

arium® Water Tower

Integrated Reverse Osmosis and Ultrapure Water System



Description

arium® steel self supporting stand designed to incorporate an arium® 61316 reverse osmosis system, an arium® 611 ultrapure water system, a 30 liter pressurized tank and a TOC analyser in one laboratory working station.

The unique design of the tower only requires inlet connections to power, suitable water source and one discharge connection to the drain. No additional fittings or connections are required.

Applications

- To provide high quality water, where space is limited
- RO water for rinsing glassware and to feed laboratory equipment, like humidifier, autoclaves or dishwasher
- Ultrapure water (ASTM Type 1) for media preparation, chromatography and life science applications

Features

- All in one working station with built-in 61316® reverse osmosis system, ultrapure (ASTM Type 1) water system, TOC analyser and tank to save bench space
- Easy to place according to your individual lab needs, mounted on 4 easy roll wheels
- Ergonomically designed to save bench space
- Maximum stability even under the most severe conditions
- Easy accessibility of all parts, making routine maintenance and cartridge changes of the arium® systems effortless.
- Tap for direct use of RO water e.g. for rinsing glassware

Specifications

Unit Dimensions

Width:	668 mm (26.3")
Height:	1907 mm (75.1")
Depth:	583 mm (22.9")

Weight

Complete system weight (packaging included):	215 kg (474 lbs)
System weight in operation:	200 kg (441 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., European Union or Japan)

Minimum inlet pressure:	1 bar 15 psi
Maximum inlet pressure:	6.8 bar 100 psi
Temperature:	5°C–30°C (41°F–86°F)
Hardness (max ppm CaCO ₃):	360*
Silt density index:	< 3
Free chlorine:	0.1 ppm
Turbidity:	< 1 NTU
Iron (Total as Fe):	< 0.1 ppm

* or softened water

Ambient Temperature & Humidity

Operation:	5°C–30°C (41°F–86°F) 80% relative humidity
Storage:	5°C–45°C (41°F–113°F) 80% relative humidity

Laboratory Water Systems

arium® tower 6193VF-15TOC2 is comprised of the following components:

- Stand-alone tower, order no. 619AT02
- Reverse osmosis system, order no. 61316
- Pressure tank, 30-l capacity, order no. 613APV31
- Ultrapure water system incl. UV lamp and ultrafilter, order no. 611VF
- TOC Instrument, order no. 611ATOC1
- Set of 2 pretreatment cartridges for reverse osmosis system, order no. 613CPF05-----V
- Set of 2 x RO modules, order no. 613CPM2-----V
- Set of ultrapure water cartridges (1 x pretreatment cartridge, 1 polishing cartridge), order no. 611CKRU

The individual components of the tower may be purchased separately to accommodate specific requirements.

Ultrapure Water System, 611VF

Product Water Quality

Resistivity (MΩ x cm)	18.2
TOC (ppb)* < 100 ppb feed water	< 1
TOC (ppb)* < 1000 ppb feed water	< 10
Absorbance units (AUFS@ 210 nm)	< 0.005
Endotoxin (EU/ml)	< 0.001
Particles (@ 0.2 µm)	< 1/ml
Bacteria (CFU/1000 ml)	< 1
Flow rate (l/min)**	up to 1.5

* Depends on inlet water quality

** Inlet pressure of 2 bar, without final filter

Reverse Osmosis System, 61316

Product Water Quality

Rejection rates	
Monovalent Ions	Up to 98%
Polyvalent Ions	Up to 99%
Particles	> 99%
Microorganisms	> 99%
Dissolved organics (>300 MW)	> 99%
Product flow rate [l/h]* (+/- 20% at 25 °C)	16
Maximum recovery rate*	Approx. 55%

* Depends on feed water quality and temperature

Pressure tank, 613APV31

Capacity @ 2.5 bar	30 liter (7.9 gallons)
Height	57 cm (23")
Diameter	41 cm (16")
Weight, empty	11 kg (24 lbs)
Weight, full	41 kg (90 lbs)

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