



MILLIPORE

Synergy[®]

Water Purification system



Ultrapure water
the easy way!

ADVANCING LIFE SCIENCE TOGETHER™
Research. Development. Production.

ULTRAPURE WATER AT THE TOUCH OF A BUTTON!

The Synergy system is designed for laboratories that already have access to purified water and need a point-of-use system to supply high quality ultrapure water. The compact design assures easy installation anywhere in your lab, on the bench or wall-mounted.

Ultrapure water from pretreated water for low-volume critical applications:

HPLC mobile phase preparation, sample dilution, buffer and cell culture media preparation, preparation of chemical solutions used with titrators, spectrophotometers and electrophoresis systems.

The Synergy system gives you easy access to ultrapure water on demand to satisfy critical applications.

Ready for use



Simple to install

Installing the Synergy system is so easy you can do it yourself! Connect the system to a pretreated water supply (e.g. from a RiOs™ system), plug in the system and install the pack - it's ready to use!

Saves space

The Synergy system's small footprint will allow you to find a space for it anywhere in your laboratory. Bench- or wall-mounted – you choose the best location for your Synergy system.

Facilitates your work



Dispensing adapted to laboratory glassware

The height and shape of the Synergy system is designed so that common laboratory glassware containers of differing sizes are easy to fill without the need to hold the container.

Automatic functions

The Synergy system recirculates water when the system is not in use in order to maintain water quality. You can also pre-set your system to deliver a fixed volume of water on demand.



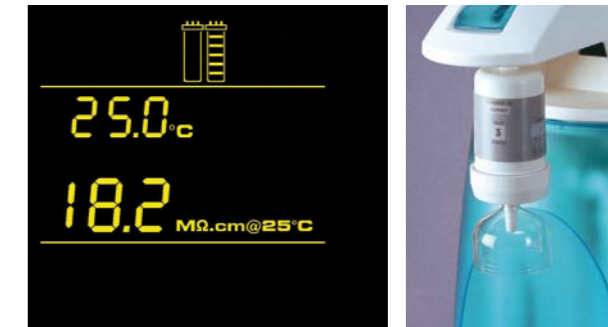
Information on hand

A handy Quick Reference Guide is conveniently located in the system base, instantly giving you all the essential system information you may require.

Easy maintenance

The single purification cartridge integrates all the main purification technologies. The Synergy system tells you automatically when to change your purification cartridge, and with its easy plug-and-use design, you can replace it in a couple of minutes.

Quality solutions



With Millipore's know-how in water purification technologies and systems, you can be sure that your Synergy system offers you the best in quality, reliability and value for money.

Complete control

The bright, intuitive color graphic display tells you in an instant all you need to know about system parameters, operational functions and product water quality. The advanced, patented, built-in resistivity monitor gives you complete control of your water quality.

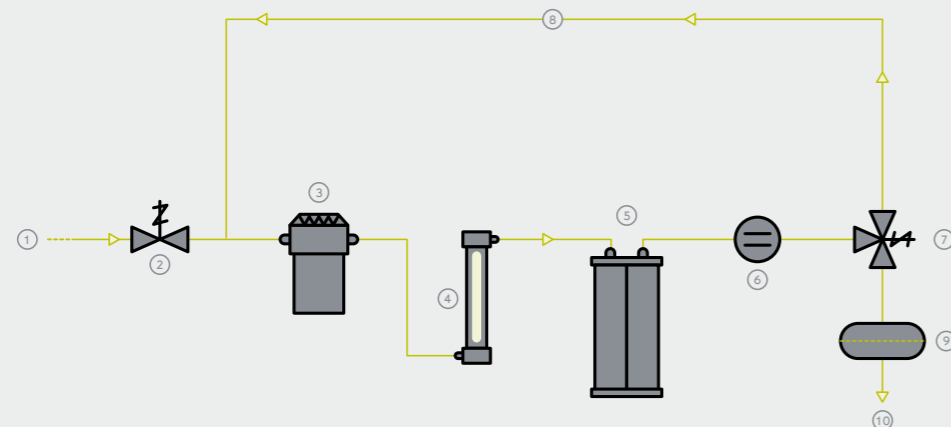
Low level organics

If you work with organic-sensitive applications such as HPLC, LC, GC or TOC analyses, the Synergy UV system contains a built-in UV lamp to reduce TOC to less than 5 ppb.

Final polishers to match your needs

Do your applications require bacteria-free, pyrogen-free or nuclease-free water? A range of filters and cartridges are available for the Synergy system to match your water requirements.

Flow Schematic



- ① Feed water
- ② Inlet Solenoid Valve
- ③ Recirculation pump
- ④ UV Lamp (185/254 nm)
- ⑤ SynergyPak®
- ⑥ Resistivity cell
- ⑦ Three way solenoid valve
- ⑧ Recirculation loop with check valve
- ⑨ Final polisher
- ⑩ Ultrapure water (Type I) delivery on demand

Specifications

Feed water: Pretreated water (Elix® system, RO, distilled or DI water)

Ultrapure (Type I) Product Water Quality*

Synergy system

Resistivity	18.2 MΩ·cm @ 25 °C
TOC (Synergy system without 185/254 nm UV lamp)	< 10 ppb
TOC (Synergy UV system with 185/254 nm UV lamp)	< 5 ppb
Particulates (size > 0.22 µm)**	< 1 Particulate/ml
Microorganisms**	< 0.1 cfu/ml
Endotoxin***	< 0.001 EU/ml
RNase***	< 0.01 ng/ml
DNase***	< 4 pg/µl
Flow rate (with Millipak® Express 20 membrane filter or BioPak® ultrafiltration cartridge as final polisher)	> 1 l/min

* In regular operating conditions

** With Millipak Express 20 (0.22 µm) membrane filter or with BioPak ultrafiltration cartridge as final polisher

*** Only with BioPak ultrafiltration cartridge as final polisher

System

Dimensions (H x W x D)	54 x 29 x 38 cm (21.3 x 11.4 x 15 in)
Net weight (Synergy system without 185/254 nm UV lamp)	6.7 kg (14.8 lb)
Net weight (Synergy UV system with 185/254 nm UV lamp)	7.2 kg (15.9 lb)
Operating weight (Synergy system without 185/254 nm UV lamp)	9.7 kg (21.4 lb)
Operating weight (Synergy UV system with 185/254 nm UV lamp)	10.2 kg (22.5 lb)
Electrical feed Voltage	100 - 230 V +/- 10 %
Electrical feed Frequency	50 - 60 Hz
Feed water Connection	½ " Gaz M
Feed water Pressure	< 0.3 bar

Millipore offers more innovative technologies and stronger application support to streamline processes and provide consistently reliable results. Our Lab Water experts take the time to evaluate the needs of individual labs and particular applications in order to recommend a system that balances water quality with volume and distribution requirements, removing water quality concerns so customers can focus on their research.

For more information please visit our web site at: www.millipore.com/labwater



www.millipore.com/offices

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