



DELIVER
EXTREMELY
CLEAN WATER TO
YOUR
HUMIDIFICATION
EQUIPMENT

UltraPure Systems Vista Reverse Osmosis Systems are completely contained in a sleek industrial grade cabinet with single point connections for ease of installation and placement virtually anywhere. Each unit has an integral 4-stage process to remove harmful substances, such as heavy metal ions and total dissolved solids from domestic water sources. This purification process will convert municipal water to a consistently higher purity level, suitable for multiple types of humidifiers.

Neatly packed in a sturdy 1/2" welded high density polyethylene plastic cabinet with hinged door makes this single point connection system ideal for small reverse osmosis applications. With our advanced system controller you can monitor City and RO water quality at a glance via the highly visible blue and red illumination on the front of the cabinet. BLUE indicating proper water quality and RED indicating an alarm condition, such as water quality level no longer within acceptable range.

For serving and protecting your process and equipment investment. Maintain and optimize your system's performance with our unique Query Code System. As a standard part of every system, this simple, friendly, powerful, no cost mobile application enables customers to manage routine filter maintenance from anywhere, including on-site or remotely.

#### **BENEFITS**

- Eliminate down time due to consumed filters (proactive vs. reactive)
- Stay ahead of the curve with automatically generated email notifications
- · Predictable data budgeting on annual filter costs
- No binding contracts or licensing fees required



## System Summary - UPS 2500

4 Stage Reverse Osmosis Deionization process. The final purity of the water leaving the RO System is between 10-40 PPM.

This Systems flow is rated at **2500 gpd** +/- 15% based on 77 degree water, 100 psi applied pressure. 500 ppm NaCI softened filtered water.

<b>Feed Pressure</b>	<b>Operating Temperature</b>	<b>Electrical Rating</b>	MFS/FLA	Dry Weight	Oper. Weight
60-125 psi	34 - 110° F	115/1/60Hz	20 / 4.9	390 lbs	430 lbs

## **Stage 1 : Sediment Filter**

Engineered to expanded volume and higher flow rates for commercial applications such as equipment protection and water polishing. Each filter is pretested for maximum pressure and temperature.

Quantity Per Unit	1
Model Number	UPF_4295
Filter Dimensions	4.5" OD x 20" L
Rating	75 -25 Micron
Max Operating Pressure	125 PSI
Operating Temperature	40 ° - 100 ° F

### Features and Benefits:

- Protect equipment from hard water damage
- Hefty flow rates up to 7 gal/min
- Two piece spin off filter
- Best cost to performance ratio in the industry

Test Information: Housings and fittings have been tested for performance to NSF Standard 42. Tests included Hyrdo Static Testing at 300 psig and Cycle Testing of 100,000 repetitions from 0 to 150 psig. Filters have been tested and listed under Standard 42 for odor, and chlorine reduction; or particulate reduction; or have been materials certified. All filters should be installed on cold water lines. Note: Activated carbon filters are not intended to be used where the water is micro-biologically unsafe or with water of unknown quality without adequate disinfection before or after the unit.

Warranty Information: Filters are warrantied to be free from any defects in workmanship or materials. Further, the warranty provided applies, only when used with the product specifications and service life, from the date of install or 5 years from the date of manufacture whichever occurs first, beyond which time or use Ultra Pure Systems is not liable of any and all liability for any use of the product.



## **Stage 2 : Carbon Filters**

Engineered to expanded volume and higher flow rates for commercial applications such as equipment protection and water polishing. Each filter is pretested for maximum pressure and temperature.

Quantity Per Unit	1
Model Number	UPF_4294
Filter Dimensions	4.5" OD x 20" L
Rating	10 Micron
Max Operating Pressure	125 PSI
Operating Temperature	40 ° - 100 ° F

#### **Features and Benefits:**

- Protect equipment from hard water damage
- Hefty flow rates up to 7 gal/min
- Two piece bayonet style replacement
- Best cost to performance ratio in the industry

Test Information: Housings and fittings have been tested for performance to NSF Standard 42. Tests included Hyrdo Static Testing at 300 psig and Cycle Testing of 100,000 repetitions from 0 to 150 psig. Filters have been tested and listed under Standard 42 for odor, and chlorine reduction; or particulate reduction; or have been materials certified. All filters should be installed on cold water lines. Note: Activated carbon filters are not intended to be used where the water is micro-biologically unsafe or with water of unknown quality without adequate disinfection before or after the unit.

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### **Stage 3: Membrane Filter**

Polyamide thin-film composite membranes are one of the industry's most reliable and highest performing reverse osmosis elements. The high flow membranes are available in all standard commercial sizes and feature a protective ABS shell. Advanced membrane technology and manufacturing processes ensure high quality and performance.

Quantity Per Unit	1	
Model Number	UPF_5301	
Filter Dimensions	4" OD x 40" L	
pH Range	2 - 11	
Max Operating Pressure	150 PSI	
Operating Temperature	40 ° - 113 ° F	

#### Features and Benefits:

- Polyamide thin-film composite membrane
- Available in all standard commercial sizes
- Protective ABS hard shell
- Meets and exceeds NSF standards
- Half the operating pressure of standard high rejection membranes

Test Information: 550 TDS Filtered (5 Micron), De-chlorinated, Municipal Feed Water, 77°F, 15% Permeate Recovery, 6.5 - 7.0 pH range, at the specified operating pressure. Data taken after 30 minutes of operation. Maximum pressure drop for each element is 15 psi. Minimum salt rejection is 96%. Permeate flow for individual elements may vary +/- 20%.



