

# CRYSTAL EX

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



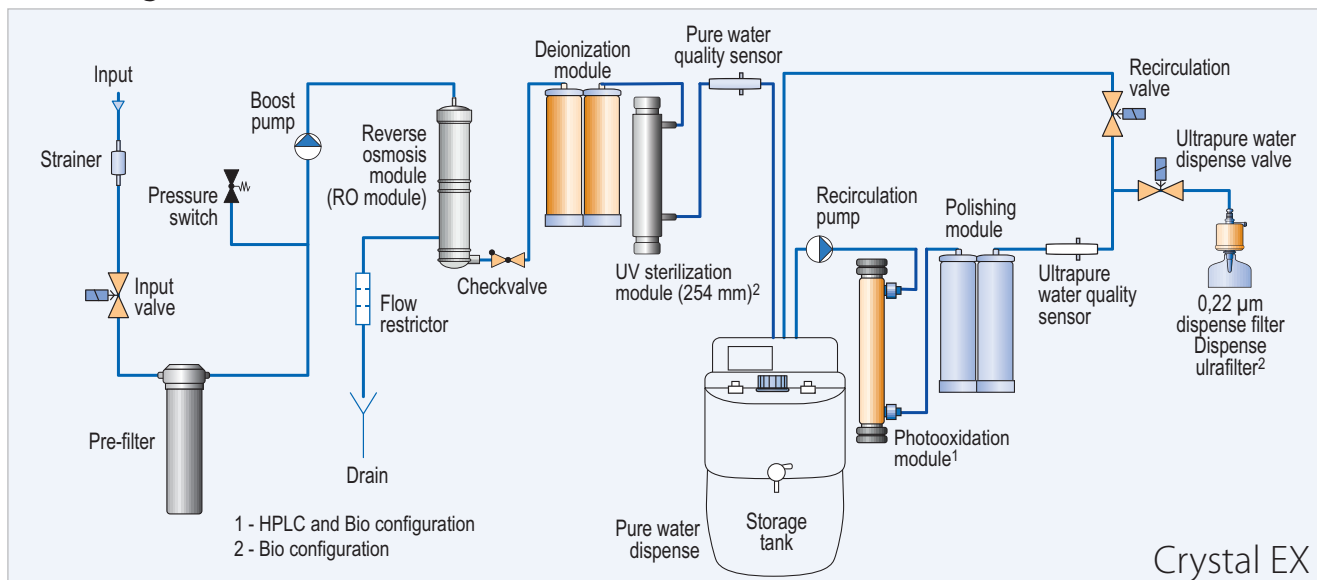
## Ordering information

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 $> 0.5 \mu\text{m}/\text{cm}$ constantly or every 12 months	
10030	Polishing module "Polishing+"	Grade 1 water conductivity is $> 0.1 \mu\text{m}/\text{cm}$ 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 $0.22 \mu\text{m}$ 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
<b>Water type</b>	<ul style="list-style-type: none"> <li>ultrapure water (Grade 1)</li> <li>pure water (Grade 2)</li> </ul>	<ul style="list-style-type: none"> <li>ultrapure water (Grade 1)</li> <li>pure water (Grade 2)</li> </ul>	<ul style="list-style-type: none"> <li>ultrapure water (Grade 1)</li> <li>pure water (Grade 2)</li> </ul>
<b>Application</b>	<ul style="list-style-type: none"> <li>atomic absorption spectrometry</li> <li>plasma optical emission spectrometry</li> <li>other inorganic trace analysis</li> </ul>	<ul style="list-style-type: none"> <li>chromatography</li> <li>mass spectrometry</li> <li>microbiology</li> <li>molecular biology</li> </ul>	highly sensitive biology applications
<b>Display</b>	Monochrome LCD display		
<b>Conductivity sensor</b>	•	•	•
<b>TOC Monitor</b>	-	-	-
<b>Volumetric dispensing</b>	-	-	-
<b>Connection to Flow point</b>	-	-	-
<b>Storage tank</b>	required but not included		
<b>Installation</b>	installable on a laboratory bench		

## Specifications

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

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