

LABORATORY WATER SYSTEMS





Enabling scientific research with a clearer laboratory water solution.

At Avidity Science®, we are as enthusiastic about designing the ultimate laboratory water systems as you are about your research and results.

Developed with today's laboratory in mind and manufactured globally, our range combines space and cost saving initiatives with a stylish finish - the Avidity Science® way.

As your dedicated laboratory water experts, we can offer advice and guidance from initial enquiry, layout and distribution designs through to complete project management and installation. Thereafter, you can rely on Avidity Science® to maintain your pure water supply for years to come.



Introducing the Avidity Science[®] difference.

Our strength is in supporting scientists.

We understand the critical nature of pure water for research facilities like yours; enabling scientific breakthroughs to be achieved across the research sector. That's why our products and services are based on your requirements.

At Avidity Science[®], we offer a pure water solution for every laboratory application, supported by our experienced team of technicians who will ensure that your pure water supply is never compromised.

EXPERT

Many years of water purification and delivery methods to provide unparalleled solutions to the laboratory space.

SUPPORT

With a customer-centric culture and a focus on service excellence, we're there when and where you need us.

APPROACHABLE

We genuinely enjoy the customers we work with. When you have a shared passion, it's easy to work together for a joint goal.

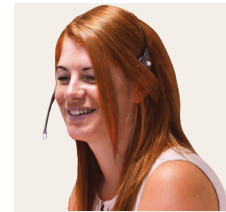
Excellent service in all forms. User guides, video tutorials, online assistance, help desk and local technicians.



Avidity Science® Service From The Start

Avidity Science® can provide specialist support from our experienced, global-based, project team who are equipped with the latest in design technology, to deliver the right configuration to your laboratory.

We will guide you through product selection and layout designs and our installation engineers will ensure minimal disruption to your work while we commission your new laboratory water systems.



Learn from our Global Experts

Operator training is free of charge on installation. We can supply customized advanced training on any of our products as required throughout your region.

A Service Plan to Suit Your Needs

Select the correct service plan for complete peace of mind adapted for you. Your equipment will be well looked after by our own experts who are also able to service third party models.

Why Choose a Service Contract?

REDUCE RISK

Protect your equipment, your employees and your work

CREATE SAVINGS

Regular maintenance reduces unexpected invoices for repairs

CONSISTENT RESULTS

Keep your machine and equipment working at optimum capacity

With a customer-centric culture and a focus on service excellence, we're there when and where you need us.

Additional Services

Customized Water Systems for New Buildings and Laboratories

We provide many water purification options for laboratories in university and clinical research environments, healthcare, diagnostics, biotechnology and pharmaceutical settings.

Our on-site qualified design and projects team offer a full design and installation service for your water distribution needs. With extensive experience in supplying and installing systems, we will manage the project from the design stage through to completion of your new or refurbished laboratory or building.

Global Standards Established

Our portfolio is compliant to globally recognized, water purification quality standards for ultimate customer reassurance, including ISO 3696:1995, ASTM and CLRW (CLSI).



Understanding Water Purification

In order to produce pure water suitable for use in scientific applications, water must pass through a series of technologies which remove impurities. Various laboratory applications require the removal of different impurities and therefore a range of technologies are utilized.

PRE-TREATMENT

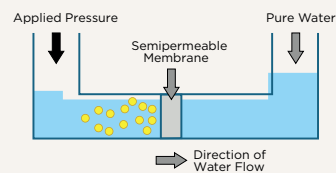
Filtration

Depth filters are commonly used as pre-treatment. Raw water passes through a series of winding fibers and carbon, which attract and trap impurities. This offers protection to the RO membrane and other purification technologies that follow. Membrane sub micron filters are traditionally used as the final step to remove bacteria and other particles which have not been dealt with by the preceding technologies.

TYPE 3 WATER

Reverse Osmosis (RO)

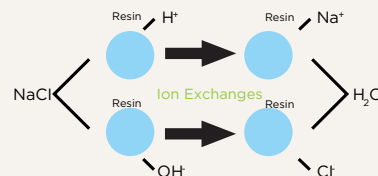
This is the most economical method of removing up to 99% of feed water contaminants. During natural osmosis, water flows from a less concentrated solution through a semipermeable membrane to a more concentrated solution until concentration and pressure on both sides of the membrane are equal. In water purification, external pressure is applied to the more concentrated side of the membrane to reverse the natural osmotic flow. This forces the feed water through the semipermeable membrane. The impurities are deposited on the membrane surface and flushed to drain.



TYPE 2 WATER

Deionization (DI)/Ion exchange

This process removes ions from water, usually RO water, with the use of synthetic resins. The ions are removed from the water through a series of chemical reactions. These reactions occur as the water passes through the ion exchange resin beads. Gradually, all unwanted ions are replaced by hydrogen and hydroxyl ions which combine to form pure water.



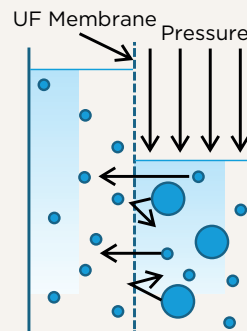
TYPE 1 WATER

Ultraviolet (UV) photo oxidation at 254nm and 185nm

Photochemical oxidation and ultraviolet light eliminate trace organics and inactivate microorganisms in feed water. The 254nm light reacts with bacterial DNA resulting in denaturation. The 185nm light breaks up long chain organics which can then be removed from the water by ion exchange.

