine and related by-products as well as other contaminants that have a molecular weight greater than 150-250 daltons. Dissolved ions that carry a charge, such as salts, are more likely to be rejected than uncharged ions, such as organics.

The system comes with 3 levels of pre-filtration, a 50 GPD Filmtec membrane, a post-carbon filter and a metal holding tank. Mounting hardware, a long reach faucet and saddle valves for easy installation are supplied with the system.

Optional stages are also available, such as UV-Disinfection, calcite filter for re-mineralization, or electronic de-scaling.

### Specifications:

Capacity 50 GPD, Tank Capacity 4 gal. Recovery 20-25%, Rejections 90% min Filtration:

- 5 M Sediment (Part # 14-WFS10-5SP)
- GAC Carbon (Part # 14-WFC10-GAC)
- Carbon Block (Part # 14-WFC10-5CB)
- Post Carbon (Part # 14-WROPC-GAC-1)
- Membrane Filmtec (Part # 14-WROM-50GPD)

### **Source Water Requirements:**

Hardness < 1 gpg Free chlorine 0 ppm TDS < 1,000 ppm pH 3 - 11 Iron < 0.01 ppm Manganese < 0.05 ppm Turbidity < 1 NTU Temperature 4  $^{\circ}$ C (40  $^{\circ}$ F) - 27  $^{\circ}$ C (80  $^{\circ}$ F) Pressure 40 - 100 psi (2.8 - 5.6 bar)

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

**ITEM NUMBER &** PRODUCT Ship **PRODUCT DESCRIPTION:** DIMENSIONS Weight Reverse Osmosis (RO) is a modern process technology to purify water for a wide range of applications, including semiconductors, food processing, biotechnology, pharmaceuticals, power generation, seawater desalting, and municipal drinking water. TWT-RO300G-FL \* 300 GPD, .75" FNPT, 2.5" X 21" membrane TWT-RO500G-FL 500 GPD, .75" FNPT, 2.5" X 21" membrane TWT-RO300G-FL TWT-RO1000G-FL These systems are 1,000 GPD, .75" FNPT, 4" X 21" membrane similar in appearance but have different capacities 26" X 36" X 9" **R-13 Compact Wall Mount RO** 50 - 75 lbs Three models for flow rates to 1200 GPD Standard features **Specifications**  Powder coated steel frames · Feed water connection 3/4" NPTF Inlet solenoid valve • Product water connection 3/8" Tubing OD Pre-filter · Reject water connection 3/8" Tubing OD • 1/2 HP motor • Feed water required (max.) 2.4 GPM Brass pump • Feed water pressure (min.) 10 PSI Liquid filled pre-filter pressure gauge 2.4 GPM • Drain required (max.) • 2 1/2" liquid filled pump pressure gauge Electrical requirements 120 VAC 60 Hz • Product water & reject water flow meters • Amp 8 • High pressure, non-metallic membrane • Pump (H.P.) 1/2housings **Applications** • SS needle valves for concentrate and Whole house • Ice makers • Labs • Beverages recycle lines · Coffee shops · Restaurants Stainless steel product water check valve **Options** • On / off toggle switch Part Number Description · Low-pressure shut-off with auto restart R2868 Leg Kit • Feed water and product water TDS mon R2353-SD Product float switch TWT-R13-0250 - 250 GPD Compact Wall R2288 Whole house option\* Mounted System **Reverse Osmosis Higher Volume Systems** Performance specifications are based Models R13-0250 R13-0600 R13-1200 on 77° feed water, SDI < 3, TDS 250 Maximum production (gallons per day) 600 1200 below 1000 ppm and pH of 8. Individual membrane productivity Average membrane rejection rate 98 % 98 % 98 % and rejection rates are based on man-Recovery (adjustable) 8 - 75 % 17-75% 34 - 75 % ufactures specifications. Please see water temperature conversion charts 3" x 10" 3" x 20" 3" x 20" Membrane size for production factor. Chlorine reduction and other pretreatment may be Number of membranes 1 (P/N R96310) 1 (P/N R96320) 2 (P/N R96320) required. Systems are designed for Pre-filter (system ships with one 5 micron cartridge) 10" 20" 20" use with municipal and well water. \*Includes 300 gal tank, product float 26" x 26" x 9" 26" x 36" x 9" 26" x 36" x 9" Dimensions, approximate (W x H x D) switch and repressurization pump

TWT recommends that filters be purchased in sets of two in order to ensure uninterrupted fluid treatment Reverse Osmosis: Removes the entire spectrum of drinking water contaminants

Note: Larger size reaction chambers and material available upon request

Shipping Weight, estimated (lbs.)

Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase.

50

60

75

with built in controls.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:

### PRODUCT DIMENSIONS

APPROX SHIP WEIGHT

### TWT-SWRO-100 - Drinking Water from Sea Water

The RO filtration system is ideal for use on board boats, yachts and vessels of all types. Compact and dependable, this sea water desalination system is able to provide up to 100 GPD (400 LPD) of drinking water from sea water source.

### **Specifications**

- Output max. 100 gallons per day
- For Feed Water Containing up to 36,000 mg/L TDS (36,000 ppm) at 25 C, SDI < 3
- 316L Stainless Steel Pump
- 24 Volt DC Motor (1 HP), Running at 1800 RPM
- High Rejection Sea Water Membrane
- Flow Meter Installed on the Permeate Line
- 5 Micron Sediment Pre-Filter
- Frame: Bent aluminum panel, with anti-vibration support

- Motor: 120 or 220V 50/60 Hz, 1Ph, 1.0 HP, 1470 RPM (60 Hz) or 1450 RPM (50 Hz)
- Pump: Cat 2SF15 (brass ) or 2SF15Sell (316SS-optional)
- Membrane: FILMTEC or SIMILAR 2.5"D x 14"L
- Pressure Vessel: Own Manufacturing (OSMO-2514-1000)
- Flowmeter: 0 to .25 GPM (or 0 to 15 GPH), Acrylic Block (optional)

RO systems are shipped with easy to follow application, installation and maintenance manual.





### TWT-12 (RO)Wall Mounted System

with Four models for flow rates to 1200 GPD

### **Features**

- · Stainless steel frame
- Automatic inlet valve
- Pre-filter housing and cartridge, 10"
- Procon pump (brass)
- 1/2 HP motor
- Liquid filled pump pressure gauge (2-1/2")
- · Stainless steel pressure vessels
- · Needle valve for concentrate line
- Needle valve for recycle line
- Check valve for product water (stainless steel)
- · Product pressure switch with Auto/Off
- Low-pressure shut-off with automatic restart

22" X 32" X 12" 50 lbs

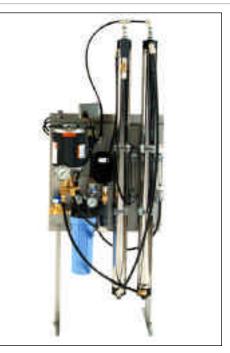
### **Specifications**

- Product water & reject water connection (tubing) 3/8"
- Feed water requirement (maximum) 2.4 GPM
- Feed water pressure requirement (minimum) 10 PSIG
- Drain requirement (maximum) 2.4 GPM
- Electrical requirement 120v/60hz
- Amps 8
- Pump 1/2 HP

### **Options**

### Part Number Description

R2864Stainless steel leg kitR2353-SDProduct water float switchR2288Whole house option\*



