



# PRODUCT

## RO – REVERSE OSMOSIS TERTIARY TREATMENT Flexible water re-use system for exceptional quality water

### FLEXIBLE REVERSE OSMOSIS SYSTEM

Aquabio’s RO Reverse Osmosis Units provide next generation tertiary treatment for water re-use focusing on:-

- Flexible operation
- High degree of automation
- Ease of maintenance



KEY PARAMETERS		RO			
Arrangement		2 stage or 3 stage arrays			
Flow Control		Variable permeate and reject flow control			
Recovery		75% for 2 stage, 85% for 3 stage			
Operating Flux		14 - 18 l/m <sup>2</sup> .h			
Operating pressure		Typically 8 – 12 bar			
Energy Usage		< 0.9 kWhr/m <sup>3</sup>			
RO MODEL		RO-200-6m-2x1	RO-200-6m-3x2	RO-200-6m-4x3	RO-200-6m5x4
Module Size		8 inch / 200mm dia x 40 inch / 1000mm	8 inch / 200mm dia x 40 inch / 1000mm	8 inch / 200mm dia x 40 inch / 1000mm	8 inch / 200mm dia x 40 inch / 1000mm
Array		2 x 1 array	3 x 2 array	4 x 3 array	5 x 4 array
Modules per Bank		18	30	42	54
Footprint for skid		6.7m x 1.6m	6.7m x 1.6m	6.7m x 1.6m	6.7m x 1.6m
Recovery		75%	75%	75%	75%
Flow per bank	Feed	320 m <sup>3</sup> /day	530 m <sup>3</sup> /day	750 m <sup>3</sup> /day	960 m <sup>3</sup> /day
	Permeate	240 m <sup>3</sup> /day	400 m <sup>3</sup> /day	560 m <sup>3</sup> /day	720 m <sup>3</sup> /day

Note: 3 stage array models also available providing 85% recovery

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BENEFITS	
Compact design	
Low fouling membrane modules allow for low pressure / low energy operation	
Automatic control of permeate and reject flow – allows for flexible operation	
Variable speed control to reduce energy usage	
Protective control for key parameters	
Standard software – fully tested, well proven operation, rapid delivery	
Fully automated operation, flushing and recirculation cleaning	
Modular design allows for ease of upgrade	
Containerised options	
Low level installation provides ease of maintenance	
Rapid procurement and installation	
Choice of membrane suppliers	
Provides potable water for re-use in combination with UV treatment	

PROJECT DELIVERY OPTIONS	
Licensee	<ul style="list-style-type: none"> <li>✓ System design</li> <li>✓ Minimum control/software package</li> <li>✓ Local manufacture</li> </ul>
Skid Package	<ul style="list-style-type: none"> <li>✓ Offsite construction</li> <li>✓ Pre-wired valves and instruments – fully tested</li> <li>✓ Quick and easy installation</li> </ul>
Containerised Plant	<ul style="list-style-type: none"> <li>✓ Fully engineered and tested</li> <li>✓ Plug and play</li> </ul>
Turnkey	<ul style="list-style-type: none"> <li>✓ Complete treatment solutions</li> </ul>

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