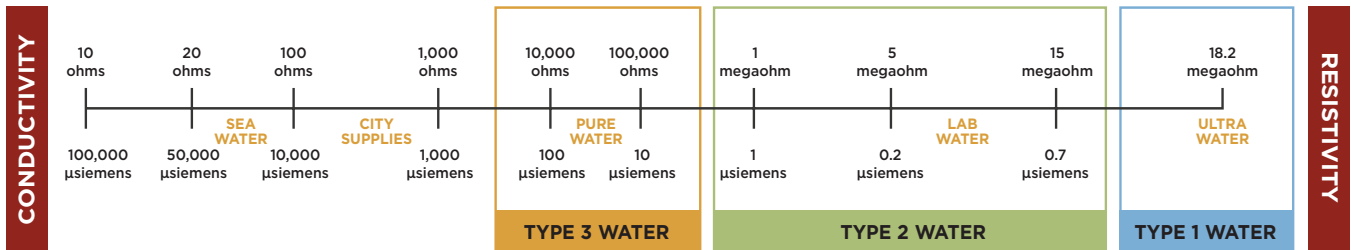
Ultrafiltration (UF)

Ultrafiltration is used to remove pyrogens (bacterial endotoxins) and nucleases. This process is critical when producing water for use in tissue or cell culture and media preparation. Ultrafilters use size exclusion to remove particles and macromolecules. Ultrafilters are usually employed at the end of the system to ensure near total removal of macromolecular impurities like pyrogens, nucleases and particulates.





Ensuring precise purity for *your* applications



III	II	I
REVERSE OSMOSIS	DEIONIZED	ULTRAPURE
<p><40µS/cm</p> <p>Up to 98% rejection of incoming feedwater inorganics, typically</p>	<p>1 - 15MΩ·cm</p>	<p>18.2MΩ·cm</p>
APPLICATION		
<ul style="list-style-type: none"> Autoclave Feed Glasswasher Feed Feed to Ultrapure Water Systems Hydroponics Steam Generators 	<ul style="list-style-type: none"> Buffer & Media Preparation Sample Dilution & Reagent Preparation Spectrophotometry Protein Electrophoresis Cytology & Histology Glassware Washing & Rinsing 	<ul style="list-style-type: none"> Molecular Biology Electrochemistry Critical Cell & Tissue Culture (GF) AAS, HPLC, IC, ICP-MS, GC, MS DNA Sequencing Genomics Proteomics Immunology Pharmacology
PROCESS		
<p>Reverse Osmosis (RO)</p> <p>This is the most economical method of removing up to 98% of feed water inorganic contaminants and >99% of organics, bacteria and particulates. In water purification, external pressure is applied to the more concentrated side of the membrane to reverse the natural osmotic flow. This forces the feed water through the semi-permeable membrane to produce permeate. The impurities are deposited on the membrane surface and flushed to drain as concentrate.</p>	<p>Deionization (DI) / Ion Exchange</p> <p>This process removes ions from water, usually RO water, with the use of synthetic cation and anion resins. The ions are removed from the water through a series of chemical reactions. These reactions occur as the water passes through the ion exchange resin beads. Gradually, all unwanted ions are exchanged for hydrogen and hydroxyl ions which combine to form pure water.</p>	<p>Ultraviolet (UV) Photo Oxidation at 254nm & 185nm</p> <p>Photochemical oxidation and UV light eliminate trace organics and inactive microorganisms in feed water. The 254nm light reacts with bacterial DNA resulting in denaturation. The 185nm light breaks down long chain organics which can then be removed from the water by ion exchange.</p> <p>Final Filtration</p> <p>Typically final filtration is deployed at the end of the process to ensure near total removal of such impurities. Depending on the type of filtration, pyrogens, nucleases and particle options are available.</p>



Introducing the *i-Series* water purification range

The *i-Series* portfolio offers a complete range of water purification systems to meet your most stringent applications and laboratory requirements.

indisputable water quality

- **Unique twin pass RO technology**
- Specific Pre-treatment Module

intelligent monitoring

- **Data Capture**
- System Monitoring

information at a glance

- **On-screen flow diagram**
- Reservoir levels visible on multiple displays throughout