### Reverse Osmosis Higher Volume Systems

Model Number	Package	GPD	Recovery (Adjustable)	Membrane Size	Number Of Membranes	Feed Water Connection	Typical Rejection	Dimensions	Ship Wt.
R12-0150-1	1	150	15%-75%	2-1/2"x14"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0150-2	2	150	15%-75%	2-1/2"x14"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0150-3	3	150	15%-75%	2-1/2"x14"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0250-1	1	250	15%-75%	2-1/2"x21"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0250-2	2	250	15%-75%	2-1/2"x21"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0250-3	3	250	15%-75%	2-1/2"x21"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0600-1	1	600	15%-75%	2-1/2"x40"	1	1/2" NPT	98%	22"x52"x12"	60
R12-0600-2	2	600	15%-75%	2-1/2"x40"	1	1/2" NPT	98%	22"x52"x12"	60
R12-0600-3	3	600	15%-75%	2-1/2"x40"	1	1/2" NPT	98%	22"x52"x12"	60
R12-1200-1	1	1200	25%-75%	2-1/2"x40"	2	1/2" NPT	98%	22"x52"x12"	70
R12-1200-2	2	1200	25%-75%	2-1/2"x40"	2	1/2" NPT	98%	22"x52"x12"	70
R12-1200-3	3	1200	25%-75%	2-1/2"x40"	2	1/2" NPT	98%	22"x52"x12"	70

TWT-R12-0150 –150 GPD Wall Mounted System with Optional Legs Sea water membranes available

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

SHIP

WEIGHT

120 -180 lbs

### ITEM NUMBER & PRODUCT DESCRIPTION:

### R4X40 RO System

Model for flow rate to 2200 GPD

### **Standard Features**

- · Powder coated steel frame
- Inlet solenoid valve
- 20" prefilter
- Prefilter pressure gauge
- Multistage centrifugal pump
- Low-pressure protection with microprocessor auto reset
- 2.5" liquid filled pump pressure gauge
- Stainless steel pressure vessel(s)
- Product flow meter
- · Reject flow meter
- · Concentrate needle valve
- Non metallic recycle needle valve
- On / off toggle switch
- Feed water and product water TDS monitor

### **Applications**

• Whole house • Boiler feed water

PRODUCT

DIMENSIONS

20" X 26" X 50"

- Humidifiers Greenhouses Process water
- Electronics

R2288

R4X40

### **Specifications**

Membrane Size	4" x 40"
Average membrane rejection	98 %
<ul> <li>Feed Water Connection</li> </ul>	3/4" NPTF
Prefilter	20"
<ul> <li>Product Water Connection</li> </ul>	5/8" tubing OD
<ul> <li>Reject Water Connection</li> </ul>	5/8" tubing OD
• Feed Water Pressure (minimu	m) 10 psi
<ul> <li>Electrical Requirement</li> </ul>	120 VAC 60 Hz*
Options	
Part Number Description	n

Whole House Option\* RO Series



TWT-RX40-1 - 2200 GPD RO System

### **Reverse Osmosis Higher Volume Systems**

Models	R4X40-1	R4X40-2	R4X40-3
Maximum Productivity (gallons per day)	2200	4400	6600
Recovery (user adjustable)	15 - 75 %	25 - 75%	32 - 75 %
Number Of Membranes	1	2	3
Feed Water Required (maximum)	10gpm	12 gpm	14 gpm
Drain Required (maximum)	10gpm	12 gpm	14 gpm
Motor Horse Power	3/4	1	1 1/2
Electrical Requirement	15 amps	20 amps	25 amps
Dimensions W x D x H	20" x 20" x 50"	20" x 20" x 50"	20" x 26" x 50"
Shipping Weight (estimated lbs)	120	150	180

Maximum production based on a feed water of  $77^{\circ}$ F, SDI < 1, 1000 ppm TDS, and pH 7. Individual membrane productivity may vary (± 15%). May be operated on other feed waters with reduced capacity. Percent Rejection is based on membrane manufactures specifications; overall system percent rejection may be less.

\*Also available in 230 volts single phase.

\*\*Includes 300 gal tank, product float switch, and pressure pump with built in controls

TWT recommends that filters be purchased in sets of two in order to ensure uninterrupted fluid treatment **Reverse Osmosis: Removes the entire spectrum of drinking water contaminants** Note: Larger size reaction chambers and material available upon request Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### ITEM NUMBER & PRODUCT DESCRIPTION:

### **R-14 Wall-Mounted Systems**

PRODUCT DIMENSIONS

41" X 51" X 18" 2

250 lbs

SHIP

WEIGHT

Models for flow rate to 5400 GPD, Stainless steel fittings, fully assembled and ready for installation.

### **Standard features**

- Stainless steel frame
- Stainless steel pressure vessels
- Pre-filter housing and cartridge, 10" Full-Flow
- Webtrol<sup>®</sup> multi-stage centrifugal pump
- Automatic inlet valve
- Low-pressure shut-off with automatic restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge (liquid filled)
- Flow meter for product water
- Flow meter for reject water
- Check valve for product water
- · Sample valve for product water
- On / off switch

### Specifications

- Feed water connection 1" FNPT
- Product water connection (1800 & 3600 GPD) 1/2" tube
- Product water connection (5400 GPD) 5/8" tube
- Reject water connection (all R14 models) 1/2" tube
- Feed water pressure requirement (minimum) 10 PSIG
- Drain requirement (maximum) 10 GPM
- Electrical requirement 230v/60hz
- Amps (1800 & 3600 GPD) 6
- Amps (5400 GPD) 9

### Options

Part NumberDescriptionR2353-SDProduct water floatswitchR2288Whole house option\*



TWT-R14-02-1WM – 3600 GPD Wall Mounted System Sea water membrane available

<b>Reverse Osmosis Higher</b>	Volume Systems
-------------------------------	----------------

Model Number	Fittings & Valves	GPD	Pump (H.P.)	Recovery (Adjustable)	Membrane Size	Membranes	Feed Water Required** (GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R14-02-1WM	SS	3600	1	25%-75%	4" x 40"	2	5	98%	41"x51"x18"	250

Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required.Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is FPMB-BBS-10 melt blown cartridge.Systems are designed for use with municipal and well water.

\*Includes 300 gallon tank, product water float switch and repressurization pump with built-in controls. \*\*At 50% recovery.

TWT recommends that filters be purchased in sets of two in order to ensure uninterrupted fluid treatment Reverse Osmosis: Removes the entire spectrum of drinking water contaminants Note: Larger size reaction chambers and material available upon request Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	PRODUCT DIMENSIONS	SHIP WEIGHT
R-14 floor-mounted sy	stems 20" X 26" X	50" 700 lbs
Two models for flow rates 72	00 to 9000 GPD	
Standard features		
<ul> <li>Powder coated steel frame</li> <li>Stainless steel pressure vessels</li> <li>Pre-filter housing and cartridge (20" Full-Flow)</li> </ul>	<ul> <li>Flow meter for reject water</li> <li>Flow meter for recycle wate</li> <li>Check valve for product wa</li> <li>On / off switch</li> </ul>	er
<ul> <li>Webtrol<sup>®</sup> heavy-duty multi-stage centrifugal pump</li> </ul>	Specifications	
<ul> <li>Automatic inlet valve</li> <li>Low-pressure shut-off with automatic restart</li> <li>Tank level input</li> <li>Pretreatment interlock input</li> <li>Adjustable recycle line</li> <li>Pre-filter pressure gauges</li> </ul>	Feed water connection Product water connection Reject water connection Feed water pressure requirement (min.) Drain requirement (maximum Electrical requirement	1" FNPT 3/4" FNPT 3/4" FNPT 10 PSIG 15 GPM 230VAC/60hz
<ul> <li>Pump discharge pressure gauge (liquid filled)</li> <li>Flow meter for product water</li> </ul>	Phase Amps	3 15

TWT-R14-04-1111000 – 7200 & 9000 GPD Floors Mounted Systems Sea water membrane available

### **Reverse Osmosis Higher Volume Systems**

Model Number	Package	GPD	Pump (H.P.)	Recovery (Adjustable)	Membrane Size	Membranes	Feed Water Required* GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R14-04-1111000	1	7200	5	42%-75%	4" x 40"	4	10	98%	60"x18"x56"	600
R14-05-1111000	1	9000	5	46%-75%	4" x 40"	5	12.5	98%	60"x18"x56"	700

Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts

to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is FPMB-BB5-20 melt blown cartridge. Systems are designed for use with municipal and well water. \*At 50% recovery.

