

PRODUCT DATA SHEET

NANTRA™ S Series Simplicity for smaller plants



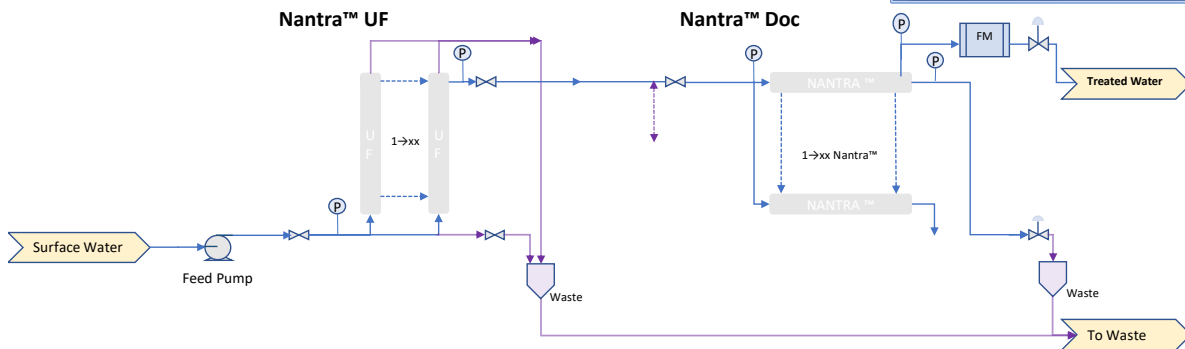
SURFACE WATER | GROUND WATER | INDUSTRIAL WATER

OVERVIEW

Akvotek's Nantra™ S plants are designed to treat ground/surface or industrial water with <3000 NTU to achieve potable water quality via a 2-step membrane treatment process.

There are no chemicals added into the Process*.

The standard treatment process involves pre-filtration, Ultrafiltration, and NantraDoc™ as the 2nd Stage membrane.



STANDARD SPECIFICATIONS

Parameter	Units	S-100	S-200	S-500	S-1000
Permeate Flow Rate	m ³ /day	100	200	500	1000
Permeate Recovery Rate	%	70-95 (varies according to feed water and configuration)			
Permeate TSS	mg/L	Below limit of detection			
Raw Water TSS	mg/L	Up to 3000			
E-Coli, Coliforms		<1/100ml			
Cryptosporidium, giardia removal		6 Log Removal			
Permeate Colour		< 5 Hazen			
Raw Water Colour		Up to 300 Hazen true colour			
Raw Water Temperature	°C	15-40			
Power Supply	-	AC 220	AC 220	AC 380	AC 380
Power Consumption	kWhr/kL	0.55	0.50	0.45	0.43
Max Power Draw	kW	1.5	2.5	6.0	11.0
No of Containers (Optional)	-	1 x 20'	1 x 20'	1 x 20'	1 x 40'
Membranes					
Nantra™ UF Membranes	No	3	6	15	30†
NantraDoc™ Membranes	No	4	8	20	40†

†Raw Water Quality Dependent

*Chlorine is added for Membrane and Residual Disinfection

STANDARD INCLUSIONS + OPTIONS

Equipment	S30E	S-100	S-200	S-500	S-1000
Low Pressure Feed Pump 304SS or 316SS Close Coupled Centrifugal, Carbon/Ceramic/NBR Mech Seal, 304 Frame	✓	✓	✓	✓	✓
Skid Mounted Plant and Equipment 304SS frame	✓	○	○	○	○
Containerised System Self-contained standard sea container – with lighting, aircon etc. CSC.	○	✓	✓	✓	✓
Low Pressure Backwash Pump 316SS or polymer close coupled centrifugal Variable Speed with User Control*	☒	✓	✓	✓	✓
Air Blower Side channel blower with air filtration, silencer and safety blow off valve, IP55	○	✓	✓	✓	✓
Pre-Filtration Manual, semi-automatic and fully automatic options available in SS with local IP 55 controls ¥	☒	✓	✓	✓	✓
Membrane CIP System Electronically controlled variable flowrate solenoid driven diaphragm dosing pump/s and tank Wetted parts - ceramic, PTFE, 316 s/steel	✓	✓	✓	✓	✓
PLC Control System (+HMI) High Speed HMI with both Unitronics or Rockwell options available	○	✓	✓	✓	✓
PLC – Remote Monitoring GSM, Modem or Ethernet – iPad Compatible	☒	○	○	○	✓
Permeate Distribution System Inclusive of tanks/pumps/pipework/control etc	☒	○	○	○	○
IH3 High Efficiency Motors NEMA 56J Frame, TEFC/IP55	☒	✓	✓	✓	✓
Switchgear DOL, Soft Start, and VSD as applicable	☒	✓	✓	✓	✓
Electrical Cabinet NEMA 4, IP65	☒	✓	✓	✓	✓
Instrumentation	S30E	S-100	S-200	S-500	S-1000
Pressure Gauge/s – 304/316SS	○	✓	✓	✓	✓
Pressure Transmitter/s	☒	○	○	○	✓
Flow Gauge/s – ABS, uPVC,PP	○	✓	✓	✓	○
Flow Transmitter/s - 304/316SS	☒	✓	✓	✓	✓
Flow Totalizer - Mechanical	☒	✓	✓	✓	✓
Flow Totalizer - Electronic	☒	✓	✓	✓	✓
Float Switch's – 316SS, ABS, uPVC	☒	✓	✓	✓	○
Control Valve - 316SS, globe, Emerson/Spirax Sarco*	☒	✓	✓	✓	✓
Premium Instrumentation System	☒	○	○	○	✓

*Can be substituted with a 7m standpipe // ¥ Manual Only on S30E – specification can be adapted to satisfy clients standards

✓ = Standard Supply, ○ = Optional Supply, ☒ = Not Applicable