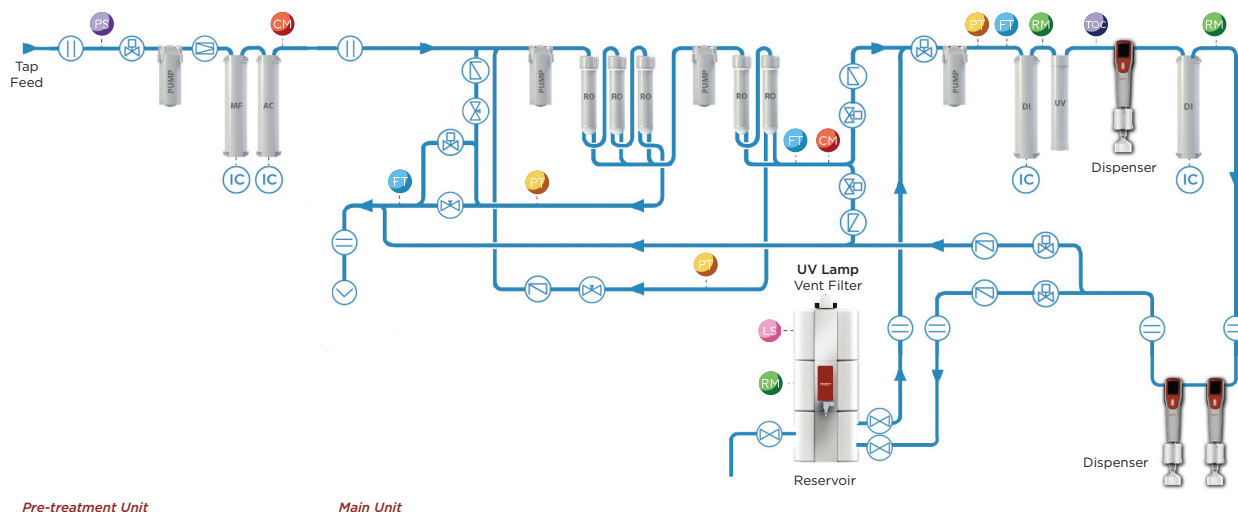


integrity of data

- **Cartridge traceability with data tag**
- Printable option

integrated pre-treatment

- **Standard on Puro-*i*, Duo-*i* II.I and Duo-*i* III.I units**



Pre-treatment Unit

Main Unit

Pressure switch	Flow transmitter	Resistivity transmitter	TOC Indicator	Solenoid valve	Intelligent chip	Decompression valve	Drain
Conductivity transmitter	Pressure transmitter	Level sensor	Hand valve	Check valve	Restrictor valve	Connector	

Duo-*i* III.I Flowchart

Laboratory Water System Overview

Use the table below to help you find the perfect Type 3 to Type 1 water system for your laboratory.

MODEL	WATER QUALITY	PRODUCTION RATE (L/HR)	TOC MONITORING	RESERVOIR REQUIRED	FINAL FILTER OPTIONS	WALL MOUNTABLE	TOUCH SCREEN USER INTERFACE
Puro™ III	Type III	Up to 25, 45 or 85L/hr		✓		✓	✓
Puro™ III T	Type III	10 or 20L/hr				✓	✓
Puro™-i III	Type III	10 or 30L/hr	✓*	✓			✓
Geno™ II	Type II	Up to 25 or 45L/hr		✓		✓	✓
Geno™ II T	Type II	10 or 20L/hr				✓	✓
Duo™-i III I	Type III & I	10 or 30L/hr	✓*	✓	✓		✓
Duo™ II I	Type II & I	Up to 25L/hr	✓	✓	✓	✓	✓
Duo™-i II I	Type II & I	10 or 20L/hr	✓*	✓	✓		✓
Alto™ I	Type I	Up to 2 L/min	✓		✓	✓	✓
Alto™-i I	Type I	Up to 2 L/min	✓*		✓		✓
Solo™ S	Type I	Up to 1.2 L/min	✓*				✓
Geno™ CL	Type II	50 to 200 L/hr depending on model					✓

* Optional regional differences



REMOTE DISPENSER OPTION	DIMENSIONS (HXWXD)	DRY WEIGHT	KEY FEATURES	PAGE IN BROCHURE
	500 x 490 x 290mm 19.7" x 19.3" x 11.5"	23kg 50.7lbs	<ul style="list-style-type: none"> • RO dampening technology • Anti-vibration • Variable flow rates 	10
	500 x 485 x 330mm 19.7" x 19.1" x 13"	20kg 44.1lbs	<ul style="list-style-type: none"> • Compact • Integrated tank 	11
✓	575 x 366 x 492mm 22.6" x 14.4" x 19.4"	23kg 50.7lbs	<ul style="list-style-type: none"> • Twin pass RO • Data capture • Drop-by-drop dispensing • Cartridge traceability 	12
	500 x 490 x 290mm 19.7" x 19.3" x 11.5"	23kg 50.7lbs	<ul style="list-style-type: none"> • RO dampening technology • Anti-vibration • Variable flow rates 	13
	500 x 485 x 330mm 19.7" x 19.1" x 13"	20kg 44.1lbs	<ul style="list-style-type: none"> • Compact • Integrated tank 	14
✓	575 x 366 x 492mm 22.6" x 14.4" x 19.4"	23kg 50.7lbs	<ul style="list-style-type: none"> • Twin pass RO • Data capture • Drop-by-drop dispensing • Cartridge traceability 	15
✓	500 x 490 x 290mm 19.7" x 19.3" x 11.5"	30kg 66.1lbs	<ul style="list-style-type: none"> • RO dampening technology • Variable flow rates • Drop-by-drop dispensing 	16
✓	575 x 366 x 492mm 22.6" x 14.4" x 19.4"	23kg 50.7lbs	<ul style="list-style-type: none"> • Twin pass RO • Data capture • Drop-by-drop dispensing • Cartridge traceability 	17
✓	500 x 490 x 290mm 19.7" x 19.3" x 11.5"	23kg 50.7lbs	<ul style="list-style-type: none"> • Anti-vibration • Automatic flush • Cartridge traceability • Drop-by-drop dispensing 	18
✓	575 x 366 x 492mm 22.6" x 14.4" x 19.4"	16.5kg 36.4lbs	<ul style="list-style-type: none"> • Application specific cartridges • Data capture • Drop-by-drop dispensing • Cartridge traceability 	19
	585 x 377 x 526mm 23" x 14.8" x 20.7"w	18kg 39.7lbs	<ul style="list-style-type: none"> • Cartridge design enables reuse • Configure flow rate to drop-by-drop • Recyclable treatment media • NFC for consumable identification 	20-21
	1852 x 750 x 600mm 29.5" x 23.6" x 73"	182kg (Net) 401lbs (Net)	<ul style="list-style-type: none"> • High volume production • Integrated tank • Casters for mobility • Remote access available 	22-23