TWT recommends that filters be purchased in sets of two in order to ensure uninterrupted fluid treatment Reverse Osmosis: Removes the entire spectrum of drinking water contaminants Note: Larger size reaction chambers and material available upon request Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

96" X 24" X 72"

### ITEM NUMBER & PRODUCT PRODUCT DESCRIPTION: DIMENSIONS

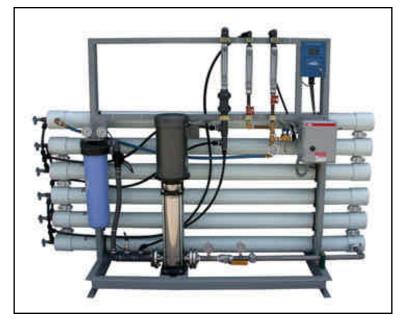
### R-24 Model for flow rate 10 GPM

### **Standard Features**

- Powder coated steel frame
- FRP multi-port pressure vessels
- Pre-filter housing and cartridge (20" B-B)
- Webtrol® multi-stage centrifugal pump
- Automatic inlet valve
- · Low-pressure shut-off with auto restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge
- · Flow meter for product water
- · Flow meter for reject water
- · Flow meter for recycle water
- Check valve for product water
- Sample valves for product water
- On / off switch

### **Specifications**

Feed water connection	1" FNPT
Product water connection	1" FNPT
Reject water connection	3/4" FNPT
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	17, 21, 25 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	20



SHIP

WEIGHT

800 lbs

TWT-R24-08-1111000 – 10 GPM RO System Sea water membrane available

Consumables and replacement parts list for RO system will be provided at time of purchase.

RO systems are shipped with easy to follow application, installation and maintenance manual.

### **Please Note:**

System engineering design, weight, size and system component assembly may vary based on TWT engineering review, water conditions, application, industry and/or customer specific needs. Pumps, piping, fittings, valves, and other material needed to and from system owners responsibility.

### **Reverse Osmosis Higher Volume Systems**

Model Number	GPM	Pump (H.P.)	Recovery Adjustable)	Membrane Size	Membranes Array	Feed Water Required*	Typical Rejection (GPM)	Dimensions	Ship Wt. (Lbs.)
R24-08-1111000	10	7.5/TEFC	60%-75%	4" x 40"	2:1:1	17	98%	96"x24"x72"	800

Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is 20" Full-Flow plastic housing and FPMB-BB5-20 melt blown filter cartridge. Systems are designed for use with municipal and well water. \*At 65% recovery.

TWT recommends that filters be purchased in sets of two in order to ensure uninterrupted fluid treatment

Reverse Osmosis: Removes the entire spectrum of drinking water contaminants

Note: Larger size reaction chambers and material available upon request

Custom engineered system built to order only. Price to be determined and based on component assembly and materials cost at time of purchase.

# Sea Water RO On-Board Desalination Systems

Model Eco

### Description

Sea Water Reverse Osmosis Systems are designed to produce potable permeate water from sea water with up to 35,000 ppm TDS content. Designed for use on recreational yachts and light commercial vessels of all types, these systems will provide a daily production of 190-580 GPD (30 liters/hour-300 liters/hour).They have a very small footprint and silent operation which means these units can be installed in almost any area. The systems can be fully automated with the addition of select optional equipment.

Systems include select pre-filtration and optional Uv disinfection to provide the highest quality drinking water possible. All systems come with high rejection rate RO membranes and feature high/low pressure gauges and safety devices. Additional optional features are available, such as automatic flushing, extended pre-filtration or remote control. Three models for recreational and commercial uses are available in various voltage configurations and flow rates.

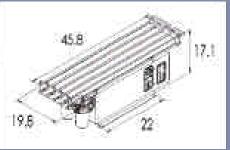
### Features

- Compact Design
- High Pressure Feed & CAT Pump
- Automatic Operation, Simple and Silent.
- Salinometer, Auto Waste Valve.
- Very Low Power Consumption

### Options

- Auto Flushing
- Remote Control
- UV Disinfection
- Wide Range of Other Options

12 or 24 VDC Model X :30-90 l/h 12 or 24 VDC 27.2115 or 230 V single ph. Model Y 60-300 l/h



30-90 l/h

Email:info@triangularwave.com • triwaveinc@aol.com websites:www.triangularwave.com www.twtwatertreatment.com

All dimensions in inches

220 or 400 V three ph.

115 or 230 V

# Sea Water Ro Systems



### **Design Assumptions**

- Feed Water of 35,000 mg/l TDS
- SDI 3
- Turbidity 1NTU for UC Disinfection

### **Standard Features**

- High Rejection Rate Sea Water RO membranes
- 5 Micron Sediment Pre-Filter
- High and Low Pressure Gauges and safety Devices
- Stainless Steel Frame

### **Optional Features**

- Automatic Flushing
- Advanced PLC Control for
  - Remote Signaling and Control
  - Permeate and Concentrate Flowmeters
- Separation Kit
- Maintenance Kit
- Additional Sand Filter

### **Additional Considerations**

- Holding Tank
- Pressure System

	Speccif	ications					
	Part #	Prod* (GPD)	Prod* (Litres/Hr)	Voltage	Power Consumption	Size L x W x H (cm)	Weight (kg)
0	Eco30	190	30	12V 24V	12A 6A	67x38x2048	48
Model Eco	Eco60	380	60	12V	25A	67x38x20	56
lode				24V	12.5A		56
N	Eco90	570	90	12V 24V	24A 17A	67x50x20	68 68
	X-30	190	30	12V 24V 115V 230V	31A 25A 1 kw 1 kw	69x33x30	34 36 38 38
( lel	X-50	320	50	12V	31A	69x33x30	40
Model X	X-60	380	60	24V 115V 230V	25A 1 kw 1 kw	69x33x30	42 44 44X
	X90	570	90	115V 230V	1 kw 1 kw	69x33x30	50 50
	Part #	Prod* (GPD)	Prod* (Litres/Hr)	Voltage s=single ph. t=three ph.	Power Consumption	Size L x W x H	Weight (kg)
	Y-60	380	60	115Vs 230Vs 220Vt 400Vt	1.5 kw	117x45x37	61
Model Y	Y-120	760	120	115Vs 230Vs 220Vt 400Vt	1.5 kw	117 x 45 x 37	69
Me	Y-180	1140	180	115Vs 230Vs 220Vt 400V	2 kw	117 x 45 x 41	67
	Y-240	1520	240	115Vs 230Vs 220Vt 400Vt	2 kw	117 x 50 x 41	85
	Y-300	1900	300	115Vs 230Vs 220Vt 400Vt	3 kw	117 x 50 x 46	95

\* Rated performance +/- 10% using standard sea water, with 35 g/l salinity, at 25° C

81

### TWT-SWRO-100 - Drinking Water from Sea Water

The RO filtration system is ideal for use on board boats, yachts and vessels of all types. Compact and dependable, this sea water desalination system is able to provide up to 100 GPD (400 LPD) of drinking water from sea water source.

