

# PURE WATER SYSTEMS

## Crystal B Pure series

The Crystal B Pure systems produce purified water for general laboratory applications and analytical inorganic methods. Crystal B Pure water complies with the requirements of ISO 3696 Grade 2. The costs of Pure water production are lower in comparison to the costs of Ultrapure water. Pure (Grade 2) water complies with the requirements of a variety of applications, including:

- Many inorganic methods of analysis (e. g. flame spectrometry)
- Wet chemistry methods
- Electrochemistry
- Labware washing, etc.

The Crystal B Pure systems are designed to provide a lab with water that is essentially free from dissolved ions and has a low TOC content. The conductivity of Crystal B Pure water is less than  $0.1 \mu\text{S}/\text{cm}$ . This exceeds the requirements for Grade 2 water put forth in ISO 3696.

Crystal B Pure systems are equipped with a user-friendly control module. The control module has a graphic LCD display with indication of water quality. The Bluetooth option (P/N 10103) provides remote control of the Crystal B system via the detachable controller. The Crystal B system can be installed on a wall or under a bench, thus saving valuable laboratory space.

The controller module provides information about the system status; including remaining pre-filter life and deionization (DI) module performance. The smart DI mod-



## Applications

Application	Crystal B Pure
Glassware rinsing	●
Laboratory washers	●
Autoclaves	●
Electrochemistry	●
Flame AAS	●
Wet chemistry	●
Spectrophotometry	●
Buffer and media preparation	●

## Specifications

Purified water specifications	Crystal B Pure
Purified water resistivity	$>10 \text{ M}\Omega \times \text{cm}$
Purified water conductivity	$<0.1 \mu\text{S}/\text{cm}$
Particles $> 0.22 \mu\text{m}$	$<1 \text{ per mL}$
Nominal flow, pure water (to storage tank)	10 L/h
Dispense flow, pure water	4 L/min
Deionization module life (standard module)	1 $\text{m}^3$
Recovery	$>30 \%$
Dimensions (WxDxH), cm	50x40x60
Storage tank (option)	25 L – 300 L
Feed water pressure	0.5 – 5 bar
Feed water conductivity	$< 900 \mu\text{S}/\text{cm}$

ule monitoring system provides a reduction in running costs. The user is instructed to replace the DI module only when the module is near the end of it's service life.

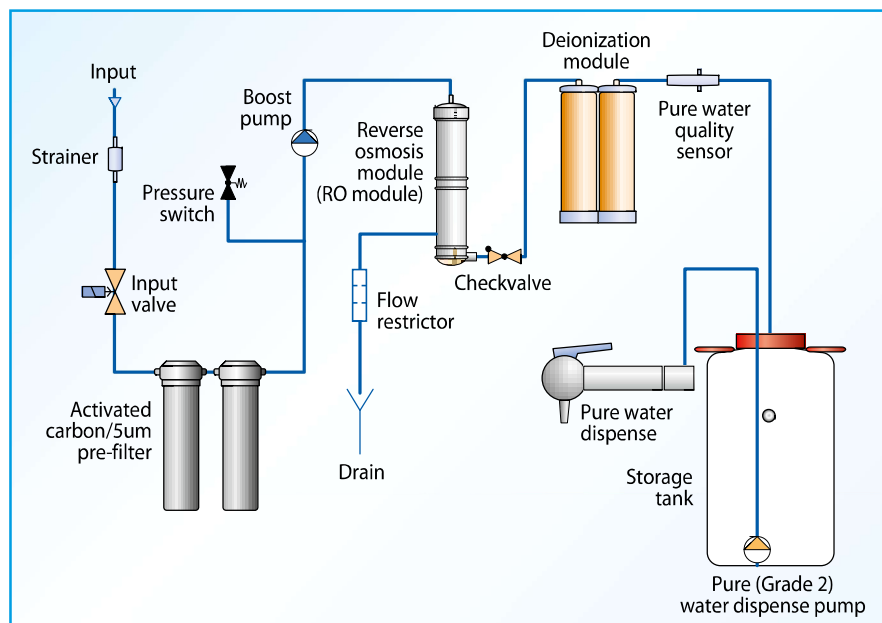
A storage tank for purified water is available as an option. We offer storage tanks with capacities ranging from 10L – 60L. All tanks with a capacity of 25L and higher have integrated pumps for fast and convenient dispensing. The dispensing flow rate is 4 L/min. An integrated pump enables placement of the storage tank under a bench, if desired, to save more space.

The Crystal B has important safety functions, including:

Tank filling control, tap water pressure control, and protection from tank sensor failure.

## Flow diagram

### Crystal B Pure



The Crystal B systems include:

- Boost pump
- Pre-filter set
- Reverse osmosis module
- Deionization module

A UV sterilization module is available as an option (P/N 10102).

## Ordering Information

Model	Part number
Crystal B Pure	CB-1005

## Components

Part number	Accessory	Crystal B Pure
10019	Pre-filter for chlorine and organics reduction	+
	Boost pump	+
	Reverse osmosis module	+
10310	Deionization module, standard	+
10102	UV sterilization module	option
10103	Removable controller with Bluetooth module	option

## Storage tanks

Part number	Accessory	Crystal B Pure
11000	Storage tank "Basic" w/dispense pump, 25L	option
11014	Storage tank "Tiny", 10L	option
10007	Storage tank "Comfort" w/dispense pump, 60L	option
10004	Storage tank "Economy" w/dispense pump, 50L	option

## Consumables

Part number	Description	Replacement criteria	Comments
10019	Replacement pre-filter set, Crystal B	Filter life counter is zero or the filter is clogged	
10310	Replacement deionization module	"DI Err" message is shown, or water conductivity is consistently > 0.5 µS/cm	
10011	Replacement sterilization UV bulb	As required (on average every 3 years)	Systems with 10102 option only