

Specifications

	C Series	E Series	S Series
Pre-Treatment Softener (Plastic)	✓	○	-
Pre-Treatment Softener (Stainless)	-	✓	✓
Water Saved Blue Display	✓	✓	✓
Energy Saved Blue Display	-	✓	✓
Reduced Water Discharge	-	✓	✓
Reduced Product Flow During Recycle	-	✓	✓
Integral Recovery RO	-	-	✓
Reject Recycle Pump	-	-	✓
Single Pass RO	✓	✓	✓
Twin Pass RO	-	○	-
Continuous Electro-Deionisation	✓	✓	✓
Hot Water Sanitisation	✓	✓	✓
Low Energy Pumps	✓	✓	✓
RO/CDI Recovery Displayed	✓	✓	✓

Feed Water Requirements

General	Potable water free from organics, colloids and suspended matter, SDI <1
Free Chlorine	<0.25 ppm
Temperature	5 - 30°C
Pressure	4 - 6 bar

Typical Treated Water Quality	Standard Orion	Orion with UF Option
	Meets current USP and Ph Eur requirements for Purified Water	Meets current Ph Eur requirements for Highly Purified Water
Conductivity	<0.2 µS/cm	<0.2 µS/cm
TOC	<250 ppb	<250 ppb
Bacteria	<10 cfu/mi	<10 cfu/100mi
Endotoxins	N/A	<0.125 EU/mi

Orion Performance (Single Pass RO)

Model		500	1000	2000	4000	6000	9000	12000	15000	20000
Product (nominal)	l/h	500	1000	2000	4000	6000	9000	12000	15000	20000
Feed C Series (nominal)	l/h	625	1250	2500	5000	7500	13500	15000	18750	25000
Feed S Series (nominal)	l/h	560	1120	2240	4480	6720	10000	13350	16700	22250
Recovery (range)	%	75 - 90								

Orion Dimensions (Single Pass RO)

Model		500	1000	2000	4000	6000	9000	12000
Height	mm	2100			2420		2010	
Width	mm	3600			4000		5000	
Depth	mm	1500		1600			1800	
Weight (operational)	kg	2100	2300	2600	4700	6000	5600	6400

Dimensions are approximate and vary with options selected.
 Dimensions exclude the salt/brine tanks and dosing tanks.
 Dimensions for 9000 and above exclude the softeners which are not mounted on the Orion skid.

✓ Standard - Not Available ○ Optional

Pre-treatment	C Series	E Series	S Series
Plastic Front End (Cold Softener)	✓	○	-
Stainless Steel Front End (HWS Softener)	-	✓	✓
Carbosoft	○	○	○
5 Micron Filter	✓	✓	✓
Carbon Cartridge Filter (In Place of 5 Micron Filter)	○	○	○
Caustic Dosing & Ph Monitor	○	○	○
Bisulphite Dosing & ORP Monitor	○	○	○
Cl Monitoring (ORP)	○	○	○
Hardness Monitor	○	○	○
Pre UV & Monitor	○	○	○

Main Treatment	C Series	E Series	S Series
Multi-Purpose Tank	✓	✓	✓
Electrical Heater	✓	✓	✓
Steam Heating	-	○	○
Single Pass RO	✓	✓	✓
Conc Recycle Pump	-	-	✓
Integral Recovery RO	-	-	✓
Twin Pass RO	-	○	-
Degasser	○	○	○
Cedi Unit	✓	✓	✓

Post Treatment	C Series	E Series	S Series
Post UV & Monitor	○	○	○
Post UF	○	○	○

Controls	C Series	E Series	S Series
Siemens PLC and HMI	✓	✓	✓
Allen Bradley PLC and HMI	○	○	○
Painted Steel Control Panel	✓	○	○
Stainless Steel Control Panel	○	✓	✓
21 CFR PT 11	○	○	○
Paperless Chart Recorder	○	○	○
Remote Monitoring by Vision	○	○	○
Control of Distribution System	○	○	○

Pipe	C Series	E Series	S Series
ASME BPE Product Pipework RO Onwards	✓	✓	✓
TOC Sample Point	○	○	○
Purified Water Tank Valve(s)	✓	✓	✓