

adrona

Q - Front Series

Intelligent Water Purification System



The systems are installable by user and all cartridges and filters are user replaceable. No tools are needed.

The first set of the consumables is included into the delivery.

Adrona water purification systems can be installed either on a laboratory bench or on a wall. Wallmount installation provides the saving of valuable laboratory space.

VOLUMETRIC DISPENSE

Adrona water purification systems have a volumetric dispenser, which enables the user to set accurate dispensing volume for each dispense cycle. The dispense volume can be set either from the keyboard or by using teaching mode. In teaching mode user uses Dispense On/OFF button to do the first dispense cycle manually. Afterwards, the system will dispense exactly the same volume each time the user presses the dispense button again.

WATER QUALITY AND VALIDATION

Embedded recirculation loop ensures stable premium water quality and enables practical elimination of Total Organic Carbon (TOC).

Performance of the deionization and polishing modules is constantly monitored. Monitoring algorithm enables cutting running costs, as replacement of the modules is requested only when service life is close to the end.

Stability of water quality guaranteed by double Ion Exchange cartridge system. (Adrona systems have 2 Ion Exchange cartridges (deionization and polishing) therefore excellent water quality guaranteed even if one of them is waiting for replacement at the moment).

User can carry out the validation of water quality sensors right on the site (available on B30, Integrity+, Connect and Onsite+). It is possible to validate conductivity measuring circuits to check if they are operating properly. Validation kit for OQ is available as an option. This helps the customer to validate water quality measuring circuits on periodical basis. No visit of service engineer is required.

¹ If not specified otherwise

² Depends on model and configuration

TOTAL ORGANIC CARBON (TOC) MONITOR

Organic contaminants may not have effect on conductivity of water, so conductivity sensors cannot be used for TOC monitoring. Therefore, a special TOC monitoring module is needed to measure TOC level. Several models of Adrona water purification systems have the TOC monitor feature. TOC values are shown on display.

DISPLAYS

Provides clear water quality readout and information about the system status including current resistivity and remaining prefilter service life.

MONOCHROME HIGH RESOLUTION LCD

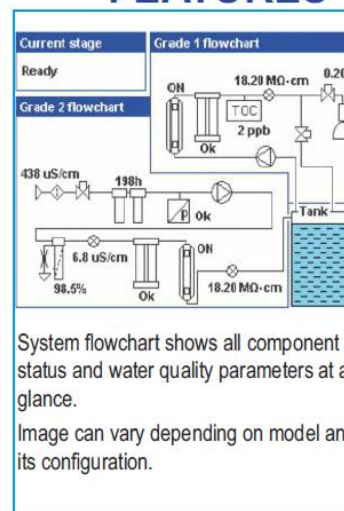


COLOR GRAPHIC LCD DISPLAY

The 16bit color display provides clear readout of water quality, system component status, performance of the polishing module. System component status is reflected on the display in an intuitive color pattern (Green/Yellow/Red).



FEATURES



ELECTRODEIONIZATION MODULE

For the laboratories with the high water consumption Adrona offers electrodeionization module that is an option. It allows significantly reduce the running costs of water purification system due to fact the replacement of EDI module is not required anymore.

SAFETY

All the Adrona water purification systems have all necessary safety functions. They are tested by an independent and accredited company for compliance with the CE directives related to safety and electromagnetic compatibility.

WARRANTY AND AFTERSALES SUPPORT

Adrona provides 1 year warranty and continuous technical support. Adrona support is evaluated very positively by dealers worldwide.

CERTIFICATION

Adrona design, manufacturing, sales and service is ISO 9001:2009 certified to provide the highest quality in every aspect.

Q-FRONT



The newest pure and ultrapure water system with maximum features, convenience and performance. This is the essence of know-hows and experience of Adrona engineers obtained during the decades. Choose between 3 configurations to fit all specific laboratory needs.

- New prefilter with significantly higher trapping capability
- Improved RO and deioniser lifetime
- Stable output water quality
- Convenient flexible dispenser
- Sanitisation cartridge available
- Configuration with EDI or conventional deionisation

DESCRIPTION

	Q-Front EDI Trace	Q-Front EDI HPLC	Q-Front EDI Bio
Water Type	<ul style="list-style-type: none"> ultrapure water (Grade 1) pure water (Grade 2) 	<ul style="list-style-type: none"> ultrapure water (Grade 1) pure water (Grade 2) 	<ul style="list-style-type: none"> ultrapure water (Grade 1) pure water (Grade 2)
Application	<ul style="list-style-type: none"> atomic absorption spectrometry plasma optical emission spectrometry other inorganic trace analysis 	<ul style="list-style-type: none"> chromatography mass spectrometry microbiology molecular biology 	<ul style="list-style-type: none"> highly sensitive molecular biology cell culture other methods sensitive to RNase and endotoxins biology applications
Display	colour graphic LCD display		
Water quality sensor	•	•	•
TOC Monitor	-	•	•
Measurement validation port	•	•	•
Volumetric Dispense	•	•	•
Dispenser	Attached flexible dispenser	Attached flexible dispenser	Attached flexible dispenser
Storage tank	tank "Pro" 30 L included, other tanks optional		
Installation	installable on a laboratory bench		

