# **CRYSTAL EX**

Adrona Crystal EX produces ultrapure and pure water. This multipurpose water purification system is highly appreciated due to the very affordable price.

#### Ordering information

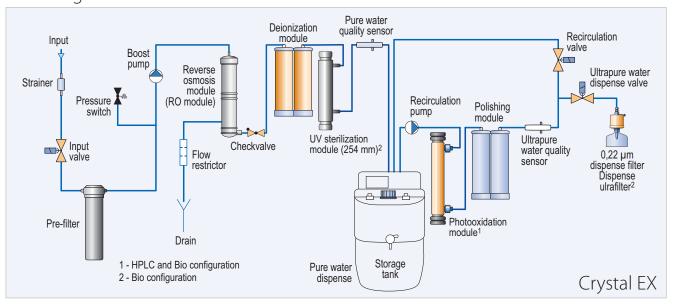
Model	Part number	
Crystal EX Trace	EX-1001	
Crystal EX HPLC	EX-1101	
Crystal EX Bio	EX-1201	



#### Consumables

Part number	Description	Replacement criteria	Comments
10320	Replacement pre-filter	If the filters are clogged or every 6 months	
10310	Replacement deionization module	Grade 2 water conductivity is > 0.5 μm/cm constantly or every 12 months	
10030	Polishing module "Polishing+"	Grade 1 water conductivity is > 0.1 μm/cm constantly or every 12 months	
10017	Replacement sterilization UV bulb	When required (on average every 2 years)	"Bio" systems only
10018	Replacement photooxidation UV bulb	2 years on average	"HPLC" and "Bio" systems only
10013	Replacement 0.22 µm dispense microfilter	Every 6–12 months	"Trace" and "HPLC" systems
10120	Replacement ultrafilter	Every 3–6 months	"Bio" systems only

### Flow diagram



### Description EX series

	Trace	HPLC	Bio
Water type	<ul><li>ultrapure water (Grade 1)</li><li>pure water (Grade 2)</li></ul>	<ul><li>ultrapure water (Grade 1)</li><li>pure water (Grade 2)</li></ul>	<ul><li>ultrapure water (Grade 1)</li><li>pure water (Grade 2)</li></ul>
Application	<ul> <li>atomic absorption spectrometry</li> <li>plasma optical emission spectrometry</li> <li>other inorganic trace analysis</li> </ul>	<ul><li>chromatography</li><li>mass spectrometry</li><li>microbiology</li><li>molecular biology</li></ul>	highly sensitive biology applications
Display		Monochrome LCD display	
Conductivity sensor	•	•	•
TOC Monitor	-	-	-
Volumetric dispensing	-	-	-
Connection to Flow point	-	-	-
Storage tank	required but not included		
Installation	installable on a laboratory bench		

## Specifications

	Crystal EX Trace	Crystal EX HPLC	Crystal EX Bio
Grade 1 water resistivity at 25 °C	18.2 MΩ x cm	18.2 MΩ x cm	18.2 MΩ x cm
Grade 1 water conductivity at 25 °C	0.055 μS/cm	0.055 μS/cm	0.055 μS/cm
Grade 2 water resistivity at 25 °C	$>$ 10 M $\Omega$ x cm	$>$ 10 M $\Omega$ x cm	>10 MΩ x cm
Grade 2 water conductivity at 25 °C	<0.1 μS/cm	<0.1 μS/cm	<0.1 μS/cm
Total Organic Carbon (TOC) level	<10 ppb	<5 ppb*	<5 ppb*
RNase	-	-	<0.01 ng/mL
DNase	-	-	<4 pg/μL
Bacteria	<0.01 CFU/mL	<0.01 CFU/mL	<0.01 CFU/mL
Endotoxins	<0.15 EU/mL	<0.15 EU/mL	<0.001 EU/mL
Particles >0.22 μm	<1 per mL	<1 per mL	<1 per mL
Nominal flow, pure water (to storage tank)	10 L/h	10 L/h	10 L/h
Dimensions (WxDxH), cm	40x35x55	40x35x55	40x35x55
System weight, kg	17	18	19
Operation weight, kg	24	25	26
Feed water pressure	0.4 – 4 bar	0.4 – 4 bar	0.4 – 4 bar
Feed water conductivity	< 1500 μS/cm	< 1500 μS/cm	< 1500 μS/cm

<sup>\*</sup> In appropriate operating conditions <2 ppb, otherwise normally <5 ppb.