### • Motor: 120 or 220V 50/60 Hz, 1Ph, 1.0 HP, **Specifications** 1470 RPM (60 Hz) or 1450 RPM (50 Hz) Output max. 100 gallons per day • Pump: Cat 2SF15 (brass ) or 2SF15Sell • For Feed Water Containing up to 36.000 (316SS-optional) mg/L TDS (36,000 ppm) at 25 C, SDI < 3 Membrane: FILMTEC or SIMILAR 2.5"D x 14"L 316L Stainless Steel Pump • Pressure Vessel: Own Manufacturing • 24 Volt DC Motor (1 HP), (OSMO-2514-1000) Running at 1800 RPM • Flowmeter: 0 to .25 GPM (or 0 to 15 GPH), • High Rejection Sea Water Membrane Acrylic Block (optional) • Flow Meter Installed on the Permeate Line RO systems are shipped with easy to follow 5 Micron Sediment Pre-Filter application, installation and maintenance manual. • Frame: Bent aluminum panel, with anti-vibration support Rear View Sed-5M TWT-SYS4/QS4M-1 (GPM 1-2) 13"W x 15" H x 6.5" 10 lbs Carb O EN

Ultra Violet Dual Media Under Cour Water Filtration System	nter Carb	-0.5M		
120V / 60 Hz Point-of-Use Ultraviol 10" Sediment Purifier Filter – 10" carbon Block	et			
<b>TWT-SYS4/QS4M-2 (GPM 1-2)</b> 230V / 60 Hz Point-of-Use Ultraviol Purifier –10" Sediment Filter 10" carbon Block	Sed- et Carb	-5M 9-0.5M	13"W x 15" H x 6.5"	10 lbs
<b>TWT-SYS4/QS4E-12 (GPM 1-2)</b> 12V Point-of-Use Ultraviolet Purifie 10" Sediment Filter 10" Carbon Block	Sed- r Carb	-5M -0.5M	13"W x 15" H x 6.5"	10 lbs
TWT-SYS4/QS4E-24 (GPM 1-2) 24V Point-of-Use Ultraviolet Purifie 10" Sediment Filter 10" Carbon Block	Sed- r Carb	-5M -0.5M	13"W x 15" H x 6.5"	10 lbs
TWT-SYS43/QS43M-1 (GPM 1-2) Ultra Violet Triple Media Under Counter Water Filtration System 120V / 60 Hz Point-of-Use Ultraviolet Purifier/10" Sediment Filter 10" Carbon Block/ 10" GAC	Sed-5M Carb-0.5M GAC	-	′5"L x 14.5"H x 5.375"D	14 lbs
TWT-SYS43/QS43M-2 230V / 60 Hz Point-of-Use Ultraviolet Purifier 10" Sediment Filter 10" Carbon Block / 10" GAC	Sed-5M Carb-0.5M GAC	-	′5"L x 14.5"H x 5.375"D	14 lbs
TWT-SYS43/QS43E-12 12V Point-of-Use Ultraviolet Purifier 10" Sediment Filter / 10" Carbon Block 10" GAC	Sed-5M Carb-0.5M GAC	15.7	′5"L x 14.5"H x 5.375"D	14 lbs
TWT-SYS43/QS43E-24 24V Point-of-Use Ultraviolet Purifier 10" Sediment Filter	Sed-5M Carb-0.5M GAC	15.7	′5"L x 14.5"H x 5.375"D	14 lbs

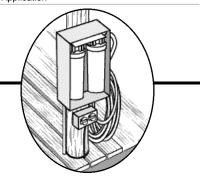
Carbon Block 10" GAC







Ultra Violet with Dual Media Water Filtration System.Under Counter or Dock Side Application





### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	GPH	PRODUCT DIMENSIO	NS	APPROX : WEIGHT	SHIP				
Inside ultra-filters pressure vessel is a network of hollow fibers that reduce microbiological contaminants in the water. Removes impurities as small as .015 microns from source water.									
TWT-UFAC11 Power Supply: 120 VAC Ultra Meter/Controller • 1 ir	600 GPH nch NPT	52"H X 5	"D	34 lbs.					
Meter Controller Specification		pH Range		3-10					
Power Supply Cycles) Flush Volume:	110 VAC/12 VD	C (50/60	MWCO Membrane Material Inlet and Outlet Fittin	a Size	100kD Polyethersulfone 1 inch NPT				
Range Increment	20-1000 Gallons 20 Gallons	S	Flush Valve Fitting Si Shipping Weight	•	3/4 inch NPT 34 lbs.				
Flush Duration: Range Increment	10-100 Seconds 1 Second	5	Operating Weight Average Flow Rate a	at 50 psi:	51 lbs.				
Maximum Flow Rate	10 Gallons per N	Vinute	Gallons per Hour Gallons per Minute		540 9				
System Specifications Maximum Operating Pressure Maximum Operating Temp. Max. Trans Membrane Pressure	72 psi (5 Bar) 40 Degree C (10 45 psi (3 Bar)	)4 Degree F)	Liters per Hour Liters per Minute		2045 34				

### **BIG BUBBA NON-METALLIC FILTERS HOUSINGS**

Big-Bubba<sup>®</sup> filters are bigger and better than other non-metallic filter housings because pricing is based on their economical plastic construction, while the pressure rating is nearly equal to stainless steel.

TWT-BBH-100	100	34"H X 12"OD	37 lbs.		
Power Supply: 120 VAC					
Piping: 2 inch FNPT					
TWT-BBH-150	<b>1</b> 50	40"H X 12"OD	43 lbs.		
Power Supply: 110 VAC/12 VDC (50/60 Cycles)					
<i>Piping:</i> 2 inch FNPT					

### **BIG BUBBA REPLACEMENT FILTER CARTRIDGES**

TWT-BBH-S	One Sediment Filter Cartridge
TWT-BBHC	One Carbon Filter Cartridge

### **Features**

- Made of glass-reinforced polypropylene for greater strength and chemical resistance.
- Will not dent, rust, chip or corrode.
- Filters accept single cartridge for convenience.
- Swing-bolt lid closure is easy, safe & secure.
- Pressure release handle for safety. (Lid will not open until pressure has been released.)
- · Cartridge "lock" adapter for convenience.
- Double o-rings on cartridges for superior sealing.

- Two inlets to allow piping from the same direction.
- Pre-set pressure release valve included.

### Applications

- · Whole house filtration for sediment
- Whole house filtration for taste & odor reduction
- Whole house filtration for chlorine reduction
- · Sea water filtration for chemical resistance
- · Commercial use when low cost filters are needed





### **CENTRIFUGAL SEPARATORS**

### How they work

High velocity influent passes through the separator, which is designed to produce a circular flow pattern. Using gravitational force, sand, debris and sludge migrate to the separator's side walls and downward, into a solids holding chamber. Cleansed effluent rises up, through the vortex and is returned back to the system. Subsequently, the separated solids are purged from the holding chamber, continuously, manually or automatically, depending on what type equipment is utilized.

### **Features & benefits**

- Removes 98% of all solids with a 1.8 specific gravity or more, and all particles greater than 40 micron in size
- Rated for pressures to 150 PSID
- Rated for temperatures to 200°F
- · Epoxy coated, carbon steel construction
- No routine maintenance required
- Minimum 4 PSI pressure drop
- Compact design to save space

### **ITEM NUMBER & GPM** PRODUCT APPROX SHIP **PRODUCT DESCRIPTION:** DIMENSIONS WEIGHT

Removes dense solids without replaceable filter elements.