* Dimensions for accessories can be found on pages 24-25

Puro™ III

Pure water in high demand

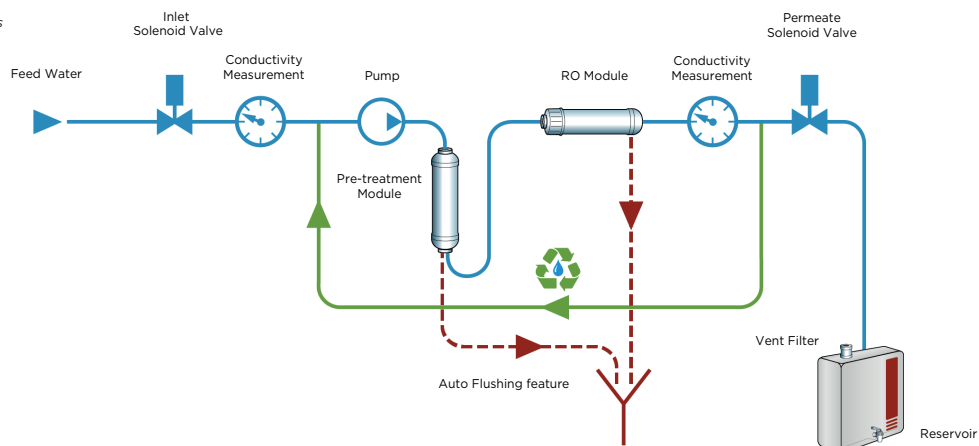


Reverse Osmosis

- Type 3 (RO) water
- Up to 85L/hr with a compact footprint
- RO sanitization process
- Quiet operation provided by unique dampening technology
- One easy-change pre-filter
- Mount on bench, wall or on top of a reservoir
- Intuitive, icon-based, interactive user interface with touch screen
- Internal leak detector and boost pump included
- Choice of storage reservoir size - 30L, 60L or 100L

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY	INORGANICS REJECTION RATE**	DAILY USAGE (MAX)	FEED WATER PRESSURE
PURO III 20	≥25L/hr	<40µS/cm	≥98%	160L/day	0.1 - 6 bar 1.45 - 87 psi
PURO III 40	≥45L/hr	<40µS/cm	≥98%	320L/day	0.1 - 6 bar 1.45 - 87 psi
PURO III 80	≥85L/hr	<40µS/cm	≥98%	640L/day	2 - 6 bar 29 - 87 psi

** Depending on feed water impurities



Puro™ III T

Small in size, big in benefits



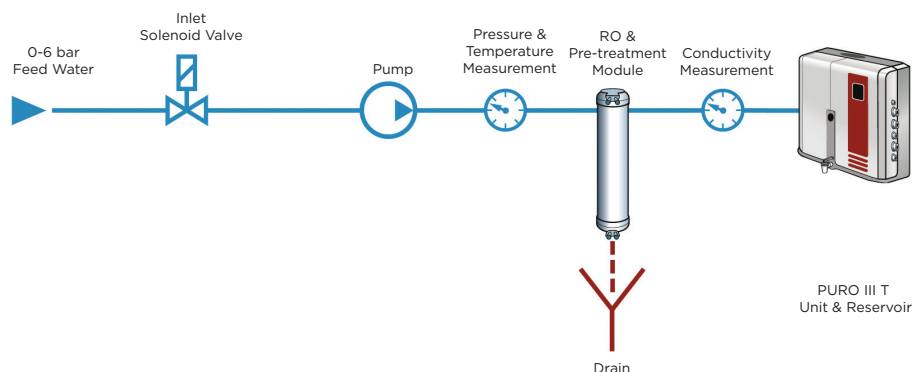
Reverse Osmosis

- Type 3 (RO) water
- Space-saving footprint with integrated 35L reservoir
- Make-up rate 10 or 20L/hr with fast dispense
- Intuitive, icon-based interactive user interface with touch screen
- Wall or bench mounting
- Quiet, internal boost pump and patented anti-vibration mountings
- Energy consumption of <60w when processing water

