

# RiOs-DI<sup>®</sup> Water Purification Systems

Easy-maintenance, superior quality pure water



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## Your water purification needs

High quality pure water without the drawbacks of service DI or distillation equipment

Pure water for general laboratory use

Compact design for the most efficient use of your lab space

Flow rate and storage volume to meet your low-volume pure water needs

High quality water for applications requiring low bacterial levels

Easily accessible information on system operation

Simple, low-level self-maintenance

## Our solution: the RiOs-DI® water purification systems

Easy-to-use **RiOs-DI® systems** produce pure water whose quality is superior to that of service DI or stills. Plus, with their combination of **reverse osmosis technology** with **deionization resins**, RiOs-DI® systems let you avoid the issues associated with service DI or distillation (maintenance, storage, cleaning, etc.).

Water from RiOs-DI® systems is suitable for a **variety of uses**, including buffer and reagent preparation; microbiological culture media preparation; and glassware rinsing.

**A small footprint** makes it easy to install the RiOs-DI® system wherever you want to in your lab.

RiOs-DI® systems have a **pure water flow rate of > 2.4 liters per hour** and an **integrated 6 l reservoir** for pure water storage.

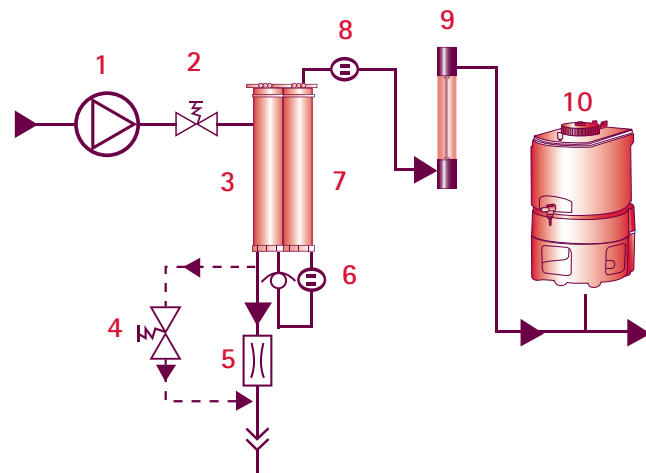
An optional **built-in UV lamp** is available to help ensure optimal water quality for bacteria-sensitive applications.

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® RODI cartridge** enables easy and rapid replacement.

# RiOs-DI® systems water purification pathway

1. Booster Pump
2. Inlet Solenoid Valve
3. SmartPak® RODI (Pretreatment and RO Cartridge)
4. RO Reject Solenoid Valve
5. RO Reject Capillary
6. Check Valve and RO Permeate Conductivity Cell
7. SmartPak® RODI (Ion Exchange Polisher Cartridge)
8. Product Resistivity Cell
9. UV Lamp 254 nm (UV System)
10. 6-Liter Reservoir



Get superior water quality and peace of mind!

## RiOs-DI® systems: a better alternative to stills and service DI

With their combination of reverse osmosis (RO) technology and deionization (DI) resins, the compact, user-friendly RiOs-DI® systems produce high quality pure water — easily and economically. The combined power of RO and DI resins in RiOs-DI® systems provides pure water with high resistivity ( $> 10 \text{ M}\Omega\text{-cm}$ ) and low TOC ( $< 30 \text{ ppb}$ ) whose quality surpasses that of service DI or distilled water. In addition, RiOs-DI® systems also let you avoid the many drawbacks of these other purification methods: high lab space demands to store resin bottles or accommodate distillation equipment; heavy maintenance; lack of water quality monitoring; and in the case of distillation, high energy and water use, as well as the need for strong chemicals for cleaning purposes.





## Pure water for general lab applications

Type II pure water from RiOs-DI® systems is suitable for basic laboratory needs, such as buffer and reagent preparation; microbiology culture media preparation; general washing and glassware rinsing.

## Bacteria-sensitive applications

RiOs-DI® systems are also available with a built-in 254 nm UV lamp to reduce the level of bacteria for critical applications.

Benefit from compact,  
user-friendly design

## Easy installation

RiOs-DI® systems are designed for easy installation: just connect the system to a tap water supply, plug it in, and insert the SmartPak® RODI cartridge – your system is ready to use!

## Optimized lab space

With their integrated 6-liter reservoirs, RiOs-DI® systems can easily be installed wherever you need pure water in your lab, on the benchtop, or on the wall.





## 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, reservoir level, 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

At the heart of the RiOs-DI® system is the all-in-one RODI SmartPak® cartridge that combines the different purification technologies. A quick single pack change is all the regular maintenance needed! Following an automatic flush cycle, the system will set itself up to produce optimal water quality. You'll receive an automatic notification from the RiOs-DI® 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 II) Product Water Quality	RiOs-DI® Systems
Resistivity	> 10 MΩ·cm @ 25 °C
Production flow rate	3 l/h @ 15 °C +/- 15 %
Organics, particulates	> 99% rejected typically
TOC	< 30 ppb

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-DI® system w/o 185/254 nm UV lamp )	7.3 kg (16.1 lb)
Net weight (RiOs-DI® system with 185/254 nm UV lamp)	7.8 kg (17.2 lb)
Operating weight (RiOs-DI® system w/o 185/254 nm UV lamp)	16.7 kg (36.7 lb)
Operating weight (RiOs-DI® system with 185/254 nm UV lamp)	17.3 kg (38 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	½" Gaz M
Tap (feed) water pressure	0.5 to 6 bar





For more information, please visit our website:

[www.millipore.com/riosdi](http://www.millipore.com/riosdi)

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