

arium® 61315 – Reverse Osmosis System



Designed to meet the demands of today's laboratories for RO treated water.

With production volumes of up to 15 liters per hour, 99% rejection of monovalent and polyvalent ions, bacteria and viruses, automated membrane back-flushing, and with its compact design, the arium® 61315 is the ideal choice for general laboratory applications, such as dish-washing water, humidifiers and as a pretreatment step prior to ultrapure laboratory water systems.

Low-energy, high-output and thin film composite membranes, dramatically reduce the volume of water rejected to waste and increase the % recovery.

Energy consumption is reduced by the incorporation of a uniquely designed RO module housing which minimizes the need for solenoid valves to regulate and control permeate flow. A single solenoid valve controls an automatic flush-fill cycle, which maintains the volume of the pressure tank while at the same time rinsing the RO modules, thereby reducing ionic concentration at the RO membrane surface. This not only conserves power, it also reduces maintenance and increases the reliability of the system.

Water storage is simplified by the use of a closed pressure vessel. This dramatically reduces the costs of maintenance due to airborne contamination, while reducing gas up-take by product water in storage. A pressurized storage tank provides more flexibility as to its location, without the need of an expensive distribution pump to deliver the water to a point of use.

Specifications for arium® 613 reverse osmosis system

Unit dimensions	Width	43 cm (16.85")
	Height	48 cm (19")
	Depth	33.4 cm (13.15")
System weight	14 kg (31 lbs)	
Operation weight	20 kg (44 lbs)	
Electrical power requirements	100–240 V AC 50–60 Hz single phase	

Inlet feed water requirements

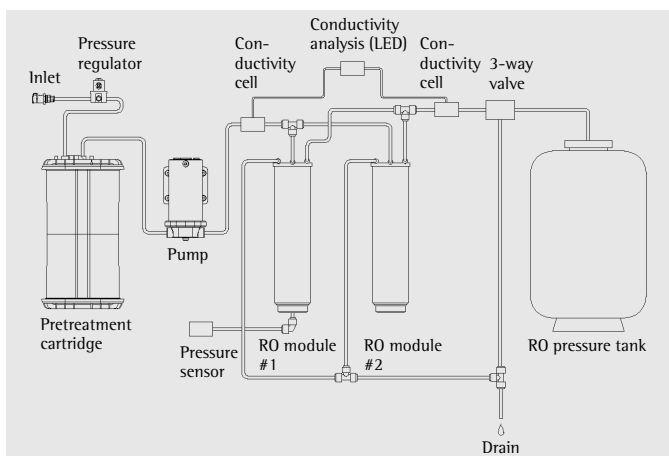
Potable tap water feed only (feed water to meet drinking water standards of the U.S. EPA, European Union or Japan).

Minimum inlet pressure	1 bar 15 psi
Maximum inlet pressure	6.8 bar 100 psi
Temperature	5°C–28°C (41°F–82.4°F)
TDS (max ppm CaCO ₃)	800
Silt density index	< 5%
Free chlorine	0.1 ppm
Turbidity	< 1 NTU
Iron (total as Fe)	< 0.1 ppm

Ambient temperature and humidity

Operation	5°C–28°C (41°F–82.4°F)
	80% relative humidity
Storage	5°C–45°C (41°F–113°F)
	80% relative humidity

RO System Schematic



Product water quality

Rejection rates	Monovalent ions	Up to 98%
	Polyvalent ions	Up to 99%
	Particles	> 99%
	Microorganisms	> 99%
	Dissolved organics (> 300 MW)	> 99%
Reject flow [l/h]*	11–12	
Product flow rate [l/h]* (±20% at 25 °C)	15	
Maximum recovery rate*	approx. 55%	

*Depends on feed water quality and temperature

Ordering information for arium® 613 reverse osmosis system

(A complete system is composed of the arium® 61315, a tank, 1 × pretreatment cartridge and 2 × RO modules).

61315	arium® RO system
613CPF05-----V	2 × pretreatment packs
613CPM1-----V	2 × RO modules
611CDS2	Sanitization kit for the tank (2 syringes)
613CDS2	Sanitization kit for the RO modules (2 syringes)
613APV30	30-liter tank (at 2 bar inlet pressure)
613APV60	60-liter tank (at 2 bar inlet pressure)
613APV150	150-liter tank (at 2 bar inlet pressure)
613AMDG1	Dispense gun
61315060F05M1A	Complete reverse osmosis system (includes arium® 61315, 60 l tank, 2 × RO modules, 2 pretreatment cartridges, sanitizing syringes for RO modules & storage tank).