In-line	centrifugal	separators	(no	legs

FP-CS-C-75	14-25 GPM	22.437"H X 6"D	16 lbs.
FP-CS-C-100	28-49 GPM	22.437"H X 6"D	18 lbs
FP-CS-C-150	67-115 GPM	30"H X 6"D	22 lbs
FP-CS-C-200	90-157 GPM	34"H X 10"D	42 lbs
FP-CS-C-300	205-355 GPM	33.875"H X 10"D	46 lbs
High flow centrifugal	separators (models with legs)		
FP-CS-C-400	352-610 GPM	53"H X 12"D	165 lbs.
FP-CS-C-600	800-1385 GPM	60"H X 14"D	232 lbs.
FP-CS-C-800	1385-2398 GPH	70"H X 18"D	365 lbs.
FP-CS-C-1000	2183-3780 GPM	86"H X 22"D	575 lbs.
FP-CS-C-1200	2915-5049 GPM	100"H X 24"D	852 lbs.
FP-CS-C-1400	3817-6610 GPM	111"H X 30"D	1382 lbs.
FP-CS-C-1800	6469-11,204 GPM	132"H X 36"D	2140 lbs.

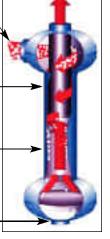


Liquids and solids enter the separator creating a circular flow pattern

Centrifugal action losses the heavier than water solids against the perimeter of the separation chamber The solids drop

along the perimeter and collect under the spin trap plate Solids are purged

based on the systems solids accumulation



### **Features & Benefits**

· Removes 98% of all solids with a 1.8 specific gravity or more, and all particles greater than 40 micron in size

• Rated for pressures to 150 PSID• Rated for temperatures to 200°F

- · Epoxy coated, carbon steel construction
- No routine maintenance required
- Minimum 4 PSI pressure drop
- · Compact design to save space

Manual purge kits for centrifugal separators		
Part Number	Separator Outlet	Description
MPK-75	3/4"	Manual purge kit with valve and fittings
MPK-150	1-1/2" Manual purge kit with valve and fittings	
MPK-200		

Timer purge kits for centrifugal separators (on/off timer models)			
Part Number Separator Outlet Description			
APT-75 3/4" 3/4" motorized valve with on / off timer, panel mounted			
APT-150	APT-150 1-1/2" 1-1/2" motorized valve with on / off timer, panel mounted		
APT-2002" 2" Motorized valve with on / off timer, panel mounted			

Automatic purge kits for centrifugal separators (with deluxe multi-set timers)			
Part Number Separator Outlet Description			
APMST-75         3/4"         3/4" motorized valve with multi-set timer, panel mounted			
APMST-150 1-1/2" 1-1/2" motorized valve with multi-set timer, panel mounted			
APMST-200	APMST-200   2"   2" motorized valve with multi-set timer, panel mounted		

Spin-down sediment filters - Self-cleaning design, designed for large particle removal with manual purge valve

Micron filter with a built-in manual flush valve to purge built-up sediments in the bottom of the filter. The self-cleaning sediment filter are 3/4"1" / 1 1/2" / 2" in/out.

Filter will initially clean the water so the staged replacement cartridges will have a much longer service life.



Spin Down Filter System Reusable sediment filter for fine sediment or particulates that can be flushed periodically



Sediment Trapper Filter System Reusable sediment filter for medium sediment or particulates that can be flushed periodically

### Spin Down<sup>™</sup> Cold Water Feed Line Polyester Screen

3/4" RSF1000L 3/4" RSF500L 3/4" RSF250L 3/4" RSF100L

### 1" RSF1000L 1" RSF500L 1" RSF250L 1" RSF100L

1.5" RSF1000M 1.5" RSF500M 1.5" RSF250M 1.5" RSF100M

2" RSF1000H 2" RSF500H 2" RSF250H

2" RSF100H

### Sediment Trapper™ Cold Water Feed Line Polyester Screen

3/4" RSF1000LST 3/4" RSF500LST 3/4" RSF250LST 3/4" RSF100LST

1" RSF1000LST 1" RSF500LST 1" RSF250LST 1" RSF100LST

- 1.5" RSF1000MST 1.5" RSF500MST 1.5" RSF250MST 1.5" RSF100MST
- 2" RSF1000HST 2" RSS500HST 2" RSF250MST 2" RSF100HST



Hot Water Spin-Down Sediment Trapper Filters Hot water sediment filters for water up to 200° Fcan be utilized after the water heater to capture scale

### **Available Upon Request**

- Replacement Intake Filters
- Spin-Down Filter Elements
- Sediment Trapper Filter Elements
- Optional Equipment List
- TWT Deposit Control Technology
- (hard water treatment &Conditioning)

### Spin Down<sup>™</sup> Hot Water Feed Line Stainless Steel Mesh Screen

3/4" RSFSS200LHT 3/4" RSFSS140LHT 3/4" RSFSS100LHT 3/4" RSFSS600LHT	3/4" 3/4" 3/4" 3/4"
N/A	N/A
1.5" RSFSS2000MHT	N/A
1.5" RSFSS140MHT	N/A
1.5" RSFSS100MHT	N/A
1.5" RSFV60MSMHT	N/A
2" RSFSS200HHT	N/A
2" RSSSS140HHT	N/A
2" RSFSS100HHT	N/A
2" RSFSS60HHT	N/A

### Sediment Trapper<sup>™</sup> Hot Water Feed Line Stainless Steel Screen

3/4" RSFSS200LSTHT 3/4" RSFSS140LSTHT 3/4" RSFSS100LSTHT 3/4" RSFSS600LSTHT

### FILTER SETS WITH UV PURIFIERS P.O.E.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com ITEM NUMBER & FILTER PRODUCT APPROX SHIP **PRODUCT DESCRIPTION: SPECS** DIMENSIONS WEIGHT TWT-SYS250-WFS15SC-Filter Set Self-cleaning filter combined with 22"W x 27"H x 7"D 8 lbs TWT-SYS250-FS filter set as seen TWT-SYS250-FS -Filter Set Filter Specs: Sed-5M/Carb -10M complete Sed-5M 11"W x 14"H x 5.75" 9 lbs with filter housings, mounting bracket, Carb-10M wrench and 10" sediment filter and 10" carbon filter-3/4" in-out-pressure tested TWT-SYS250-FSUV (4 GPM) Residential/ Commercial P.O.E. Sed-5M 17"W x 26H" x 6.5"D 16 lbs UV Disinfection/Filtration System Purifier Carb-10M Combined as a Unit for 1/2" or 3/4" Pipes TWT-SYS700-FS --Filter Set Filter Specs: Sed-5M/Carb -10M complete Sed-5M 11"W x 25"H x 5.75" 13 lbs with filter housings, mounting bracket, wrench Carb-10M and 20" sediment filter and 20" carbon filter-3/4" in-out-pressure tested TWT-SYS700-FSUV (8 GPM) Filter Set with UV Purifier Residential/ Commercial P.O.E. UV Sed-5M 17"W x 26"H x 6.5"D 18 lbs **Disinfection/Filtration System Purifier** Carb-10M Combined as a Unit for 3/4" or 1" Pipes 120V / 60 Hz other current source available upon request

### FILTER SETS WITH UV PURIFIERS P.O.E.

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	FILTER SPECS	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
TWT-SYS1200-FSUV (12 GPM) Filter Set with UV Purifier				
Residential/ Commercial P.O.E. UV Disinfection/Filtration System Purifier Combined as a Unit for 1" to $1^{1}/_{2}$ " Pipes	Sed-5M Carb-10M	20"W x 52"H x 8"D	33 lbs	

### TWT-SYS1200-FS –Filter Set

Filter Specs: Sed-5M/Carb -10M Filter Set - complete with filter housings, mounting bracket, wrench and 20" sediment filter and 20" carbon filter-1" in-out–pressure tested Sed-5M Carb-10M 14.5W" x 29"H x 8"D 22 lbs



### TWT-SYS1500-FSUV (GPM 15) Filter Set with UV Purifier

Residential/ Commercial P.O.E. UV Disinfection/Filtration System Purifier Combined as a Unit for 1" to 11/2" Pipes

