# Thermo Scientific Barnstead Smart2Pure water purification system

All in one! The Barnstead Smart2Pure system is a compact system which converts tap water to into both ASTM Type I and II water. The Smart2Pure 3 and 6 feature a built-in 6 L reservoir to store the Type 2 water. The Smart2Pure 12 offers the choice of a 30 or 60 L reservoir for customizable storage capacity.



#### **APPLICATIONS INCLUDE:**

#### Molecular Biology and Microbiology

- Cell and tissue culture
- PCR, DNA sequencing
- Electrophoresis

#### **Analytical Chemistry**

- HPLC
- · GC, GC-MS, ICP-MS, AA
- TOC Measurements, IC

#### **Routine Laboratory Work**

- Preparing and diluting buffers and reagents
- · Rinsing lab glassware
- Supplying autoclaves and other small lab equipment

#### **Powerful performance**

Based on your requirements, choose from capacities of 3, 6 or 12 L/hr

#### **Lasting economy**

- Water purification progresses through independent cartridges with Aquastop quick-connect for fast replacement
  - **Module 1** Combination of pretreatment and the reverse osmosis membrane
  - Module 2 Polishing cartridge contains high-quality ultrapure resin for consistent purity and long cartridge life

#### Easy-to-operate

- · Dispensing is easy and features variable speed to control flow
- · The display can be tilted for optimal reading
- Optional UV bulb and ultrafilter to customize ultrapure water quality

#### **Placement options**

- · Position on laboratory bench
- · Mount it on the wall

#### Smart2Pure 3 and 6 features smart, integrated 6 L reservoir

- · Constructed with pigment-free materials
- Conical bottom outlet allows for complete draining and efficient cleaning and disinfection

#### Smart2Pure 12 offers reservoir options, either 30 or 60L

- · Large opening for easy and effective cleaning by hand
- Sterile venting filter/reservoir overflow protects against contamination by microorganisms
- CO<sub>2</sub> adsorber prevents TOC value increases from drawn-in CO<sub>2</sub>
- · Polyethylene reservoir is opaque to light
- Recirculation pump protects the high purity water from bacterial growth during standstills and maintains the low conductivity value
- Wall-mount optional for simple space-savings
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### **compact** dual quality system

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Quick Look Comparison						
	Smart2Pure system	Smart2Pure UV system	Smart2Pure UF system	Smart2Pure UV/UF system		
Type 1 Water						
Applications	AA, IC, ICP, standard buffer	Inorganic and organic trace analysis, HPLC, ICP-MS, IC, TOC analysis	Microbiology, IVF, monoclonal antibodies	Molecular biology, PCR, DNA, monoclonal antibodies, cell culture media		
Resistivity at 25°C, MΩ.cm	18.2	18.2	18.2	18.2		
Conductivity, µS/cm	0.055	0.055	0.055	0.055		
TOC value, ppb	5-10	1-5	5-10	1-5		
RNase, ng/ml	n/a	n/a	n/a	<0.003		
DNase, pg/μl	n/a	n/a	n/a	<0.4		
Bacterial content, CFU/mL	<1	<1	<1	<1		
Particles, µm/mL	<1	<1	<1	<1		
Endotoxines, EU/mL	n/a	n/a	<0.001	<0.001		
Flow rate, L/min	1	1	1	1		
Type 2 Water		•				
Pure water production at 15°C, L/h	3, 6 or 12	3, 6 or 12	3, 6 or 12	3, 6 or 12		
Resistivity at 25°C, MΩ.cm	15-10	15-10	15-10	15-10		
Conductivity, µS/cm	0.067-0.1	0.067-0.1	0.067-0.1	0.067-0.1		

Feed Water Requirements*				
Source	Tap water			
pH range	4-11			
Temperature, C°	2-35			
Pressure, psi (bar)	1.4-87 (1-6)			

<sup>\*</sup> Please see user manual for complete list of feed water requirements

**Space-Saving Design**Simply stand the Smart2Pure system on the benchtop or mount it directly to the wall, as shown by the Thermo Scientific MicroPure, for more bench space



# Thermo Scientific Barnstead Smart2Pure water purification system (continued)



#### **Economical Design**

The RO membrane with pretreatment cartridge is separate from the DI cartridge, ensuring you only replace each cartridge as needed



UV-Oxidation 185/254 nm

Optional UV-oxidation for reducing the content of microorganisms and their metabolites



**Flexible** 

Gain increased flexibility by adding a hand dispenser with 3 meter cord



### **Flexible Storage**

Store high purity water safely and conveniently in either a 30 or 60 L reservoir (only for Smart2Pure 12)

Product Specifications – Storage Reservoirs					
Volume	Material	Dimensions H x D in (mm)			
30 L	Polyethylene, ultrapure water	23.5 x 15 (598 x 380)			
60 L	resistant, opaque to light	35.9 x15 (912 x 380)			

Storage Reservoir Options for Smart2Pure 12 System Only	30L	60L		
Tank Choose a tank to meet your capacity needs	06.5040	06.5070		
Required Accessories				
Sterile overflow for reservoir	06.5001	06.5001		
CO <sub>2</sub> adsorber + sterile filter, 0.2 µm	06.5002	06.5002		
Optional Accessories				
UV lamp assembly for the tank, 230V, 50Hz Ships complete with assembly and UV lamp	06.5006	06.5006		
Wall mounting bracket	06.5015	06.5016		
Replacement Consumables				
Replacement UV lamp (reservoir), 230V, 50Hz	09.5002	09.5002		