

Thermo Scientific Water Purification Systems

Ultrapure Water Systems



Thermo Scientific Barnstead Smart2Pure ultrapure water purification systems

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

Product features:

Powerful performance

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

Lasting economy

Water purification progresses through independent cartridges with Aquastop quick connects 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 UF ultrafilter to customize ultrapure water

Placement options

Position on laboratory bench or mount it on the wall

Smart integrated 6L reservoir for the Smart2Pure 3 and 6

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. Optional CO₂ absorber prevents TOC value increases from drawn-in CO₂. 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. Conical bottom outlet allows for complete draining and efficient cleaning and disinfection

Specifications:

Flow rate, max.	1 L/min
Permeate flow rate at 15°C	3, 6 or 12 L/hr depending on model
Operating pressure	2 to 6 bar
Temperature	2° - 35°C
Conductivity	0.055µS/cm
Resistance at 25°C	18.2 MΩ.cm
Bacterial content	<1 cfu/ml
Particles >0.2µM/mL	<1

TOC	1-5 ppb UV models (5-10 ppb non-UV models)
Endotoxins	< 0.001 cfu/ml UF models (n/a non-UF models)
Permeate conductivity	0.067-0.1 µS/cm
Permeate resistance at 25°C	15-10 MΩ.cm
Electrical Requirements	90-240V/50 Hz
Power Consumption	0.06 kW
Feedwater connector	¼ inch o.d.
Dimensions WxDxH	305x400x545 mm

Ordering information

System Options for Smart2Pure	Permeate flow at 15°C	Smart2Pure Standard	Smart2Pure UV	Smart2Pure UF	Smart2Pure UV/UF
Smart2Pure System 3 and 6 L/hr All systems include an RO/pretreatment cartridge, ultrapure polisher cartridge, sterile 0.2 µm filter, pressure regulator, UV lamp and/or UF filter where applicable. The 3 and 6 lph models also include an internal 6L tank with vent filter.	3 L/hr	50129869	50129872	50129870	50129688
	6 L/hr	50129873	50129885	50129874	50129887
Required Accessories					
Pretreatment filter Required to prolong cartridge life. Ships with a filter housing and 1µm filter.		09.4003	09.4003	09.4003	09.4003
Optional Accessories					
Wall mounting bracket		09.2212	09.2212	09.2212	09.2212
Qualification documents (IQ00)		I00DOCE50133911	I00DOCE50133911	I00DOCE50133911	I00DOCE50133911
Replacement Consumables					
RO membrane with integrated pretreatment	3 L/hr	09.2003	09.2003	09.2003	09.2003
	6 L/hr	09.2006	09.2006	09.2006	09.2006
Ultrapure polisher cartridge		09.1020	09.1020	09.1020	09.1020
Sterile 0.2 µm filter for system		09.1003	09.1003	09.1003	09.1003
Ultrafilter		n/a	n/a	50133981	50133981
System UV-lamp		n/a	09.1002	n/a	09.1002
Cleaning solution	Europe/Asia Pacific	09.2202	09.2202	09.2202	09.2202
	North America	CMX25	CMX25	CMX25	CMX25

System Options for Smart2Pure 12	Smart2Pure 12 Standard	Smart2Pure 12 UV	Smart2Pure 12 UF	Smart2Pure 12 UV/UF
Smart2Pure System 12 L/hr Systems include an RO/pretreatment cartridge, an ultrapure polisher cartridge, sterile 0.2 µm filter, pressure regulator, UV lamp and/or UF filter where applicable	50129888	50129890	50129889	50129845
Required Accessories				
Smart2Pure Reservoir Choose a reservoir that fits your needs	See "Storage Reservoir Options"			
Pretreatment filter Required to prolong cartridge life Ships with a 10 inch filter housing and 1 µm filter	09.4003	09.4003	09.4003	09.4003
Optional Accessories				
Wall mounting bracket for the system	09.2212	09.2212	09.2212	09.2212
Qualification documents (IQ00)	I00DOCE50133912	I00DOCE50133912	I00DOCE50133912	I00DOCE50133912
Replacement Consumables				
RO membrane with integrated pretreatment	09.2012	09.2012	09.2012	09.2012
Ultrapure polisher cartridge	09.1020	09.1020	09.1020	09.1020
Sterile 0.2 µm filter for system	09.1003	09.1003	09.1003	09.1003
System UV-lamp	n/a	09.1002	n/a	09.1002
Ultrafilter	n/a	n/a	50133981	50133981
Cleaning solution	Europe/Asia Pacific	09.2202	09.2202	09.2202
	North America	CMX25	CMX25	CMX25

Product Specifications – Storage Reservoirs		
Volume	Material	Dimensions H x D in (mm)
30 L	Polyethylene, ultrapure water resistant, opaque to light	23.5 x 15 598 x 380
60 L		35.9 x 15 912 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
CO₂ absorber + sterile filter, 0.2 µm	06.5002	06.5002
Optional Accessories		
UV lamp assembly for the tank, 230V 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	09.5002	09.5002