120V / 60 Hz other current source available upon request

Sed-5M 20"W x 52"H x 8"D 33 lbs Carb-10M



### TWT-SYS1500-FS-Filter Set Only

Filter Specs: Sed-5M/Carb -10M Filter Set - Sed-5M Complete with filter housings, mounting bracket, wrench and 20" sediment filter and 20" carbon filter- $11/_2$ " BB in-out-pressure tested

Sed-5M 14.5W" Carb-10M

14.5W" x 29"H x 8D" 22 lbs



For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:	FILTER SPECS	PRODUCT DIMENSIONS	APPROX SHIP WEIGHT	
TWT-SYS3000-FSUV (GPM 30) Filter Set with UV Purifier				
Residential/ Commercial P.O.E UV Disinfection/Filtration System Purifier Combined as a Unit for $1^{1}/_{2}$ " Pipes	Sed-5M Carb-10M	21"W x 52"H x 8D"	33 lbs.	
120V / 60 Hz other current source available upon request				Ŀ
TWT-SYS3000-FS-Filter Set Only Filter Specs: Sed-5M/Carb -10M Filter Set - complete with filter housings, mounting bracket, wrench and 20" sediment filter and 20" carbon filter- 1-1/2" BB in-out- pressure tested	Sed-5M Carb-10M	14.5"W x 29"H x 8"D	22 lbs	
TWT-SYS5000–50 GPM Custom System Quote 120V / 60 Hz other current source available upon request	TBD*	21"W x 52"H x 8"D	38 lbs	
<b>TWT-SYS6000–100 GPM</b> Custom System Quote Filtration and UV system integrated based of application requirements at time of purchase		21"W x 52"H x 8"D	42 lbs	

The SYS5000 & SYS6000 are all similar in appearance, but have different capacities.

\*Based on price of material at time of purchase, are meant to ensure proper use, application and installation

### FILTRATION PRODUCTS/FILTER HOUSINGS for REPLACEMENT CARTRIDGES

For addition	al information: visit www.triangularwave.com •	E-mail: info@triangula	arwave.com • triwaveinc@aol.com	
ITEM NUMBER & PRODUCT DESCRIPTIO	PRODUCT N: DIMENSIONS	CASE PACK	APPROX SHIP WEIGHT	
TWT-FH4200WW14	10" White Filter Housing for 1/4" pipe size	6	BOV	
TWT-FH4200WW38	10" White Filter Housing for 3/8" pipe size	6	BOV	
TWT-FH4200WW12	10" White Filter Housing for 1/2" pipe size	6	BOV	
TWT-FH4200WW34	10" White Filter Housing for 3/4" pipe size	6	BOV	
TWT-FH5000BL34PR	10" Blue Filter Housing for 3/4" pipe size with Pressure Release Valve	6	BOV	
TWT-FH5000BL1PR	10" Blue Filter Housing for 1" pipe size with Pressure Release Valve	6	BOV	
TWT-FH5000BL15PR	10" Blue Filter Housing for 1-1/2" pipe size with Pressure Release Valve	6	BOV	
FILTRATION PRODUCTS/20" FILTER HOUSINGS for 20" X 4-1/2" OD CARTRIDGES				
TWT-FH10000BI 34PR	20" Blue Filter Housing for 3/4" pipe size	6	BOV	

TWT-FH10000BL34PR	20" Blue Filter Housing for 3/4" pipe size with Pressure Release Valve	6	BOV
TWT-FH5000BL1PR	20" Blue Filter Housing for 1" pipe size with Pressure Release Valve	6	BOV
TWT-FH5000BL15PR	20" Blue Filter Housing for 1-1/2" pipe size with Pressure Release Valve	6	BOV

FILTRATION PR	ODUCTS/JUMBO FILTER HOUSINGS	CASE PACK		
TWT-FMJCH40	50 GPM single cartridge, jumbo filter housings in 316 stainless steel	1	31 lbs	
TWT-FMJCH90	100 GPM single cartridge, jumbo filter housings in 316 stainless steel	1	56 lbs	2
TWT-FMJCH170	150 GPM single cartridge, jumbo filter housings in 316 stainless steel	1	62 lbs	<b>F</b> Î Î Î

### FILTRATION PRODUCTS/JUMBO FILTER & HURRICANE HOUSINGS REPLACEMENTS

TWT-FMHC-40-5	5 micron pleated cartridges for FMJC40 Carton Size 10" x 10" x 12"	1	3 lbs
TWT-FMHC-90-5	5 micron pleated cartridges for FMJCH90 Carton Size 8" x 8" x 20"	1	5 lbs
TWT-FMHC-170-5	5 micron pleated cartridges for FMJCH170 Carton Size 8" x 8" x 31"	1	14 lbs

Pleated: Washable and reusable for sediment reduction/removal

### FILTRATION PRODUCTS/REPLACEMENT BAG FILTERS

TWT-RBF-05	5 Micron bag filters	20	BOV	
TWT-RBF-10	10 Micron bag filters	20	BOV	
TWT-RBF-20	20 Micron bag filters	20	BOV	
TWT-RBF-50	50 Micron bag filters	20	BOV	
TWT-RBF-100	100 Micron bag filters	20	BOV	

Other Micronic sizes available upon request

BOV: Based on volume, shipping weight, and other related products ordered to be packed at time of purchase



### FILTRATION PRODUCTS/REPLACEMENT FILTER CARTRIDGES

The below listed filters are used in our All-In-One integrated systems, under counter systems are other related systems in catalog

ITEM# NUMBER	PRODUCT DESCRIPTION	MICRON	HOUSING	
TWT-155169	Solid Block	0.5	10"	
TWT-155634	Solid Block	10	10"	
TWT-155783	Solid Block	10	20" Big Blue	
TWT-155635	Solid Block	10	20" Slim Line	
Solid Block: Activated chemical reduction/re	carbon for taste, lead emoval	l, odor, chlorir	ne and organic	
TWT-155182	Pleated Sediment	5	10"	
TWT-155103	Pleated Sediment	10	10"	
TWT-155420	Pleated Sediment	5	20" Big Blue	
TWT-155305	Pleated Sediment	20	20" Big Blue	
TWT-155414	Pleated Sediment	5	20" Slim Line	
TWT-155303	Pleated Sediment	20	20" Slim Line	
Pleated: Washable a	nd reusable for sedim	ent reduction	n/removal	
TWT-155382	Pleated Carbon	10	20" Big Blue	
Pleated Carbon: Tas	te, odor, chlorine and	organic cher	mical reduction/removal	
TWT-155109	GAC	N/A	10"	
TWT-155249	GAC	N/A	20" Big Blue	
TWT-155111	GAC	N/A	20" Slim Line	
GAC: Granulated act and chlorine reduction	ivated carbon for taste n/removal	e, odor, orgar	nic chemicals	
TWT-GAC10M/KDF	GAC/KDF	N/A	10"	
GAC/KDF-55:	Granulated activated carbon with KDF-55, specially formulated copper/zinc alloy media designed to remove chlorine, lead, volatile organic chemicals, hydrogen sulfide, sulfur, herbicides, pesticides, chemical factilizer residues and tribalemethanes			

chemical fertilizer residues and trihalomethanes

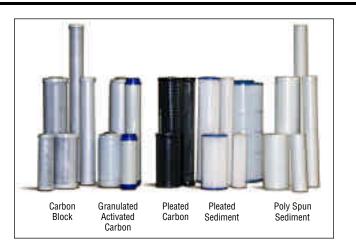
### **TWT-MZRFC**

Mini-Zap Replacement Filter Cartridge

The above replacement filter cartridges are used in TWT Counter Top, Under Counter, P.O.E., P.O.U. and Integrated All-In-One Treatment Systems. Refer to Specific product sheet (catalog or website) for correct replacement filter cartridges needed.