ORDERING INFORMATION

Model	Part number
Part number depends on the configuration	See Price List for further information
Water quality sensor validation kit	10913
IQ/OQ documentation	10142

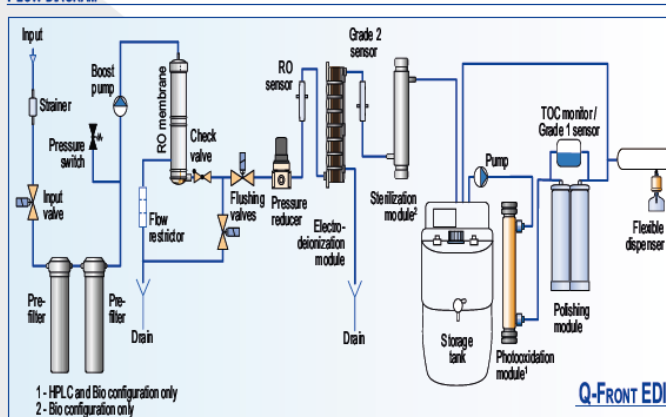
CONSUMABLES

Part number	Description	Replacement criteria	Comments
10310	Deionization module	When indicated on the display or water conductivity is constantly > 0.1 µS/cm during tank filling stage	
10030	Polishing module "Polishing"	When indicated on the display or water conductivity is constantly > 0.1 µS/cm during recirculation	
10410	Pre-filter set	Filter life counter is zero or the filter is clogged	
10018	UV photooxidation bulb	2 years on average	Only for „Bio“ and „HPLC“
10012	Point-of-use microfilter	Every 6-12 months	Only for „Trace“ and „HPLC“
10120	Point-of-use ultrafilter	Every 3-6 months	Only for „Bio“
10011	UV sterilization bulb	When required (on average every 2 years)	Only for „Bio“

SPECIFICATIONS

Purified water parameters	Q-Front system configuration		
	Trace	HPLC	Bio
Grade 1 water resistivity	18.2 MΩ x cm	18.2 MΩ x cm	18.2 MΩ x cm
Grade 1 water conductivity	0.055 µS/cm	0.055 µS/cm	0.055 µS/cm
Grade 2 water conductivity	0.1 µS/cm	0.1 µS/cm	0.1 µS/cm
Total Organic Carbon (TOC) level	<10 ppb	<2 ppb	<2 ppb
RNase	-	-	<0.01 ng/mL
DNase	-	-	<4 pg/µL
Bacteria	<1 CFU/mL	<1 CFU/mL	<0.1 CFU/mL
Endotoxins	<0.15 EU/mL	<0.15 EU/mL	<0.001 EU/mL
Particles >0.22 µm	<1/mL	<1/mL	<1/mL
Deionization module life*	1 m³	1 m³	1 m³
Feed water pressure	0.5 - 4 bar	0.5 - 4 bar	0.5 - 4 bar
Data interface	RS 232	RS 232	RS 232
Dimensions (WxDxH), cm	35x39x54	35x39x54	35x39x54
Weight, kg	27	28	29

FLOW DIAGRAM



For increased convenience of use of the Adrona water purification systems, choose from the variety of accessories to meet your specific needs.

STORAGE TANKS

Adrona water purification systems can be equipped with water storage tanks of various capacity. Depending on the consumption of purified water, user can choose the tank starting from tank with capacity of 10 litres up to 300 litres. All the storage tanks are equipped with level switch and dispense pump.

WATER STORAGE TANK PRO

Specially designed for significant reduction of microbiological contamination possibilities

Features:

- Capacity 25 litres
- Opaque housing walls for protection against light
- Conical bottom for complete draining
- Ergonomical design
- Equipped with stopcock
- Recirculation system for maintaining the water quality
- Automatic UV sanitization (UV lamp) module (option)
- Multiposition level switch, that enables precise control of remaining water
- Fast pure water dispense pump (option)



WATER DISPENSING UNIT

Water dispensing unit provides more convenient use of Adrona systems. One water purification system can be equipped with 2 water dispensing units.

- Adjustable in all dimensions
- Manual and/or volumetric dispensing with teaching mode
- Colour graphic LCD display
- Full remote control for water purification system
- Compatible with B30, Onsite+, Integrity+, Connect and E30 systems



ORDERING INFORMATION

Model	Part number
Water storage tank Pro w/multi position level switch, 25 L	11015
Water storage tank Basic w/ level switch and dispense pump, 25 L	11000
50 L water storage tank Economy w/ level switch, pump	10004
Water storage tank Comfort w/ level switch, dispense pump, 60 L	10007
Water storage tank Tiny w/ level switch, dispense tap, 10L	11014
Storage tank Comfort w/dispense pump, 100L	10027
Storage tank Comfort w/dispense pump, 200L	10026
Storage tank Comfort w/dispense pump, 300L	10025
Automatic sanitization module for tank	10315
Water dispensing unit	10305

WATER STORAGE TANK BASIC 25 L



WATER STORAGE TANK ECONOMY 50 L



WATER STORAGE TANK COMFORT 60 L

