



MILLIPORE

RiOs-DI[®] 3 UV

Water Purification system



Pure water
at your fingertips!

ADVANCING LIFE SCIENCE TOGETHER™
Research. Development. Production.

TAP TO PURE WATER

RiOs-DI UV, the economical, friendly, easy-to-use and easy-to-maintain solution to your purified water needs. A very compact solution that efficiently combines reverse osmosis (RO) technology with deionization (DI) resins to produce high quality pure water.

The RiOs-DI UV system's product water is stored in an internal reservoir and is ideal for low volume routine laboratory applications such as:
Buffer and reagent preparation - Microbiological culture media preparation - General washing - Feed to Milli-Q® and Synergy® ultrapure water systems.

The RiOs-DI UV system is designed to provide water that is of higher quality than water produced by stills or service DI water – without the drawbacks. The combined power of RO and DI provides water of high resistivity and low TOC (> 10 MΩ·cm and < 50 ppb).

Ready for use



Easy installation

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

Saves space

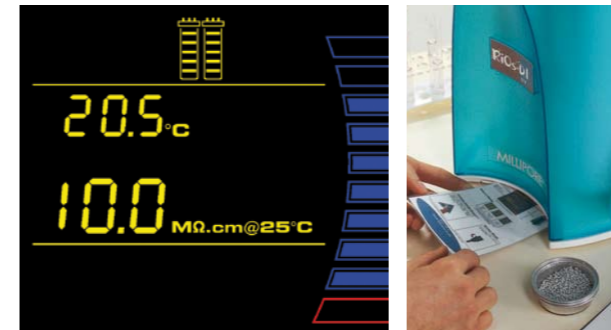
With its integrated 6 l reservoir, the RiOs-DI UV system can easily be installed anywhere in your lab. For low volume users needing a complete and compact solution (pure and ultrapure water), the RiOs-DI UV system can be used to feed a Milli-Q or Synergy system dispensing ultrapure water – both systems can be installed in just an 80-centimeter (32-inch) space.

Facilitates your work



System status at a glance

The at-a-glance color graphic display clearly indicates all system parameters so that you instantly have 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 will find a handy Quick Reference Guide in the system base, instantly giving you all the essential system information you may require.

Quality solutions



With Millipore's extensive experience in water purification technologies and laboratory applications, you can be sure that the RiOs-DI UV system offers a reliable, compact and easy-to-use solution for your pure laboratory water needs.

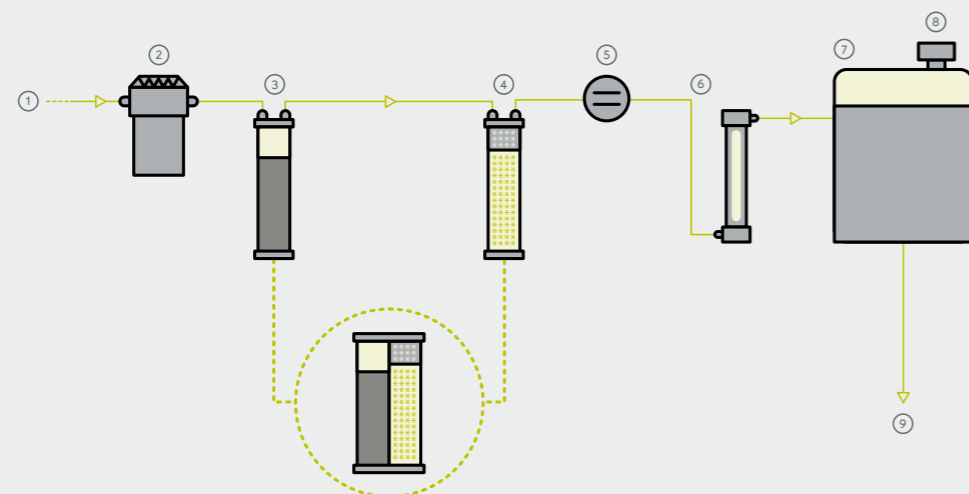
Easy to maintain

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

Low bacteria levels

If you are working with bacteria-sensitive applications, then the built-in UV lamp ensures optimal results.

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 (Type II) storage
- ⑧ Vent filter
- ⑨ Pure water (Type II)

Specifications

RiOs-DI 3 UV water system*

Feed water specification	Potable tap water with conductivity < 2000 $\mu\text{S}/\text{cm}$ @ 25 °C, at a pressure between 0.5 and 6 bar
Flow rate	> 2.4 l/h @ 15 °C typically
Resistivity	> 10 M Ω ·cm @ 25 °C (Type II) typically
TOC	< 50 ppb
Microorganisms	> 99 % rejected typically
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)**

* This system also exists without an UV lamp
** Net weight without UV lamp: 7.3 kg (16.1 lb)



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