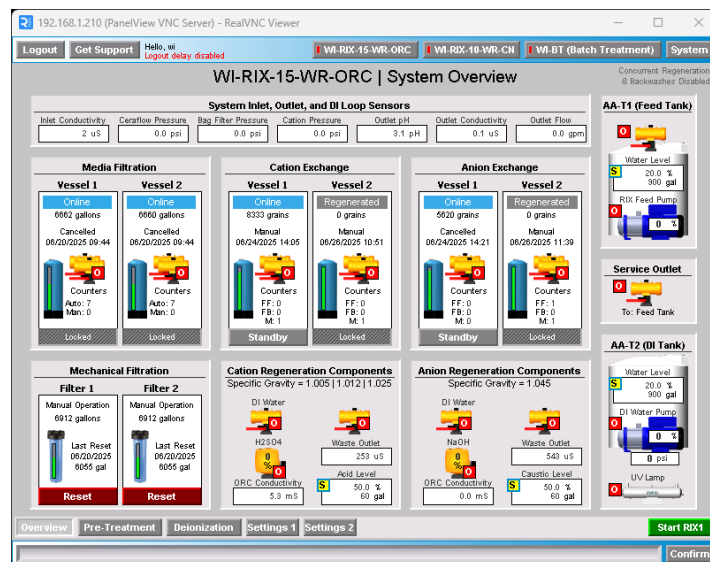


Operating Profile Produces 12-gpm of 1-uS/cm (1-MegΩ) water from feedwater with <450 ppm TDS with pre-treatment by multimedia & bag filters prior to alternating duplex cation & anion exchange resin vessels, with one of each in service and one in regeneration or standby for continuous operation.

Skid-mounted Integrated on a 304SS skid with polyurethane to prevent corrosion, limiting install to interconnect piping & electrical connections.

Feed & DI Water Tanks Application dependent size plastic HDLPE flat-bottom dome-top with psi sensor monitoring water level for operation control. Includes inlet/outlet fittings & valve.

Feed & DI Water Pumps 316SS multi-stage with VFD motor control producing 15-gpm @ 80-psi.



Multi-media Filters Duplex Cerapure™ vessels to remove up to 30-ppm of total suspended solids with automatic backwashing triggered by inlet pressure.

Bag Filters Duplex parallel filter housings rated for 15gpm with isolation valves for in-service change-out of 5μ bag filters based on psi delta.

Cation & Anion Exchangers Duplex alternating between service, regeneration & stand-by providing continuous operation even during regeneration.

Exchange Capacity 60,000 cation grains when regenerated with 4-lbs HCl & 54,000 anion grains with 6 lbs NaOH by counter current regeneration.

Regeneration Automatic based primarily on resin loading determined by feedwater uS & total flow or secondarily based on product water uS & pH, to ensure continuous high-quality DI product water.

Chemical Draw 32% HCl for cation & 25% NaOH for anion regeneration drawn from drums blended with DI water adjusted by metering valves with manual verification by hydrometer.

Controls Allen Bradley CompactLogix PAC & PanelView 7+ 7" screen for human-machine interface, Signet inlet & outlet uS, psi, flow & pH sensors monitoring operation & regeneration by GF Automation.

Off-Skid System Tanks

Feed Rinsewater	Minimum 1,000-gallon	15' x 15'
DI Water Holding	Minimum 1,000-gallon	4' x 10' skid & 5'D Tanks

Footprint

Skid Integrated Components

Operating Specifications

Feed Pump		Feed Water	
Rated Flow	15-gpm@70-psi	Temperature	55°F-105°F
Flow & psi Control	Variable frequency drive	pH	3-10 SU
DI Water Pump		TDS	<500 mg/l
Flow & psi Control	Variable frequency drive	TSS	<25 mg/l
		Oil & Grease	Non-detect
Duplex Media Filters		Feed Water	<15-gpm
Vessel size	13" x 54"		
Media	Cerapure-C	Product Water	
Volume & Depth	2-ft3 & 24"	Conductivity	1 uS
Backwash	Automatic	pH	6.2 to 8.5

Duplex Bag Filters		Regeneration	
Flow Rating	10-gpm each	Direction	Counter-current
Filter Rating	5-micron	Feed Water	Deionized
		Cation Regenerant	32% HCl
Ion Exchange Vessels		32% HCl per Cycle	4-gallons
Configuration	Alternating Duplex	Cation Waste per Cycle	100-gallons
Vessel Size	13" x 54"	Anion Regenerant	50% NaOH
Construction	PE Fiberglass	50% NaOH per Cycle	2-gallons
Resin Volume	3-ft3 each	Anion Waste per Cycle	125-gallons
Cation Resin	Macroporous strong acid	Activation	Automatic
Anion Resin	Gel Type II strong base	Primary Control	Totalized feedwater TDS
Resin Bed	Packed with inert	Secondary Control	Outlet uS & pH

Controls		Utilities	
Pump/Media psi	150-psi sensor	Electrical	15A@480VAC
Inlet uS Sensor	Signet 2850	City Water	5-gpm@60-psi
Service Flow Meter	Signet 2537		
Outlet uS Sensor	Signet 2850	Automation Interface	
Outlet pH Sensor	Signet 2724	Programmable Controller	AB CompactLogix
DI Water Flow Meter	Signet 2537	Touchscreen	AB PanelView Plus 7