

# RiOs™ 3, 5, 8 Water Purification Systems

Reliable and affordable pure water solutions



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## Your water purification needs

Reliable, affordable laboratory grade water

Flow rates adapted to your daily usage

A choice of adequate storage volumes

Pure water to feed ultrapure water purification systems or other lab equipment

Pure water for general laboratory use

Compact design for the most efficient use of your lab space

Easily accessible information on system operation

Simple, low-level self-maintenance

## Our solution: the RiOs™ water purification systems

Merck Millipore RiOs™ systems produce reliable, affordable Type III pure water for a variety of laboratory applications, thanks to high performance reverse osmosis (RO) membranes.

Systems in the RiOs™ range provide 3, 5, or 8 liters of pure water per hour.

RiOs™ systems come either with an integrated 6-liter reservoir (RiOs™ 3) or an external reservoir (30 l or 60 l).

Water from RiOs™ systems can be used as feed water for ultrapure water systems (e.g., Milli-Q® or Synergy® systems), as well as feed to humidifiers, autoclaves, and glassware washers.

RiOs™ system pure water is also suitable for a variety of other needs, including manual cleaning or rinsing, and buffer and reagent preparation.

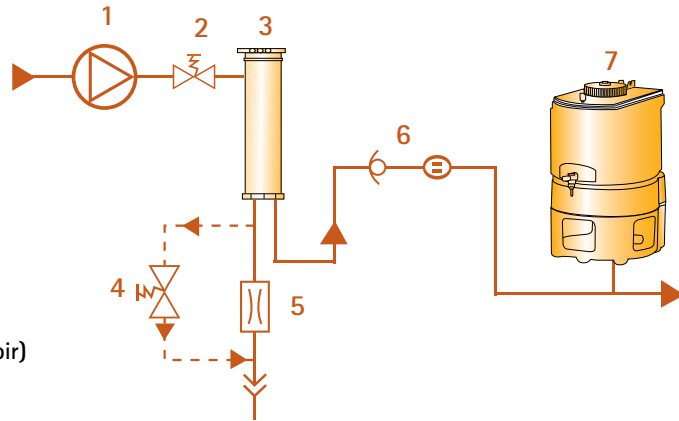
A small footprint makes it easy to install the RiOs™ water purification units wherever you want to in your lab.

The user-friendly display provides system status at a glance; the concise *Quick Reference Guide* is a handy guide for daily operation.

The single SmartPak® RO cartridge (with integrated RO membrane) enables easy and rapid replacement.

# RiOs™ systems water purification pathway

1. Booster Pump
2. Inlet Solenoid Valve
3. SmartPak® RO
4. RO Reject Solenoid Valve
5. RO Reject Capillary
6. Check Valve and RO Permeate Conductivity Cell
7. Reservoir (6 l built-in or 30 l/60 l external reservoir)



Choose the pure water solution that's right for you

## Reliable, affordable pure water

Designed to produce reliable, affordable pure water, RiOs™ systems are a perfect solution for Type III laboratory-grade water needs. Select the RiOs™ system that best matches your daily water volume needs: the range includes models that produce 3, 5 or 8 liters of pure water per hour. Pure water is stored conveniently either in an integrated 6-liter reservoir for the RiOs™ 3 system, or in external 30 l or 60 l reservoirs for the RiOs™ 5 and RiOs™ 8 models.



## Feed water for ultrapure water systems and other lab equipment

RiOs™ systems provide an ideal source of pure water for use as feed to ultrapure water purification systems, such as Merck Millipore's Milli-Q® or Synergy® systems. A mere 80-centimeter (32-inch) space suffices to hold the two systems, and you'll have access to both Type III and Type I (18.2 MΩ·cm) water on demand! When connected to an external reservoir, RiOs™ systems can also supply pure water to feed other laboratory equipment, including humidifiers, autoclaves, and glassware washers.

## Pure water for general, non-critical lab applications

Type III water from RiOs™ systems is suitable for all your manual cleaning and rinsing needs, as well as for buffer and reagent preparation; and for use in water baths.



Benefit from compact,  
user-friendly design

## Easy installation

RiOs™ systems are designed for easy installation: just connect the system to a tap water supply, plug it in, and insert the SmartPak RO cartridge. If your configuration includes a 30- or 60-liter reservoir, follow the simple setup procedures, and your system will be ready to use! Just open the tank outlet valve to dispense pure water – the integrated 6 l reservoir or external 30/60 l reservoirs store your RO water in optimal condition ready for use when you need it.

## Optimized lab space

With their small footprint and robust design, RiOs™ water purification units can be installed wherever you need pure water in your lab, on the benchtop, or on the wall.\*

*\* RiOs™ 5 and RiOs™ 8 systems are designed for use with a 30 l or 60 l external reservoir.*

# Merck Millipore offers 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 SmartPak® purification cartridge with integrated RO membrane protection simplifies maintenance to a quick pack change. You'll receive an automatic notification from the RiOs™ system when it's time to change the cartridge, which is easily done in a couple of minutes.



## Watercare Pact Service portfolio

To optimize the performance and lifetime of your water purification system, Merck Millipore offers a complete portfolio of Service plans ranging from a single annual checkup to a full system cover. For more information, please check with your Merck Millipore applications specialist or visit our website: [www.merckmillipore.com/labwater](http://www.merckmillipore.com/labwater)

# Specifications

Pure (Type III) Product Water Quality	RiOs™ Systems
Ionic content	> 96 % rejected typically
Organics, particulates	> 99 % rejected typically
Production flow rate	3, 5, 8 l/h @ 15 °C +/- 15 %

System Information	
Dimensions (H x W x D)	50 x 29 x 33 cm (19.7 x 11.4 x 13 in)
Net weight (RiOs™ 3 system)	7 kg (15.4 lb)
Net weight (RiOs™ 5, 8 systems)	6 kg (13.2 lb)
Operating weight (RiOs™ 3 system)	14.9 kg (32.8 lb)
Operating weight (RiOs™ 5, 8 systems)	8.9 kg (19.6 lb)
Built-in reservoir volume	6 l
Electrical feed voltage	100-250 V +/- 10 %
Electrical feed frequency	50-60 Hz +/- 10 %
Tap (feed) water connection	1/2" Gaz M
Tap (feed) water pressure	0.5 to 6 bar







For more information, please visit our website:  
[www.merckmillipore.com/rios358](http://www.merckmillipore.com/rios358)

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