If fluid conditions require different media and/or additional micronic particle trapping for enhanced results, filters are available in various capacities providing flexibility & adaptability to meet the needs of all fluid conditions & applications. Contact your dealer or TWT.Inc. for additional information. Product numbers may change, micron size, filter medium must be indicated on purchase order

Note: Filter Housing, Filter Replacement Cartridges, and In-Line Filters if not listed, are available upon request



### **METER VALVES/AUTOMATIC SHUT-OFF FOR FILTER SYSTEMS**

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### **ITEM NUMBER & PRODUCT DESCRIPTION:**

PRODUCT DIMENSIONS

WEIGHT

APPROX SHIP

### TWT-UCVCM-01

P.O.E./P.O.U. filter system with battery powered indicator lights to alert you when filters/batteries need to be replaced See page 59 replacement filters

See page 75 for 13" X 11" X 4.5"



### FILTER SYSTEM ACCESSORIES

### **METER VALVES/AUTOMATIC SHUT-OFF BASED ON GALLONS FILTERED**

WM2000B	Black 1800 gal, Jaco fitting, 1/4" MNPT	BOV	
WM2000W	White 1800 gal, Jaco fitting, 1/4" MNPT	BOV	
WM3000B	Black 3800 gal, Jaco fitting, 1/4" MNPT	BOV	
WM3000W	White 3800 gal, Jaco fitting, 1/4" MNPT	BOV	
WM3001B	Black 15,000 L, Jaco fitting, 1/4" MNPT	BOV	1 mart
WM2001B	Black 7,000 L, Jaco fitting, 1/4" MNPT	BOV	
WM2000HCW	White 1800 gal, John Guest connectors, 1/4"	BOV	
WM2000HCB	Black 1800 gal, John Guest connectors, 1/4"	BOV	

### **DIGITAL FLOW METER VALVES**

TWT-FPDM-100	With Audible Alarm to indicate cartridge replacement	BOV
TWT-FPDM-200	With Audible Alarm to indicate cartridge replacement	BOV
TWT-FPDM-210	With Audible Alarm to indicate cartridge replacement	BOV

### **MOUNTING BRACKETS**

TWT-FM20	Mounting bracket for single filter housing	BOV		
TWT-FM30	Mounting bracket for double filter housing	BOV		
TWT-FM50	Mounting bracket for triple filter housing	BOV		
Larger sizes available upon request				

### **HOUSING WRENCHES**

TWT-FHR-10	10" Filter Housing Wrench	BOV
TWT-FHR-20	20" Filter Housing Wrench	BOV

### FEED WATER SADDLE VALVE

TWT-SV-1	1/2" MNPT x 1/2" FNPT x 1/4" compression	BOV
TWT-SV-2	3/8" MNPT x 3/8" FNPT x 1/4" compression	BOV

Larger sizes available upon request

BOV: Based on volume, shipping weight, and other related products ordered to be packed at time of purchase



### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

### ITEM NUMBER & PRODUCT DESCRIPTION:

PRODUCT DIMENSIONS APPROX SHIP WEIGHT

Designed to Effectively Eliminate Rust and Iron from your Water Supply Thoroughly and Economically

### TWT-RE-12

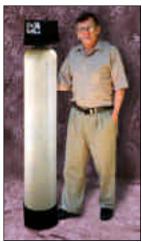
Rust-Erase Iron Filter Flow rate: 30 Liters per minute Maximum Iron Removal Capacity: 12 p.p.m. Filter Medium: Fine birm Electrical Supply: 120V 60 Hz 1 Amp or: 240V 50Hz 1 Amp Plumbing: 1" and 1" N.P.T. In-Out Back-wash Connection: 3/4" N.P.T.

Note: Other voltage source available upon request.

63"H x 10"D

100 lbs

90 lbs



### Chemical-Free Iron Removal Systems (no chemical injection required)

### TWT-RE-30

Maximum Iron Removal Capacity: 30 p.p.m. Flow rate: 30 Liters per minute Maximum Iron Removal Capacity: 30 p.p.m. Filter Medium: Fine birm Plumbing: 1" and 1" N.P.T. In-Out Back-wash Connection: 3/4" N.P.T.	52"H x 12"D	80 lbs
TWT-RE-50 Maximum Iron Removal Capacity: 50 p.p.m. Flow rate: 48 Liters per minute Filter Medium: Fine birm Plumbing: 1" and 1" N.P.T. In-Out Back-wash Connection: 3/4" N.P.T.	52"H x 12"D	100 lbs



• Clack 1" air injection system • Off air control tank (10x47)

• 163 valve • Brim Media • Bypass valve • Electronic timer control valve (backwash)

# TWT-RE-30C\*47"H x 10"DThe chrome jacketed system is complete<br/>with upgraded valves (chrome jacket is only<br/>available on the 30 ppm iron system).47"H x 10"DFlow rate: 30 Liters per minute<br/>Maximum Iron Removal Capacity: 30 p.p.m.47"H x 10"DFilter Medium: Fine birm<br/>Plumbing: 1" and 1" N.P.T. In-Out<br/>Back-wash Connection: 3/4" N.P.T.47"H x 10"D

Electrical Supply: 120V 60 Hz 1 Amp or: 240V 50Hz 1 Amp

\*Indicates Chrome Jacket





TWT-RE-30 / TWT-RE-50- These systems are similar in appearance but have different capacities



### FILTRATION PRODUCTS/FILOX IRON REMOVAL SYSTEM C/W

### For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

TWT-Filox-IRFS Filox media iron removal system. C/W 1 CF media. Single tank unit, service flow 6-7 GPM backwash flow required 5.5-GPM.

### Whole House Filters For Iron, Hydrogen Sulfide And Manganese.

Iron, Manganese and Hydrogen Sulfide are common elements found in your water and can be a nuisance causing stains in sinks, bathtubs, toilets, driveways and even the side of your house. In addition Iron, Manganese and Hydrogen Sulfide release unpleasant odors and tastes to your water supply. FILOXTM, a non-chemical oxidizing media is the answer to these water problems.

### System Advantages

- · Highest flow rate of any Iron removal media.
- No oxidizing chemicals needed for regeneration.
- High efficiency with minimum of 80% Manganese dioxide for enhanced performance and capacity.
- Effective, from 5.0 to 9.0 pH.
- System is easy to program, with10 pre-programmed regeneration cycles to optimize water treatment.
   May require additional oxidizing agents depending on water conditions.
- 10 year warranty on tank.
- 5 year warranty on valve.
- Made in USA.

**NOTE:** The use of chemicals and oxidizers, such as chlorine potassium permanganate and oxygen may be required to provide the optimal treatment for Iron, Hydrogen Sulfide and Manganese.

Model No.	Value	Mineral Tank Size	Media Cubic Ft.	Gravel (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space L x W x H
NF09-W110F	Time Clock	9X48	1	None	6	<15	5.3	16X10X55
NF10-W110F	Time Clock	10X54	1.5	None	9	< 15	7.5	16X11X62
NF12-W110F	Time Clock	12X52	2	None	12	<15	10	17X13X60
NF14-W110F	Time Clock	14X65	3	None	18	<15	15	18X15X74
NF16-W110F	Time Clock	16X65	4	None	24	<20	20	20X17X74

### Iron, Hydrogen Sulfide, and Manganese Removal

### **Filox-RTM Media**

Filox-RTM media is an economical Iron and Hydrogen Sulfide filtration media that out performs traditional Greensand and Birm.

### **Features & Benefits**

- Superior high efficiency media for filtration and removal capabilities
- No oxidizing chemicals needed for regeneration.
- High efficiency with 80% manganese dioxide for enhanced performance and capacity.
- Effective, from 5.0 pH to 9.0 pH
- Highest flow rate of any standard iron removal media.

