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**WATERITE TECHNOLOGIES, INC.
PRODUCT SPECIFICATION SHEET
RO-SYS-001R7**

**VECTAPURE RSX LIGHT COMMERCIAL
REVERSE OSMOSIS SYSTEMS**

A. GENERAL SPECIFICATIONS

TYPE: Low pressure RO, spiral wound membrane(s) in series, recirculation loop

VOLTAGE: 110VAC/60hz, optional 220VAC/60hz

SERVICE AMPS:	110VAC	220VAC
RSX350	5.1A	2.6A
RSX700	7.5A	3.8A
RSX1050	7.5A	3.8A
RSX 1600	10.4A	5.2A

FEED WATER PRESSURE: 40 psi minimum, 80 psi maximum

FEED WATER TEMP: 40° C maximum

B. MATERIAL SPECIFICATIONS:

FRAME COLOUR: White enamel

FRAME MATERIAL: Mild steel angle frame, rubber leveling feet

FRAME DIMENSIONS:

Height 35.25" (90cm) **RSX1600** 45.25" (115cm)

Width 17.75" (45cm)

Depth 14.5" (36.8cm)

OPERATING PRESSURE: 150 psi (10.5 bar)

SPEC RO-SYS-001R7

May 2007



MEMBRANE

RSX 350/700/1050

BLACK MAX®, spiral wound TFC, BME-2521SL, 350 GPD permeate @ 300 TDS, 150 psi, 25°C feed

Alternate: Osmonics AK2521-TF

RSX 1600

BLACK MAX®, spiral wound TFC, BME-2540SL, 800 GPD permeate @ 300 TDS, 150 psi, 25°C feed

Alternate: Osmonics AK2540-TF

INLET SOLENOID:	110VAC/60hz, normally closed, ¼" FNPT, 0 differential
FEED WATER INLET:	3/8"
WASTE WATER OUTLET:	3/8"
PRODUCT WATER OUTLET:	3/8"
LOW PRESSURE SWITCH:	110VAC/60hz, low cut-out @ 15 psi
DRIVE PUMP MOTOR:	110VAC/60hz, type 48Y frame, 1725 rpm
DRIVE PUMP:	Rotary vein type, brass, 304 SS optional RSX350: 97 GPH @ 150 psi RSX700, 1050: 137 GPH @ 150 psi RSX1600 : 290gph @ 150 psi
CONCENTRATE VALVE:	316 SS needle valve, locking stem, metal seated, o-ring packing
RECIRCULATION VALVE:	Chrome plated brass needle valve, internally bypassed, locking nut on stem, brass seated, o-ring packing
SYSTEM FITTINGS:	Jaco high pressure compression on RSX350, 700, 1050 - Brass medium pressure compression on the RSX1600
LOW PRESSURE FITTINGS:	DMfit standard pressure push-on
TUBING:	Higher pressure 3/8" LDPE, clear
PREFILTRATION HOUSINGS:	2 X Polypropylene, 20", 125 psi rated, o-ring seated with threaded cap, pressure release
FILTER CARTRIDGES:	Melt-blown spun polypropylene, 5-micron and 1-micron
MEMBRANE HOUSING:	304 SS body, groove clamp enclosures, 3/8" FNPT ports, EPDM o-rings

C. PERFORMANCE SPECIFICATIONS

PERMEATE PRODUCTION

RATE:	RSX350: .21 USG/min. (0.85 litres/min.)
	RSX700: .47 USG/min. (1.76 litres/min.)
	RSX1050: .69 USG/min. (2.68 litres/min.)
	RSX1600: 1.11 USG/min. (4.20 litres/min.)

Production rate @ feed water of 300 TDS, 25°C, system pressure @ 150 psi, 60 % recovery, inlet pressure of 60 psi.

WASTE PRODUCTION RATE:

Feed Water <1000 TDS

RSX350:	.145 USG/min. (0.55 litres/min.)
RSX700:	.291 USG/min. (1.10 litres/min.)
RSX1050:	.436 USG/min. (1.65 litres/min.)
RSX1600:	.693 USG/min. (2.62 litres/min.)

Feed Water >1000 TDS

RSX350:	.291 USG/min. (1.10 litres/min.)
RSX700:	.631 USG/min. (2.39 litres/min.)
RSX1050:	.947 USG/min. (3.59 litres/min.)
RSX1600:	1.52 USG/min. (5.75 litres/min.)

MEMBRANE CROSSFLOW:

Shows crossflow by element in series order.

RSX350:	(1) 1.61 USG/min. (6.12 litres/min.)
RSX700:	(1) 2.28 USG/min. (8.66 litres/min.) (2) 2.07 USG/min. (7.86 litres/min.)
RSX1050:	(1) 2.28 USG/min. (8.66 litres/min.) (2) 2.07 USG/min. (7.86 litres/min.) (3) 1.86 USG/min. (7.06 litres/min.)
RSX1600	(1) 4.83 USG/min. (18.28 litres/min.) (2) 4.28 USG/min. (16.02 litres/min.)

D. RECOMMENDED FEED WATER PRETREATMENT SPECIFICATIONS:

TDS:	< 2000 TDS
HARDNESS:	< 6 grains/gal. (103 mg/l)
TOTAL IRON:	< .05 ppm
TANNIN:	< .5 ppm
CHLORINE:	< .1 ppm
pH:	5.5 – 9.5
ORGANIC/MICROBIOLOGICAL ACTIVITY:	0
MANGANESE:	<.05 ppm
HYDROGEN SULPHIDE:	0
TURBIDITY:	SDI < 5.0

E. OPTIONAL EQUIPMENT

- Permeate flow meter
- Waste flow meter
- Autoflush solenoid and timer
- Panel mount permeate TDS monitor

F. DRY WEIGHT

RSX 350:	72lbs (33kgs)
RSX 700:	77lbs (35kgs)
RSX 1050	83lbs (38kgs)
RSX 1600	97 lbs (44kgs)



VECTAPURE™ RSX700