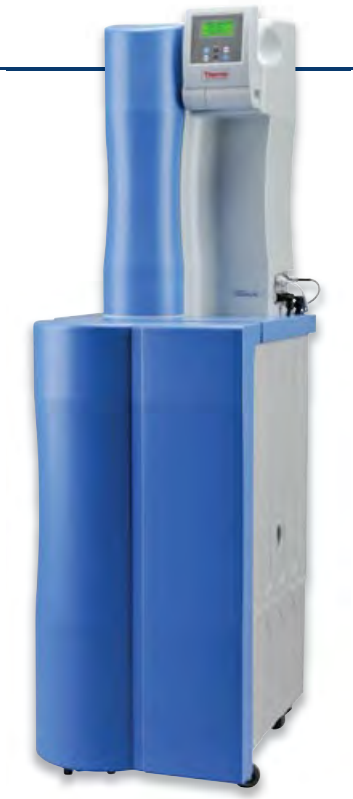
Thermo Scientific Barnstead LabTower RO water purification system

The Barnstead LabTower RO Converts Tap Water into RO Water and stores it in an integrated 100 L reservoir



ROUTINE LABORATORY WORK:

- Rinsing lab glassware
- Supplying autoclaves, water baths, incubators and glassware washers
- Preparing and diluting buffers and reagents
- General biotechnology

Advanced technology in a mobile design

- An ultra-modern controller provides easy-to-read system parameters
- Completely drainable integrated 100 L high-purity water reservoir has a low-noise pressure booster as a standard component
- Mounted on casters, the compact LabTower RO system is an ideal pure water supply for any laboratory. Ideally suited as a feed water source for dishwashers, autoclaves and general laboratory use
- A built-in pretreatment unit, consisting of a hardness stabilizer for protection of the reverse osmosis module from hardness formers
- An activated carbon/5µm combi-cartridge protects the system against free chlorine and particles, ensures the long service life of downstream purification stages

Compact and mobile design

- Two system options with permeate flows of 20 or 40 L/h
- Stand-alone design with integrated 100 L tank takes up ZERO bench space
- Casters allow for easy relocation
- Systems can be upgraded later to accommodate growing water capacity demands

Integrated 100 L reservoir

- 100 L RO water storage in a high-purity polyethylene PE opaque reservoir
- Adjustable reservoir volume can be programmed for times of low demand
- Dispense from the reservoir to supply autoclaves, glassware washers, incubators, etc

Easy-to-operate clear display

- Resistivity/conductivity clearly displayed on large back-lit control panel that tilts for optimum viewing
- Status of current operating mode clearly indicating “production”, “stand-by”, or “cleaning” modes
- Reservoir fill-level shown as %
- System parameters are code-protected to prevent accidental changes to set points

GLP-compliant documentation

- Developed to fulfill GLP requirements
- Recorded and traceable data can be obtained by print out via the RS-232 interface and accessory printer
- Highly qualified and precise measurement of the conductivity is ensured by the cell constant of 0.16 cm^{-1}

Quick Look Comparison	LabTower RO 20	LabTower RO 40
Pure water production at 15°C , L/hr	20	40
Withdrawal performance from reservoir at 1.5 bar, L/hr	180	180
Retention quota for inorganics, %	> 98	> 98
Bacteria content, %	> 99	> 99
Retention quota for particles, %	> 99	> 99

RO water delivered
from an integrated system

Feed Water Requirements*	
Source	Potable tap water that has been softened or hardness stabilized
Silt density index (SDI)	< 5. With higher values a pretreatment (model no. 09.4000) must be installed upstream of the system.
Conductivity, µS/cm	< 1500
Free chlorine, mg/L	<0.1
pH-Range	4-11
Temperature, °C	2-35

*complete list of feed water specifications can be found in the operational manual

LabTower RO Product Specifications					
Operating pressure	**Electrical requirements**	**Power consumption**	**Feed water connector**	**Dimensions W x D x H**	**Temperature**
29-87 psi (2-6 bar)	90-240V, 50/60Hz	0.25kW	3/4" NPT	17.7 x 22.8 x 59 in (450 x 580 x 1500 mm)	2-35°C

System Options		LabTower RO 20	LabTower RO 40	LabTower RO 60
LabTower RO Systems* All systems include an RO membrane(s), integrated 100 L reservoir, and pressure regulator		50132390	50132391	50132392
Required Accessories				
Pretreatment cartridges Both are required for complete pretreatment solution	5µm filter with activated carbon and a 10 inch filter housing	50134022	50134022	50134022
	1µm filter with a 10 inch filter housing	09.4003	09.4003	09.4003
Sterile vent filter for reservoir		50135142	50135142	50135142
Sterile overflow for reservoir		50132714	50132714	50132714
Optional Accessories				
Printer Utilizes RS-232 interface for safe documentation of all measured values and faults with date and time in compliance with GLP guidelines	120V, 50/60Hz	AY1137X1	AY1137X1	AY1137X1
	230V, 50Hz	09.2207	09.2207	09.2207
UV lamp assembly for the reservoir with lamp, 230V, 50Hz only		06.5006	06.5006	06.5006
Water watcher Alerts the user to leaks. Available as 240V only.		16.0129	16.0129	16.0129
Hand Dispenser Kit Hand dispenser with 3 meter cord that connects to tank. Ships with a 0.2 micron final filter.		50138221	50138221	50138221
Replacement Consumables				
Reverse Osmosis membrane LabTower TII 20 and 40 require two membranes, and LabTower TII 60 requires four membranes, as indicated		22.0046 (must order 2)	22.0087 (must order 2)	22.0087 (must order 2) and 22.0046 (must order 2)
10" 5µm filter with hardness stabilizer cartridge		06.5204	06.5204	06.5204
Replacement reservoir UV Lamp (230V, 50Hz only)		09.5002	09.5002	09.5002
Cleaning solution	Europe/Asia Pacific	09.2202	09.2202	09.2202
	North America/Latin America	CMX25	CMX25	CMX25
1µm filter prefilter for 09.4003		06.5101	06.5101	06.5101
5µm prefilter + activated carbon 10 inch cartridge		06.5201	06.5201	06.5201