### **Operating Conditions**

Active Ingredient	75-85% Manganese Dioxide
Service Flow	6 gpm/cu.ft.
Freeboard	30-50%
Backwash rate	12-15 gpm/sq.ft @ 60F
Bed depth	20 inch Minimum
pH Range	5.0 - 9.0
Screen size	12 x 40
Bulk density	114 lbs/cu.ft.
R	emoval Capacity
Iron	15.0 ppm
Hydrogen Sulfide	7.0 ppm
Manganese	3.0 ppm
L	





### WHOLE HOME/OFFICE BACK WASHABLE FILTRATION SYSTEM

For additional information: visit www.triangularwave.com • E-mail: info@triangularwave.com • triwaveinc@aol.com

ITEM NUMBER & PRODUCT DESCRIPTION:

Interchangeable mixed media bed

### TWT-TP-001M (municipal water) TWT-TP-001W (well water)

Pre-Filter MicroZ filter media, KDF, Activated Carbon Power Supply: 120 VAC/60 Hz 1amp or 240v 50 Hz 1amp *Piping:* 1" inch NPT

*GPM* 8-10 GPM *PRODUCT DIMENSIONS* 60"H X 12"D *APPROX SHIP WEIGHT* 100 lbs. Depending media chosen

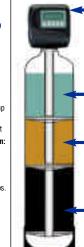


OPTION #1 TWT-TP-001M (municipal water) TWT-TP-001W (well water) Filtration System

Flow rate: 8-10 GPM Electrical Supply: 120V 60 Hz 1 Amp or: 240V 50Hz 1 Amp Plumbing: 1\* and 1\* N.P.T. In-Out Back-wash Connection: 3/4\* N.P.T.

Size: 60" high X 12" diameter Approx Weight: 100 lbs

(depending media chosen)



### Metered Control Valve

### Pre-Filter

MicroZ<sup>™</sup> filter media is used for pre-filtration to remove particles, five micron and up. MicroZ out performs sand and multimedia to provide increased particulate removal.

### KDF

KDF is added here to enhance performance of activated carbon and to aid in the removal of iron and hydrogen sulfide.

### Activated Carbon

Activated carbon is used for pre-treatment to remove chlorine taste, odors.

### TWT-TP-002M (municipal water) TWT-TP-002W (well water)

Pre-Filter MicroZ filter media, KDF, Activated Carbon, High Efficiency Ion Exchange Resin Power Supply: 120 VAC/60 Hz1amp or 240v 50 Hz 1amp

**Ref A:** This system backwashed using standard softening salt *Piping:* 1" inch NPT

*GPM* 8-10 GPM *PRODUCT DIMENSIONS* 60"H X 12"D *APPROX SHIP WEIGHT* 100 lbs. Depending media chosen

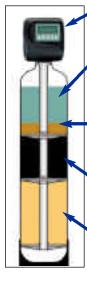


### TWT-TP-002M (municipal water) TWT-TP-002W (well water) Filtration System

**OPTION #2** 

Flow rate: 8-10 GPM Electrical Supply: 120V 60 Hz 1 Amp or: 240V 50Hz 1 Amp Plumbing: 1\* and 1\* N.P.T. In-Out Back-wash Connection: 3/4\* N.P.T. Size: 60\* high X 12\* diameter

Approx Weight: 100 lbs. (depending media chosen)



### Metered Control Valve

### Pre-Filter

MicroZ<sup>™</sup> filter media is used for pre-filtration to remove particles, five micron and up. MicroZ out performs sand and multimedia to provide increased particulate removal.

### KDF

KDF is added here to enhance performance of activated carbon (below) and to aid in the removal of iron and hydrogen sulfide

### Activated Carbon

Activated carbon is used for pretreatment to remove chlorine taste, odors and to extend life of the ion exchange resin

### High Efficiency Ion

Exchange Resin Fine mesh resin is used for increased efficiency and to enhance performance with high iron content water

### Specifications: Based on TWT model # & media chosen

Capacity (Grains)	Footprin (Min)		afety Ioat Valve	Connection Rem Size Hard			Removes Chlorine	Removes Taste & Odor		Remove: Particula		Removes Iron	
30,000	30" X 19	n	Yes	1"	Y	ES	YES	YES		YES		YES	
TWT Use Only	Water Source	Pre Filter	Carbon Type	KDF Type	Resin Type	Valve	Valve Type	Mineral Tank	Pipe Size		Bypass Valve	Safety Float Valve	
M3011- W100SM 5CZ	Municipal	Micro Z	Low Fines Coconut	55	Fine Mesh	Watts Metered	Up I Flow	10" X 60"	1"	18" X 36"	Yes	Yes	
M3011- W100SM 8CR	Well	Micro Z	Low Fines Coconut	85	Fine Mesh	Watts Meterec	Up I Flow	10" X 60"	1"	18" X 36 <b>"</b>	Yes	Yes	

# TWT<sup>®</sup> OFFERS A BOLD SERIES OF CHEMICAL-FREE PRODUCTS & SYSTEMS DESIGNED TO MEET THE DEMANDING CHALLENGE IN FLUID MANAGEMENT

### Let TWT Help You Make Your Success Our Priority

### We pledge to provide you with:

- Unique products and services that directly and reliably address your needs
- The highest level of customer satisfaction before, during and after the sale
- Timely delivery of your order
- More ways to keep your fluid system running right
- More specialized services from one specialized source
- Guaranteed satisfaction

### Our teams broad expertise includes...

- Knowledge of industry-specific needs
- Personnel with research and development capabilities and know-how
- Manufacturing and quality control specialists
- Marketing, Sales
- Domestic and international sales specialists

### **Protection For New Equipment**

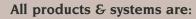
TWT provides new equipment with the ability to enhance the product benefits and features

### **Treatment For Existing Equipment**

Retrofit existing equipment to improve its operating efficiency and life cycle

### **Enhance Product Line**

Enter new markets and broaden customer satisfaction



- Properly packaged, skidded and /or crated to ensure safe delivery
- Shipped complete with all components ready for easy installation\*
- Provided with easy to follow installation & application guidelines
  - Clearly numbered for easy inventory and stockroom control



Skidded

Crated

Packaged



- Filtration: Removes dirt & particulate matter
- Deposit Control Technology: Hard water conditioning & treatment
- Disinfection & Purification Technology: Kills bacteria and other harmful pathogens.
- Potable Water, Process and Waste Water Treatment & Conditioning

**Comprehensive Websites. The Valuable Technical Resource** For All Involved In Water And Fluid Management. Visit Triangularwave Technologies, Inc.(TWT)

www.twtwatertreatment.com www.triangularwave.com

"ER & EI

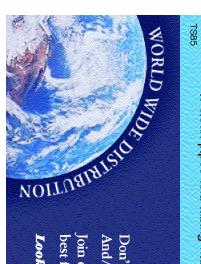
SAVINGS economical and safety point-of-view Technology Matters! TWT makes sense from an operational, **Environmental Needs with Intelligent Solutions! The Difference in** Lots of Companies Provide Products and Systems...TWT Senses

# NO MATTER HOW TOUGH THE JOB ... TWT IS THE SOLUTION

is clean pipes and tubing with no biofilm and reduced bacterial In effect, a clean, corrosion-free delivery system is restored and maintained in an environmentally safe and chemical-free manner. The result

> contamination. TWT systems make sense from operational, economic and safety points of view.

savings over the life cycle of the equipment. significant savings over a short period of time and even greater Ownership of the TWT System will afford you and/or your customers



# SATISFACTION GUARANTEED

And/or for information on what TWT treatment products or systems will meet your industry specific needs. Don't Wait...Contact us today for a free consultation!!! (Info@triangularwave.com) A luxury you CAN afford

best for your operations. Join out team, (recurring revenue product line) start a program that works

Looking forward to working with you, The Team at TWT, Inc.

