PURIFIED WATER FOR LABORATORIES

Quality of patient results depend on:

*Preanalytic



*Instruments

*Reagents

*Purified water

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CONTAMINANTS IN RAW WATER



Minerals

Organic

Particles, colloids

Micro-organism

Gases

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METHODS TO REMOVE THIS CONTAMINANTS

Distillation

lons exchange

Reverse osmosis

Ultra-filtration

Microporous filtration

Photo-oxidation

Activated- carbon adsorption

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EFFICIENCY OF EACH METHODS



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TECHNICALS WORLDS TO EVALUATE THIS CONTAMINANTS

<u>Hardness</u>: measures the scaling power of a water related to the presence of ions Ca and Mg (in °F/ French degrees)

<u>The conductivity (µS/cm) or resistivity (Megahoms.cm):</u> measures the ionic contamination

Total Organic Carbon, TOC (mg/l)

measures the organic contamination

Bacteria quality (CFU/ml

measures the quantity of bacteria

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DIASYS WATER PURIFIERS



Combination of 4 methods in 3 steps:

Pre filtration (Micro filtration + Activated carbon)

Reverse Osmosis

lons exchanges

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DIASYS WATER PURIFIERS

Step 3 Step 2 Step 1 Methods Reverse Ultra-Activated lons Micro-Distillation exchanges filtration filtration carbon osmosis Contaminants IONS **ORGANICS** PARTICULS COLLOIDS BACTERIA GAZ Ineffective Effective

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THE OMINI IS RECOMMENDED FOR DAILY DI WATER CONSUMPTION LESS THAN 30 LITERS SPECIALLY ADAPTED FOR RESPONS 920

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Power tension	230 volts ~ / 50 Hz.
Production flow at 25 ° C	15 liters / hour
Production flow at 10 ° C	9 liters / hour
Resins type	Resin with mixed beds
Resins volume	0.75 liters
Maximum supply water temperature	38 °C
Maximum hardness without protection	40 °f of TH
pH	3 to 11
Min / max inlet pressure	2 / 6 bars
Dimensions $(I \times h \times w)$	42 X 39 X 43 cm
Weight	13.5 kg
Provided accessories	 1 pressurized storage tank of 12 liters 1 conductimeter 1 filters spanner pipe 1/4"

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BMAXI





THE O MAXI IS RECOMMENDED FOR DAILY DI WATER CONSUMPTION OVER 50 LITERS SPECIALLY ADAPTED FOR BIOMAJESTY 6010C

Equiped with a new RO membrane reducing the water consumption

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Diagnostic Systems

Power tension	230 volts ~ / 50 Hz.
Production flow at 25 ° C (77 °F)	55 liters / hour
Production flow at 10 ° C (50 °F)	40 liters / hour
Resin type	Mixbed ions exchange resin
Resin volume	11 liters (another volume in option)
Maximum inlet water temperature	38 °C (100 °F)
Maximum hardness without	40 °f (French degree) of TH (1 °f = 10 mg/L CaCO ₃ =
protection	$4 \text{ mg/L Ca}^{2+} = 2.4 \text{ mg/L Mg}^{2+}$)
рН	3 to 11
Min /max inlet pressure	2 / 5 bars (29 / 87 PSI)
Sizes (I x h x w)	55 x 45 x 73 cm
Weight	58 kg
Provided accessories	- 1 pressurized storage tank of 75 liters
	- 1 conductimeter
	- 1 bottle containing 11 L of mixbed resins
	- 2 filters spanners
	- Tubes and fittings for installation

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