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY	INORGANICS REJECTION RATE**	DAILY USAGE (MAX)*	FEED WATER PRESSURE
PURO III T 10	10L/hr	<40µS/cm	≥98%	80L/day	0.1 - 6 bar 1.45 - 87 psi
PURO III T 20	20L/hr	<40µS/cm	≥98%	160L/day	0.1 - 6 bar 1.45 - 87 psi

* Based on make-up rate of 8hr/day excluding DI resin capacity

** On UV model and depending on feed water impurities



Puro-i™ III

Confidence in quality

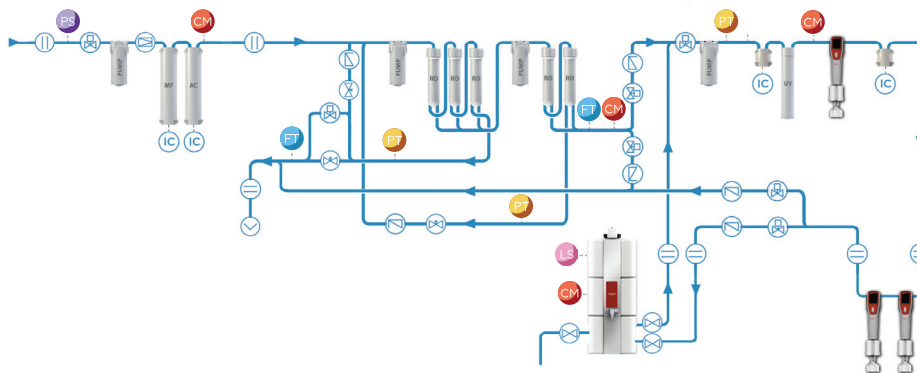


Reverse Osmosis

- Type 3 (RO) water
- Unique twin pass RO technology (<math><10\mu\text{S}/\text{cm}</math>, typical <math><5\mu\text{S}/\text{cm}</math> if feed condition is <math><2000\mu\text{S}/\text{cm}</math>)
- Auto RO sanitization
- Interactive 7" touch screen
- Remote dispensing option for Type 3 water
- Auto reservoir sanitization option
- Endotoxin and Nuclease-free option available
- Flexible pre-treatment options for variable feed water quality
- Choice of storage reservoir size - 35L, 70L or 105L

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY	DISPENSE FLOW RATE	INORGANICS REJECTION RATE	BACTERIA*	PARTICLES (>0.2 μM)*	FEED WATER PRESSURE
PURO-i III 10	10L/hr	<math><40\mu\text{S}/\text{cm}</math>	$\geq 2\text{L}/\text{min}$	$\geq 99\%$	<math><0.01\text{CFU}/\text{mL}</math>	<math><1/\text{ml}</math>	0.5 - 6 bar 7.25 - 87 psi
PURO-i III 30	30L/hr	<math><40\mu\text{S}/\text{cm}</math>	$\geq 2\text{L}/\text{min}$	$\geq 99\%$	<math><0.01\text{CFU}/\text{mL}</math>	<math><1/\text{ml}</math>	0.5 - 6 bar 7.25 - 87 psi

* With LWFS32302 final filter



Pressure switch	Flow transmitter	Level sensor	Solenoid valve	Intelligent chip	Decompression valve	Drain
Conductivity transmitter	Pressure transmitter	Hand valve	Check valve	Restrictor valve	Connector	

Geno™ II

Beyond expectation



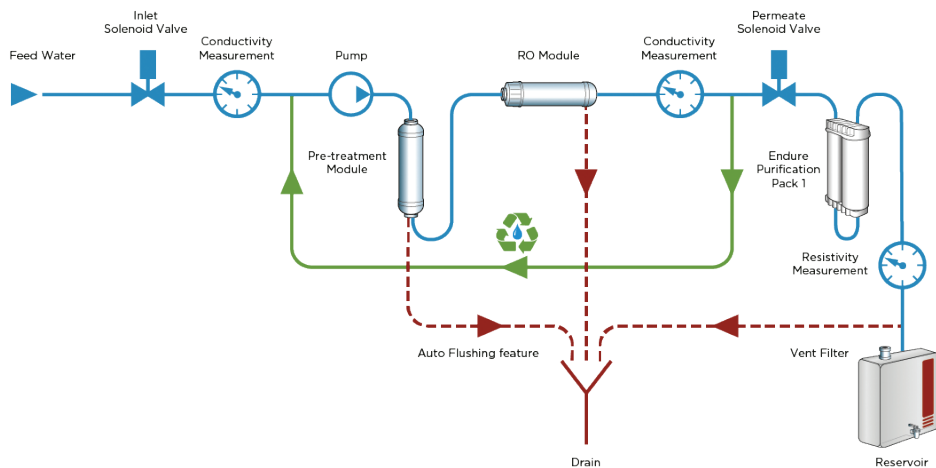
Deionized Water

- Type 2 (DI) water
- RO sanitization process
- Simple operation with easy-change consumables
- Mount on bench, wall or on top of a reservoir
- Intuitive, icon-based, interactive user interface with touch screen
- Internal leak detector and boost pump included
- Choice of storage reservoir size - 30L, 60L or 100L

