

# RiOs™ 3, 5, 8 Water Purification Systems

Reliable and affordable pure water solutions

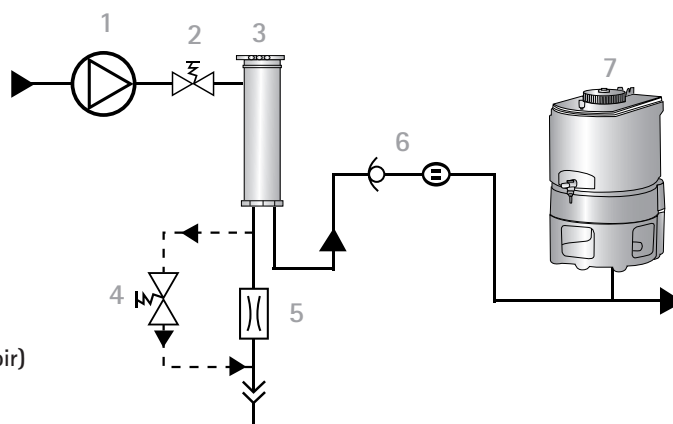


# Reliable and affordable pure water solutions

| Your water purification needs                                                  | Our solution: the RiOs™ water purification systems                                                                                                                                      |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reliable, affordable laboratory grade water                                    | 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.     |
| Flow rates adapted to your daily usage                                         | Systems in the RiOs™ range provide 3, 5, or 8 liters of pure water per hour.                                                                                                            |
| A choice of adequate storage volumes                                           | RiOs™ systems come either with an integrated 6-liter reservoir (RiOs™ 3) or an external reservoir (30 l or 60 l).                                                                       |
| Pure water to feed ultrapure water purification systems or other lab equipment | 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. |
| Pure water for general laboratory use                                          | RiOs™ system pure water is also suitable for a variety of other needs, including manual cleaning or rinsing, and buffer and reagent preparation.                                        |
| Compact design for the most efficient use of your lab space                    | A small footprint makes it easy to install the RiOs™ water purification units wherever you want to in your lab.                                                                         |
| Easily accessible information on system operation                              | The user-friendly display provides system status at a glance; the concise <i>Quick Reference Guide</i> is a handy guide for daily operation.                                            |
| Simple, low-level self-maintenance                                             | 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.*

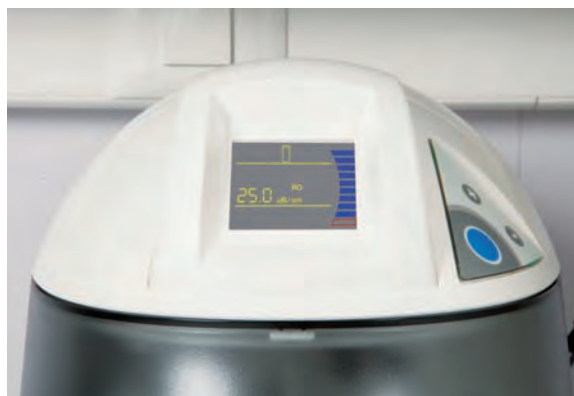
# Merck Millipore offers more than water

## 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.millipore.com/labwater](http://www.millipore.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<br>(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.millipore.com/rios358](http://www.millipore.com/rios358)**

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