

Super-Q® Plus

Reagent-Grade Water Purification System



UP TO 10 LITERS PER MINUTE OF ULTRAPURE WATER ON DEMAND AT THE POINT-OF-USE

Ultrapure Quality

The Super-Q® Plus System is designed to provide the "final polish" to water which has been pretreated by reverse osmosis, distillation or deionization. Super-Q® Plus systems consistently produce up to 12 L/min of ultrapure water quality which exceeds Type 1 ASTM/CAP/NCCLS specifications.

• TP Cartridges Cartridges

Cartridges used in the system are of a thermoplastically welded construction. This avoids the use of glues and solvents which give rise to high T.O.C. (organics) levels in product water.

• Purification Media

Merck Millipore uses strict testing regimes to select resins and other purification media. Deionization resin is selected not only for high ion-exchange capacity and rapid rinse-up, but also for low extractables, both in terms of T.O.C. and particulate levels (resin fines).

• Continuous Development

Our manufacturing facilities utilize the latest developments in HPLC, Ion Chromatography and T.O.C. analysis to continuously make improvements in materials of construction and manufacturing processes.

• Automatic Recirculation

During periods when water is not required, the system can be set on "Standby". The integral pump automatically recirculates the water for 5 minutes every 1 hour 30 minutes to maintain high quality between uses.

Specifications

Flow Rate: 10-12 L/min; (2.6 to 3.0 gpm)

Product Water Quality:

Resistivity: 18 Ω .cm at 25 °C

(built in temperature compensated resistivity meter)

Organics (ppb): < 20 at T.O.C

(With Organex-Q™ TP cartridge and reverse osmosis feed water)

Bacteria (cfu/ml): < 10 (with the Durapore® TP cartridge)

T.D.S. (ppm): < 0.03

Silicates (ppm): < 0.01

Heavy metals (ppm): < 0.01

Feed Water Parameters

Temperature range: 5-40 °C

Pressure: 1 bar max., (15 psi),
0.03 bar min. (0.5 psi)

Operating Pressure: 5 bar max., (75 psi)

Plumbing Connections

Inlet/Outlet: 1/2" 'Fast+Tite' compression fittings to take 1/2" rigid tubing

Dimensions

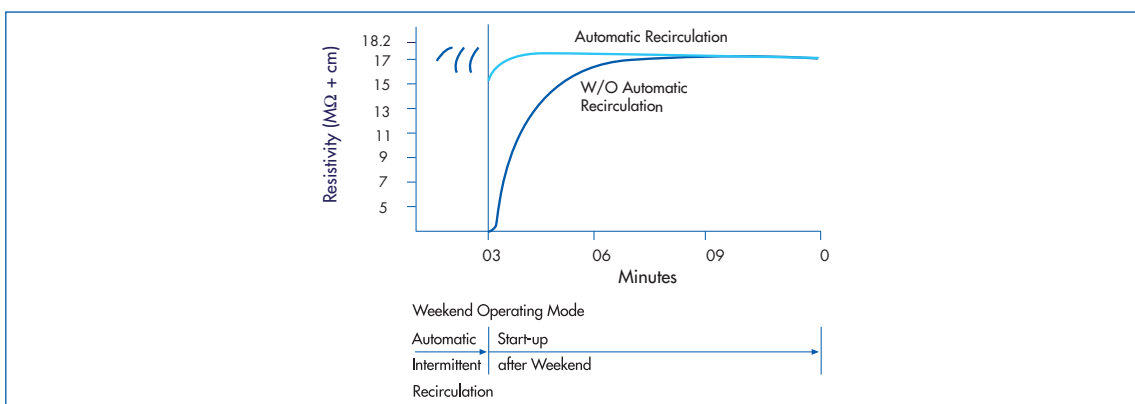
Width: 1150 mm, 45.25 inches

Height: 800 mm, 31.5 inches

Depth (Front-Back): 220 mm, 8.75 inches

Shipping Weight: 30 kg, 66 lbs.

Operating Weight (system filled with water): 63 kg, 40 lbs.



Comparison of resistivity recovery after weekend or overnight.

Applications

The Super-Q® Plus systems feature a modular design allowing cartridge selection to meet a variety of high volume Type 1 Ultrapure water applications, such as:

- Microbiological buffer and media preparation
- Reagent preparation
- Distribution loop polishing
- Electronics point-of-use rinsing

Super-Q® Plus Systems, Milli-RX™ Systems, and SDS Storage and Distribution Systems are offered as custom-engineered total water system solutions.

Cartridge Selection Guide

Cartridge	Function
Milligard® TP Cartridge	Prefiltration. High retention membrane filter cartridge removes high particle loads from feed water.
Super-C™ Cartridge	Organics removal. Activated carbon cartridge for highly efficient removal of organics using unique dry-packed carbon.
Ion-Ex® TP Cartridge	Inorganics removal. Mixed bed nuclear grade ion exchange cartridge for highly efficient removal of inorganic ions.
Organex-Q® TP Cartridge	Trace organic removal. Unique mixture of ion-exchanged resins and synthetic activated carbon for removal of trace organics.
Durapore® TP Cartridge	Removal of microorganisms and particles above 0.22 µm. Durapore membrane cartridge for the removal of all material larger than pore size of 0.22 µm.

Ordering Information

Description	Voltage	Qty/Pk	Catalogue No.
Super-Q® Plus Water Purification (4-bowl, with pump)	120 V/60 Hz	1	ZFSQ 115 P4
	230 V/50 Hz		ZFSQ 240 P4
Super-Q® Plus Water Purification (3-bowl, no pump)	120 V/60 Hz	1	ZFSQ 115 03
	230 V/50 Hz		ZFSQ 240 03
Super-Q® Plus Water Purification (4-bowl, no pump)	120 V/60 Hz	1	ZFSQ 115 04
	230 V/50 Hz		ZFSQ 240 04

Consumables	Qty/Pk	Catalogue No.
Milligard® Cartridge Filter, 20"	3	CWSC 02S 03
Super-C™ Carbon Cartridge	3	CDFC 022 03
Ion-Ex® Cartridge	2	CPMB 022 02
Organex-Q™ Cartridge	1	CPEX 022 01
Durapore® TPE Cartridge, 0.22 µm	1	CVDI 02T PE