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY (@25°C/77°F)	DISPENSE RATE FROM TANK*	INORGANICS REJECTION RATE**	DAILY USAGE (MAX)	FEED WATER PRESSURE
GENO II 20	≥25L/hr	1 - 15MΩ-cm	3 - 7L/min	≥98%	160L/day	0.1 - 6 bar 1.45 - 87 psi
GENO II 40	≥45L/hr	1 - 15MΩ-cm	3 - 7L/min	≥98%	320L/day	0.1 - 6 bar 1.45 - 87 psi

* Depending on tank and pump setup

** Depending on feed water impurities



Geno™ II T

For all sensitive laboratory applications



Deionized Water

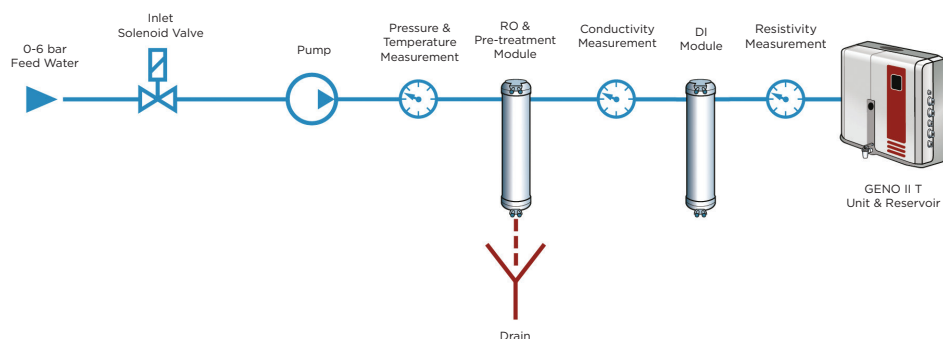
- Type 2 (DI) water
- Space-saving footprint with integrated 35L reservoir
- Make-up rate 10 or 20L/hr with fast dispense
- Intuitive, icon-based, interactive user interface with touch screen
- Wall or bench mounting
- Quiet, internal boost pump and patented anti-vibration mountings
- Energy consumption of <60w when processing water

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY (@25°C/77°F)	TOC REDUCTION***	INORGANICS REJECTION RATE**	DAILY USAGE (MAX)*	FEED WATER PRESSURE
GENO II T 10	10L/hr	1 - 15MΩ·cm	96%	≥98%	80L/day	0.1 - 6 bar 1.45 - 87 psi
GENO II T 20	20L/hr	1 - 15MΩ·cm	96%	≥98%	160L/day	0.1 - 6 bar 1.45 - 87 psi

* Based on make-up rate of 8hr/day excluding DI resin capacity

** On UV model and depending on feed water impurities

*** Depending on feed water quality



DuoTM-i III I

Efficient dual quality

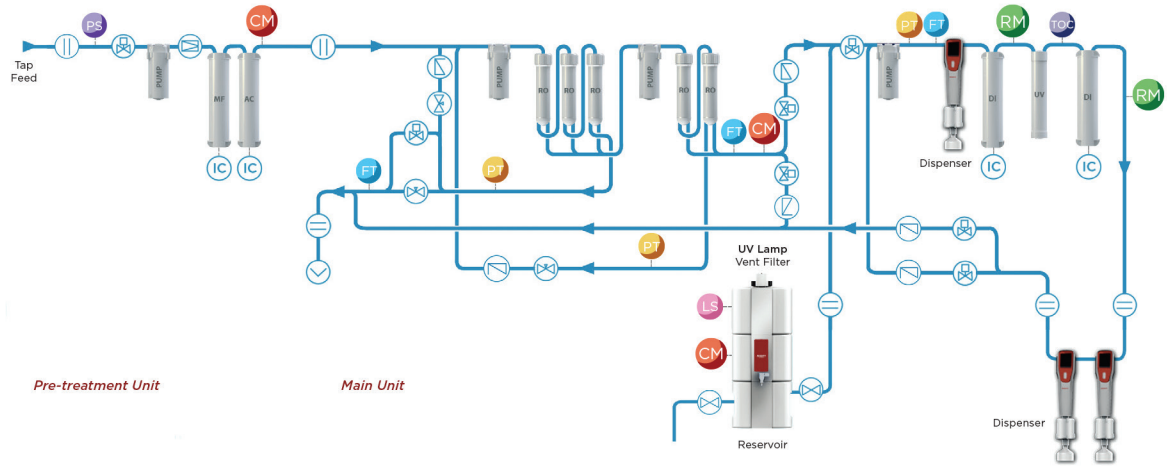


Reverse Osmosis and Ultrapure Water

- Dispense Type 1 and Type 3 water (optional) from the remote dispenser(s)
- Unique twin pass RO technology (<10µS/cm, typical <5µS/cm if feed condition is <2000µS/cm)
- Data capture with printable option
- Dispense Type 3 water from the reservoir
- Endotoxin and Nuclease-free option available
- Cartridge traceability with data tag
- Auto reservoir sanitization option
- Interactive 7" touch screen
- Color coded dispensing stations with up to 2 flexible dispensing options
- Choice of storage reservoir size - 35L, 70L or 105L

