MERCK

Simplicity®
Water Purification Systems

Ultrapure water on demand wherever you need it!

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

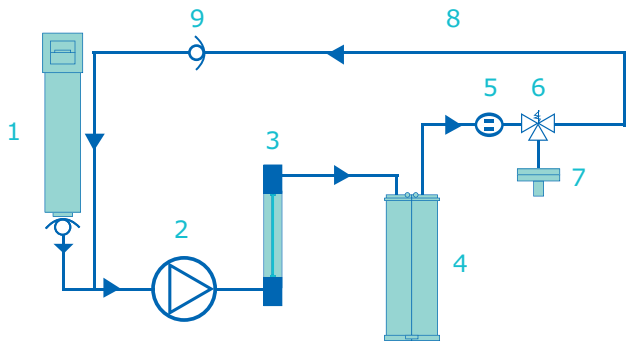
Milli-Q®
Lab Water Solutions

Ultrapure water on demand wherever your need it!

Your water purification needs	Our solution: Simplicity® water purification systems
Ultrapure water on demand wherever and whenever you need it in your lab	**Compact, portable Simplicity®** water purification systems produce ultrapure water on demand **where you really need it: on your lab bench where you perform your experiments.**
Convenient, high quality fresh feed water for successful experiments without the water contamination issues linked to carboy use	Simplicity® systems produce ultrapure water on demand using pure water from the **removable 2-liter integrated reservoir.**
Flexible feed water production possibilities	Simplicity® systems can produce **ultrapure water from a variety of pretreated water types,** including water from Elix® systems, and distilled, de-ionized, or reverse osmosis (e.g., RiOs™ systems) water.
Compact design for the most efficient use of your lab space	A **small footprint** makes it **easy to install** the Simplicity® systems wherever you want to in your lab.
Flow rates adapted to your ultrapure water needs	Simplicity® systems can dispense **> 0.5 L/min of ultrapure water.**
High quality water to meet the requirements of your most critical applications	Options such as a **UV lamp** and a range of **Application Pak point-of-use polishers** are available to fine-tune your ultrapure water.
Easily accessible information on system operation	The **user-friendly display** provides system status at a glance; the concise **Quick Reference Guide** is a handy guide for daily operation.
Simple, low-level self-maintenance	The **snap-in-and-out design** of the **SimpliPak®** purification cartridge enables easy and rapid replacement.

Simplicity® Systems Water Purification Pathway

1. 2-Liter Removable Reservoir
2. Distribution Pump
3. UV Lamp 185/254 nm (UV System)
4. SimpliPak® 1, 2 or 3 Cartridge
5. Product Resistivity Cell
6. Point-of-Use (POU) Solenoid Valve
7. Final Filter / Application Pak
8. Recirculation Loop
9. Check Valve



Choose the solution that’s right for you

Compact and portable “nomadic” systems

Installation for Simplicity® systems is simple so that you can do it yourself! Just plug in the system, insert the SimpliPak® cartridge, fill the removable reservoir with pretreated water, and you’re ready to go! If you later find that it would be handier to move your system somewhere else — either within your lab or even down the hall as a temporary solution for a colleague — nothing could be easier. Turn off the power, unplug the system, and move the system to its new location. Plug it back in, power on the system, and presto, the system is ready again to produce ultrapure water. This also makes also the Simplicity® an ideal system for use in mobile laboratories.

Integrated pure water reservoir — no more carboys!

Simplicity® systems have an integrated pure water reservoir that lets you do away with cumbersome carboys and their doubtful water quality. It’s easy to remove the 2-liter reservoir from your Simplicity® system and refill it from a pretreated pure water source — Elix® system, distilled, deionized or reverse osmosis (RiOs™ system) water. Additionally, when not in use, the system recirculates water to maintain water quality, so that you don’t have to wait for water quality to improve when you need to source water.

Optimized lab space

Designed to facilitate your work, the Simplicity® system’s small footprint will allow you to find a space for it anywhere in your laboratory.

High ultrapure flow rates to match your requirements

With flow rates greater than 0.5 L/min, Simplicity® systems provide ultrapure water on demand in the volumes required to satisfy critical applications.

Fine-tune your water quality

Point-of-use ultrapure water on demand

For laboratories with an existing access to pure water, Simplicity® systems provide a solution to point-of-use ultrapure water needs. The high quality ultrapure water produced by Simplicity® systems is suitable for applications such as production of mobile phase for chromatographic separations; preparation of blanks and standard solutions for spectrophotometry, spectroscopy or other analytical techniques; and preparation of buffers for biochemical experiments.

Organic-sensitive applications

If you work with organic-sensitive applications such as HPLC, GC or TOC analyses, the Simplicity® UV system contains a built-in 185/254 nm UV lamp to reduce TOC to less than 5 ppb. Water with low TOC provides important benefits to HPLC users such as higher sensitivity and longer column lifetime.

Application Pak point-of-use polishers

Our range of Application Pak polishers makes it possible to fine-tune your ultrapure water quality to match your research. Are your applications sensitive to bacteria, particulates, pyrogens, nucleases, endocrine disruptors or volatile organic compounds? If so, just choose the appropriate final polisher from our range of Application Paks to provide optimal water quality for your requirements.

For more information, please visit **MerckMillipore.com/labwater**.

We offer more than water

Just the information you need

The intuitive color graphic display shows key system parameters at a glance, enabling easy water quality and maintenance warning monitoring. Additional information on system operation and maintenance is provided by the Quick Reference Guide and User Manual stored on the water production unit.

User-friendly maintenance

The single SimpliPak® purification cartridge has a snap-in-and-out design that means you can change it in a couple of minutes. You'll receive an automatic notification from the Simplicity® system when it's time to change the cartridge.

Milli-Q® Service Plans

To optimize the performance and lifetime of your water purification system, we offer a complete portfolio of service plans ranging from a single annual checkup to a full system cover. For more information, please check with your applications specialist or visit: **MerckMillipore.com/Milli-QServices**

Specifications

Ultrapure (Type 1) Product Water Quality*

Parameter	Value
Resistivity	18.2 MΩ·cm @ 25 °C
Instant flow rate (with Application Pak final filter)	> 0.5 L/min
TOC (w/o 185/254 nm UV lamp)	< 15 ppb
TOC (with 185/254 nm UV lamp)	< 5 ppb
Particulates (size > 0.22 µm)**	< 1 particulate/mL
Bacteria**	< 0.1 cfu/mL
Endotoxin (pyrogens)***	< 0.001 EU/mL
RNases***	< 0.01 ng/mL
DNases***	< 4 pg/µL

* In regular operating conditions

** With SimFilter® (0.05 µm) end filter or with Biopak® ultrafiltration cartridge as final polisher

*** Only with Biopak® ultrafiltration cartridge as final polisher

System Information

Parameter	Value
Dimensions (H x W x D)	51 x 29 x 36 cm (20.1 x 11.4 x 14.2 in)
Net weight (Simplicity® system w/o 185/254 nm UV lamp)	4.9 kg (10.8 lb)
Net weight (Simplicity® system with 185/254 nm UV lamp)	5.4 kg (11.9 lb)
Operating weight (Simplicity® system w/o 185/254 nm UV lamp)	8.4 kg (18.4 lb)
Operating weight (Simplicity® system with 185/254 nm UV lamp)	9 kg (19.8 lb)
Built-in removable reservoir volume	2 L
Electrical feed voltage	100-250 V ± 10%
Electrical feed frequency	50-60 Hz ± 10%

Milli-Q®

Lab Water Solutions

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