

RiOs-DI® Clinical

Water Purification System

Consistent and reliable purified water for low-volume clinical analyzers



Key benefits:

- Specifically designed to feed clinical analyzers
- · Provides an efficient alternative to buying and storing bottled water
- Economical system allows substantial cost savings
- Eliminates the need to constantly manually refill pure water reservoirs or storage tanks
- Produces a consistent and reliable supply of pure water

The RiOs-DI® Clinical system is a very compact solution specifically designed for low-volume analyzers. The system efficiently combines reverse osmosis (RO) technology with deionization (DI) resins to produce CLSI® Special Reagent Water.*

With high resistivity and low TOC (typically > 10 M Ω -cm @ 25 °C and < 50 ppb before storage), this product water is of higher quality than either water produced by stills or service DI water. Product water can be stored in the system's integrated 6 I reservoir.

*SRW type



Ready for use with your analyzer Easy to install

In order to minimize capital investment, RiOs-DI® Clinical systems have been designed to enable you to install them yourself. However, as with all Merck Millipore systems, on your request, our dedicated engineers can provide this service.

Saves space

With its integrated 6-liter reservoir, the RiOs-DI® Clinical system can easily be installed anywhere in your lab. For low-volume analyzers requiring between 10-30 l/day, the RiOs-DI® Clinical system is the answer to your purified water needs.



Facilitates your work in the clinical environment

Pure water is a clinical reagent and should be monitored as any other reagent in the clinical environment. With Merck Millipore's extensive experience in water purification technologies and laboratory applications, you can be sure that the RiOs-DI® Clinical system offers a reliable, compact and easy-to-use solution for your analyzer.



System status at a glance

The at-a-glance color graphic display clearly indicates system parameters, showing all the information you need regarding water quality, system functions and water level in the reservoir.

Information at your fingertips

Should you need it, you'll find a handy Quick Reference Guide in the system base, instantly giving you all the essential information you may require.



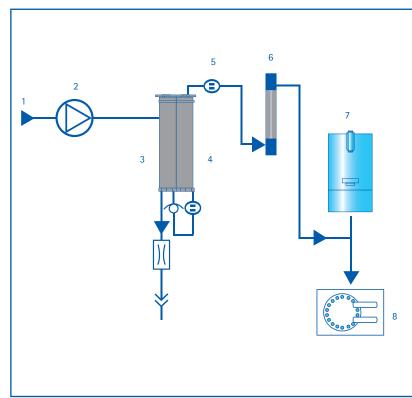
Quality solutions Easy to maintain

At the heart of the RiOs-DI® Clinical solution is the all-in-one pack that combines the different purification technologies. A single quick pack change is all the maintenance needed! Following an automatic flush cycle, the system will set itself up to produce optimal quality water. Additionally, the color graphic screen automatically displays a reminder when the pack change is needed. The pack change takes just a few minutes. This avoids any downtime for your analyzer.

Low bacteria levels

The RiOs-DI® Clinical system's built-in UV lamp (254 nm) ensures low bacteria levels before storage, with typically > 99 % of microorganisms rejected (LRV 5).

Flow Schematic



- 1. Potable (tap) water feed
- **2.** Booster pump to increase flow rate and rejection of contaminants by RO membrane
- 3. SmartPak® RODI cartridge first stage:
- Pretreatment for Reverse Osmosis cartridge protection
- Reverse Osmosis cartridge for removal of ions (> 94 %), organics, particulates and colloids (> 99 %) typically.
- **4.** SmartPak® RODI cartridge second stage:
- Mixed bed ion-exchange resin for removal of remaining ions
- Organex for removal of ionic and organic trace contaminants
- **5.** Resistivity cell
- **6.** High efficiency UV lamp (254 nm) for bacteria destruction (LRV 5)
- 7. Tank for pure water storage
- 8. Analyzer

Specifications

RiOs-DI® Clinical water purification system

Feed water specification	Potable tap water with conductivity $<$ 2000 $\mu S/cm$ @ 25 $^{\circ}C$ at a pressure between 0.5 and 6 bar
Flow rate	> 2.4 l/h @ 15 °C typically
Resistivity	> 10 MΩ.cm @ 25 °C (SRW water)* typically**
TOC	< 50 ppb**
Microorganisms	< 10 cfu/ml after UV**
Dimensions (H x W x D)	50 x 29 x 33 cm (19.7 x 11.4 x 13 in)
Net weight	7.8 kg (17.2 lb)

^{*} CLSI Special Reagent Water

^{**} before storage

Ordering information

Description	Catalogue No.
RiOs-DI® Clinical 3 UV S. Kit	ZRDSVCL3 + Country Code*
SmartPak® RODI	SPR00SIA2
Wall mounting bracket with tap	WMBSMT001
Vent filter for internal reservoir (Qty 2/box)	TANKMPK03
Tank connection kit	TANKPECKT
Sanitization kit	SANIKIT01

^{*} Ask your Merck Millipore Application Specialist to specify your correct 2-letter country code before ordering.

Merck Millipore delivers a broad and innovative range of systems for clinical and immunochemistry instruments that improve laboratory productivity and ensure accurate daily results. Its clinical products benefit users in hospitals, physicians' offices, reference and forensic labs, as well as diagnostic manufacturers.

Merck Millipore's Bioscience Division provides innovative tools, services and biological reagents that drive advancements in biomedical and academic research as well as support the discovery and development of new pharmaceuticals. Our customers work in leading research laboratories across a variety of industries throughout the world. Merck Millipore improves their laboratory productivity and efficiency through optimized workflows.

Please visit www.millipore.com/labwater for more details.