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY (@25°C/77°F)	DISPENSE FLOW RATE	BACTERIA*	TOC****	ENDOTOXINS**	RNASE***	DNASE***	PROTEASE***
TYPE 3 DUO-i III.I 10	10L/hr	<5µS/cm	≥2L/min	<0.01CFU/mL	<30ppb	-	-	-	-
DUO-i III.I 30	30L/hr	<5µS/cm	≥2L/min	<0.01CFU/mL	<30ppb	-	-	-	-
TYPE 1 DUO-i III.I (ALL)	-	18.2MΩ-cm	≥2L/min	<0.01CFU/mL	≤5ppb	<0.001EU/mL	<1pg/mL	<1pg/mL	<0.15µg/mL

* With LWFS32302 final filter ** With LWFS32303 final filter *** With TCO04 final filter **** With feed water TOC less than 2ppm



PS Pressure switch FT Flow transmitter RM Resistivity transmitter TOC TOC Indicator
CM Conductivity transmitter PT Pressure transmitter LS Level sensor Solenoid valve IC Intelligent chip Decompression valve Drain
Hand valve Check valve Restrictor valve Connector

Duo™

Dual quality; One clear solution

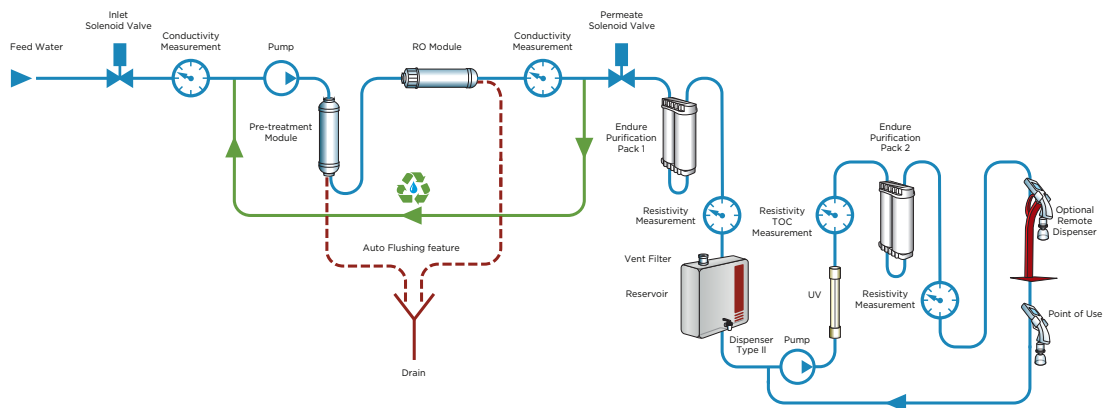


Deionized and Ultrapure Water

- Type 2 and Type 1 water quality from one unit
- Option of remote and/or integrated dispenser
- Intuitive, icon-based, interactive user interface with touch screen
- Up to 2L/min Ultrapure Water with volumetric dispense
- Variable make up rate up to 25L/hr
- Mount on bench, under bench or on the wall
- Continuous TOC monitoring
- Endotoxin and Nuclease-free option available
- Choice of storage reservoir size - 30L, 60L or 100L

MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY (@25°C/77°F)	DISPENSE FLOW RATE	DISPENSER WATER QUALITY (@25°C/77°F)	BACTERIA	TOC	ENDOTOXINS**	RNASE**	DNASE**	PROTEASE**
DUO II.I	≥25L/hr	15MΩ·cm	≥2L/min	18.2MΩ·cm	<0.01CFU/mL	≤5ppb	<0.001EU/mL	<1pg/mL	<5pg/mL	<0.15µg/mL
DUO II.I-R	≥25L/hr	15MΩ·cm	≥2L/min	18.2MΩ·cm	<0.01CFU/mL	≤5ppb	<0.001EU/mL	<1pg/mL	<5pg/mL	<0.15µg/mL

** Using correct final filter TC004



Duo[™]-i

Intelligent dual quality



Deionized and Ultrapure Water

- Dispense Type 1 and Type 2 water (optional) from the remote dispenser(s)
- Unique twin pass RO technology ensures enhanced DI cartridge capacity
- Data capture with printable option
- Dispense Type 2 water from reservoir
- Integrated Water Leakage Protection
- Endotoxin and Nuclease-free option available
- Cartridge traceability with data tag
- Interactive 7" touch screen
- Color coded dispensing stations with up to 2 flexible dispensing options
- Choice of storage reservoir size - 35L, 70L or 105L

