

ULTRAPURE WATER SYSTEMS



Onsite series

Adrona Onsite systems produce ultrapure water from pre-treated water. Ultrapure water produced by the Adrona Onsite complies with the requirements for Grade 1 water for all relevant standards (ISO 3696, ASTM, CLSI).

Adrona Onsite systems are recommended for laboratories with consumption of ultrapure water of 5-10 litres per day.

Adrona Onsite systems are available in following configurations:

- **Onsite HPLC System** (P/N CB-1803) produces water with very low organic carbon (TOC) content. This meets the requirements of liquid chromatography methods. Onsite HPLC water can also be used for some microbiology and molecular biology applications.
- **Onsite Bio System** (P/N CB-1805) produces water with very low organic and RNase/DNase content. This is intended for use in molecular biology, including RNase-sensitive applications.

Water produced by Adrona Onsite systems is intended for most de-

manding applications including, but not limited to:

- inorganic trace analysis
- liquid chromatography
- cell culture
- molecular biology

Ultrapure water produced by an Integrity system, with resistivity of 18.2 MegaOhm*cm (0.055 μ S/cm), exceeds requirements of all relevant standards (ISO 3696 Grade 1, ASTM Type I, CLSI Type I). Crystal

rage tank. The storage tank should be filled with pre-treated water by the operator. Pre-treated water may be obtained from a water still, or a reverse osmosis system.

The Crystal Onsite system comes with a 5L carboy. The carboy has a stopcock and handle for convenient transportation of water from a water still to the Crystal Onsite unit.

The recirculation system ensures a consistent quality of water and reduces total organic carbon (TOC) to a very low level: <2ppb.

A space-saving, integrated, 5L tank is made of high-density polyethy-

lene to minimize contamination. The 5L tank is accessible for cleaning.

All Crystal Onsite systems have a controller with a graphic LCD display for water quality indication. The LCD display provides all the necessary information about system status, remaining pre-filter life, and the polishing module performance. The smart polishing module monitoring system pro-

The user is instructed to replace the polishing module only when the module is close to the end of its service life.

If a Bluetooth option (P/N 10103) is installed, the controller can be detached. The Onsite system can be controlled remotely for convenient operation.

The Crystal Onsite has important safety functions including tank filling control. All cartridges and filters are easily accessible and no tools are required to replace them. The Onsite system can be installed on a laboratory bench or mounted on the wall to save space.

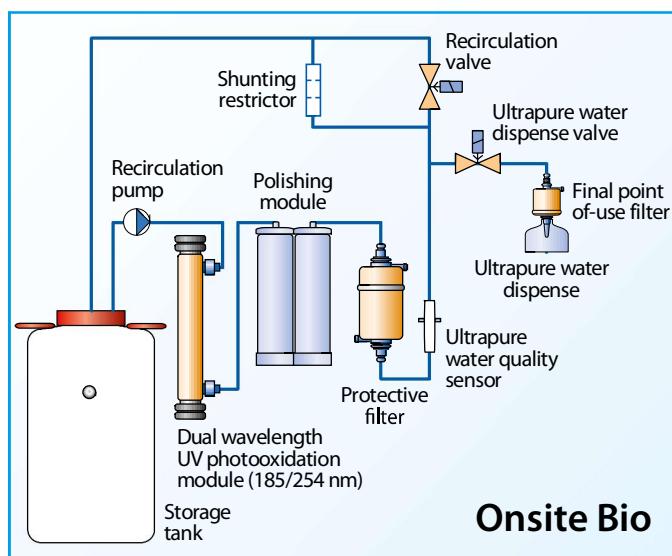
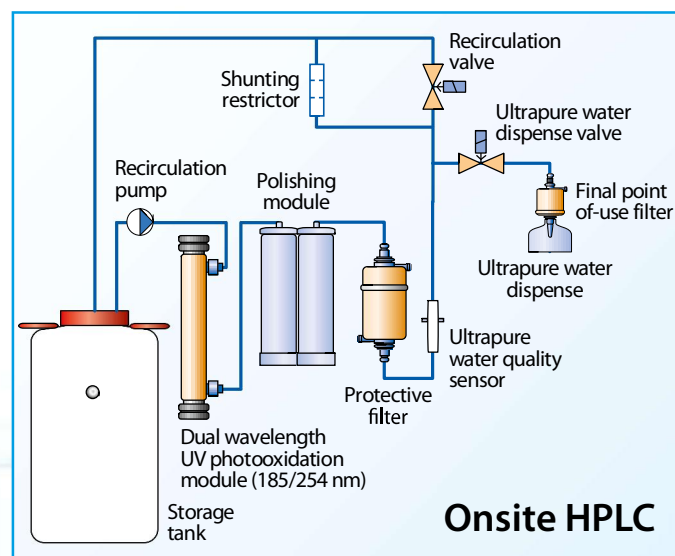
Applications

Application	Onsite HPLC	Onsite Bio
Reagent preparation	●	●
Ion chromatography	●	●
ICP-MS	●	●
Atomic absorption spectrophotometry with graphite atomizer	●	●
ICP-OES	●	●
HPLC	●	●
Gas chromatography	●	●
Total Organic Carbon measurement	●	●
Flow cytometry	–	●
Cell and tissue culture	–	●
Molecular biology	–	●

Components

Part number	Accessory	Onsite HPLC	Onsite Bio
10029	Polishing module	+	+
10105	Photooxidation module	+	+
10012	Point-of-use microfilter	+	–
10109	Point-of-use ultrafiltration module	–	+
10106	Integrated TOC monitor	option	–
10103	Removable controller with Bluetooth module	option	option

Flow diagrams



Specifications

Purified water specifications	Onsite HPLC	Onsite Bio
Ultrapure (Grade 1) water resistivity	18.2 MΩ x cm	18.2 MΩ x cm
Ultrapure (Grade 1) water conductivity	0.055 μS/cm	0.055 μS/cm
TOC	<2 ppb	<2 ppb
RNase	–	<0.01 ng/mL
DNase	–	<4 pg/μL
Bacteria	< 1 cfu/mL	< 1 cfu/mL
Endotoxins	<0.15 EU/mL	< 0.001 EU/mL
Particles > 0.22 μm	<1/ per mL	<1/ per mL
Nominal dispense flow, ultrapure water	2 L/min	2 L/min
Polishing module life	1 m ³	1 m ³
Recovery	>30 %	>30 %
Dimensions (WxDxH), cm	50x40x60	50x40x60
Integrated storage tank	5 L	5 L
Feed water conductivity	< 15 μS/cm	< 15 μS/cm

Ordering Information

Model	Part number
Crystal Onsite HPLC	CB-1803
Crystal Onsite Bio	CB-1805

Consumables

Part number	Description	Replacement criteria	Comments
10029	Replacement polishing module	„DI Err” message is shown, or water conductivity while dispensing is consistently > 0.1 μS/cm	
10018	Replacement photooxidation UV bulb	As required (on average – every 3 years)	„HPLC” and „Bio” systems
10012	Replacement 0.22 μm dispense microfilter	Every 6–12 months	„Trace” and „HPLC” systems
10120	Replacement ultrafilter	Every 6–12 months	„Bio” systems only