## **Stage 4: Ultra Violet Light Sterilization OPTIONAL**

Optional UV Sterilizer can be added to each system. Water will pass through UV light as a last pass prior to going into water storage tank. UV Sterilizer is sized for system nominal capacity and pre wired integral of system. Blue LED light inside cabinet indicates UV light is on. Bulb and Sleeve replacement is recommended every 10,000hrs.





## **Product Water Storage Tank**

RO permeate water storage tank, made of superior materials and meeting the stringent standards of NSF 58. At the heart of the tank is a 100% butyl rubber diaphragm that has been post cured to eliminate any unwanted odors. Combined with a polypropylene liner it keeps system water contained in a sealed water chamber.

Model Number	UPS-FC_120
Deliverable Capacity	86.7 Gallons
Dimensions	26" OD x 61" T
Connection Size	1 1/4" Male NPT
Weight	154lbs
Max Operating Pressure	125 PSI

#### Features and Benefits:

- Discharges in any position
- Exceeds NSF and ANSI standards
- Polypropylene Liner
- Cold Rolled Steel w/polyurethane finish
- Environmentally safe, 100% lead-free
- 100% seamless composite construction







### **John Guest LLDPE Tubing**

The John Guest PE range of plastic tubing is produced in Linear Low Density Polyethylene (LLDPE) for cold and intermittent hot water applications. The tubing provides the benefits of a wide range of temperature and pressure suitability, broad chemical compatibility and is made from non contaminating materials. LLDPE is more robust than traditional low or medium density polyethylene and is recommended for use with cold and intermittent hot water. The tubing is made from FDA compliant materials and is NSF International certified.

Tube Tolerances		1/4"-1/2":+0.001/-0.004		
Max Temperatur	150°F			
Tube Dimensions		1/4" OD - 0.170" ID		
Tube Dimensions		1/2" OD - 0.375ID		
Weight		2lbs 1.1oz		
Conversion Factor		NaCl (avg 0.5)		
Inte	ing Col	or Key		
Yellow	Blue		Black	
Incoming City	Reverse Osmosis		Reject	

#### Features and Benefits:

- FDA compliant materials
- Broad chemical compatibility
- Made from all non-contaminating materials
- Stronger than standard polyethylene tubing
- NSF International certified.



## John Guest "push-fit" Fittings

John Guest fittings are manufactured in gray and black acetal copolymer with RED safety clips attached to each fitting.

Standard Sizes	1/4" 1/2"
<b>Max Pressure</b> 3/16" - 5/16"	232psi
<b>Max Pressure</b> 3/8" - 1/2"	145psi
Max Temperatures	-2° - 149° F

#### Features and Benefits:



- Push-fit technology
- Suitable for soft metal or plastic tubes
- Suitable for air or inert gases
- Superior flow characteristics
- Quick disconnection without the need for tools



### **Advanced System Controller**

The onboard Ultra Pure Systems advanced system controller provides high-end RO control features in a compact, economical package. Outfitted with a dedicated high pressure switch input, alarm relay output and a large hinged UL certified enclosure to accommodate motor contactors, disconnects and fuse blocks the controller provides precise performance with less hassle. Developed with reliability and quality and reliability in mind the advanced system controller offers best in class controls sophistication not found in other entry level RO controllers.

Inlet pressure switch	Normally-Open
Pretreat lockout	Normally-Open
Dimensions	10"W x 7"D x 12"L
Power Supply	120v
Permeate Conductivity	<b>0-1500* PPM, 0-3000 μs</b>
Feed Conductivity	0-3000* PPM, 0-6000 μs
Amperage	MFS 20A - MCA 17.5A - SCCR

#### **Features and Benefits:**

- Common sense interface with 4 line bright LCD
- Fully fused at international standards
- Power supply operates on varying voltages
- Stationary high current wiring

### **Motor and Booster Pump**





The Ultra Pure 2500GPD system comes equipped with a rigid-base split-phase motor used for hub-mounted pump applications, including liquid transfer pumps. An extended hub allows a brass rotary vane pump to be direct-mounted to the motor via a stainless steel clamp. Auto thermal protection helps prevent pump damage from overheating. The direct-mounted volumetric pump is specifically designed for pumping water and aggressive liquids with low flow at high pressure. The pump housing and rotor are Brass while the pumping chamber and vanes are graphitic carbon.

<b>Motor Specifications</b>		
Power Output	3/4 HP	
Voltage	115v 1ø/60Hz	
RPM Range	1701 -1800	
Pump Specifications		
Max Operating Pressure	230 psi/up to 16 bar	
Inlet/Outlet Port Size	3/8" NPT	
Flow Rate	1.5 GPH at 1725 rpm	

#### **Motor Features and Benefits:**

- Low amp draw design for 230V/1ø/60Hz operation
- UL recognized and CSA Certified
- High starting and breakdown torque
- Continuous duty at nameplate ratings

### Pump Features and Benefits:

- AISI 303 Stainless steel housing and rotor
- Carbon graphite pumping chamber and vanes
- Direct-drive motor and pump integral of system



## **Remote Monitoring Card**

Each Reverse Osmosis cabinet has a built in control card that resides inside the electrical cabinet that is capable of seeing High Reverse Osmosis PPM. Contacts are dry and isolated from any other use. Both contacts are n/o voltage free contacts.

Max switching voltage 125vac, 60vdc Max switching current 1A Min permissable load 1 mA @ 5vdc

During normal operation, contacts remain closed. When motor stops running, readings are locked into controller and contacts are unable to change position. Upon startup a timer initiates and real time readings and alarms are active

When a High RO PPM occurs an alarm is annunciated an LED light turns RED, audible alarm is heard and contacts will change position.