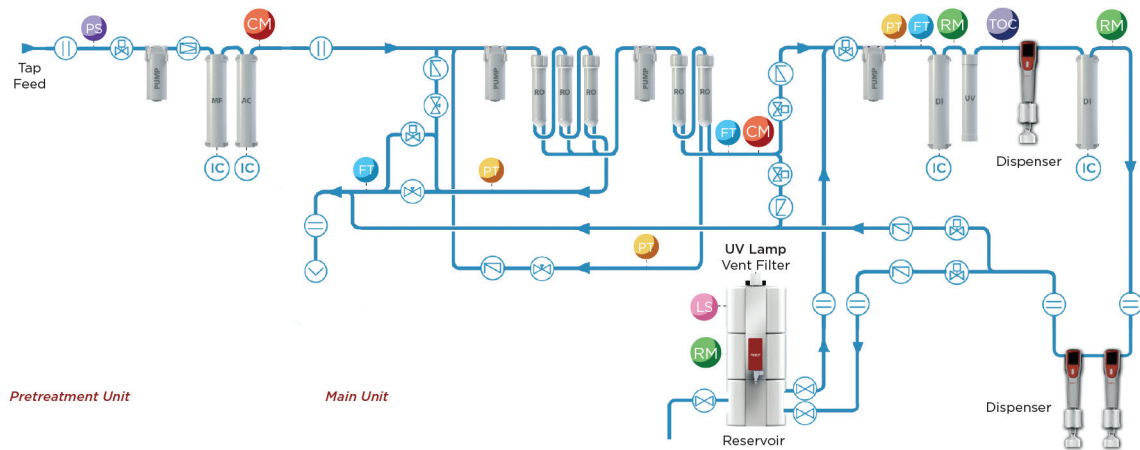
MODEL	MAKE-UP FLOW RATE (@15°C/59°F)	WATER QUALITY (@25°C/77°F)	DISPENSE FLOW RATE	BACTERIA*	TOC****	ENDOTOXINS**	RNASE***	DNASE***	PROTEASE****
DUO-i II.I 10	10L/hr	>5MΩ-cm	≥2L/min	<0.01CFU/ml	<30ppb	-	-	-	-
DUO-i II.I 20	20L/hr	>5MΩ-cm	≥2L/min	<0.01CFU/ml	<30ppb	-	-	-	-
DUO-i III.I (ALL)	-	18.2MΩ-cm	≥2L/min	<0.01CFU/ml	<5ppb	<0.001EU/mL	<1pg/mL	<1pg/mL	<0.15µg/mL

* With LWFS32302 final filter

** With LWFS32303 final filter

*** With TC004 final filter

**** With feed water TOC less than 2ppm



Alto™ I

Ultrapure, Ultra-flexible

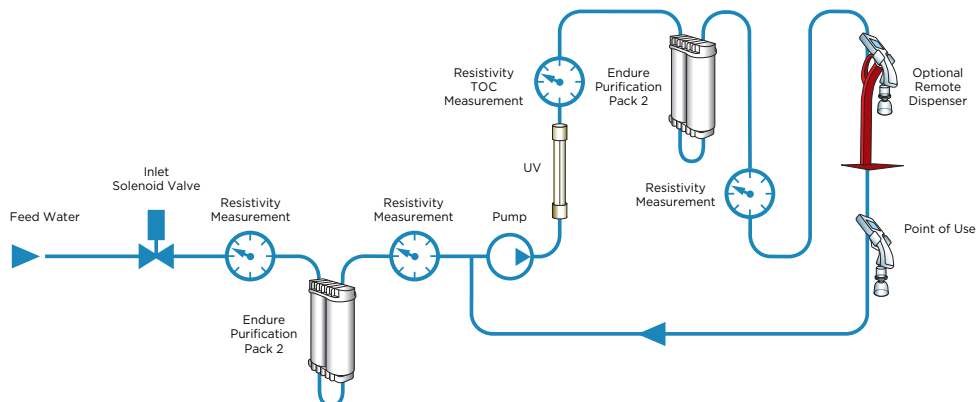


Ultrapure Water

- Type 1 water up to 2L/min
- Volumetric and drop-by-drop dispensing
- Continuous TOC monitoring
- Dual wave length 185/254 nm UV lamp
- Option of remote and/or integrated dispenser
- Intuitive, icon based touch screen
- Mount on bench, under bench, or on the wall
- Endotoxin and Nuclease-free option available

MODEL	DISPENSE WATER QUALITY (@25°C/77°F)	DISPENSE FLOW RATE	BACTERIA	TOC	ENDOTOXINS***	RNASE***	DNASE***	PROTEASE***	FEED WATER PRESSURE
ALTO I	18.2MΩ·cm	≥2L/min	<0.01CFU/ml	≤5ppb	<0.001EU/ml	<1pg/mL	<5pg/mL	<0.15µg/mL	1 - 6 bar 14.50 - 87 psi
ALTO I-R	18.2MΩ·cm	≥2L/min	<0.01CFU/ml	≤5ppb	<0.001EU/ml	<1pg/mL	<5pg/mL	<0.15µg/mL	1 - 6 bar 14.50 - 87 psi
ALTO I-T	18.2MΩ·cm	≥2L/min	<0.01CFU/ml	≤5ppb	<0.001EU/ml	<1pg/mL	<5pg/mL	<0.15µg/mL	Tank Fed No Minimum
ALTO I-TR	18.2MΩ·cm	≥2L/min	<0.01CFU/ml	≤5ppb	<0.001EU/ml	<1pg/mL	<5pg/mL	<0.15µg/mL	Tank Fed No Minimum

*** Using correct final filter TC004



Alto™-i I

Ultra-Intelligent,
Ultra-Informative



Ultrapure Water

- Type 1 water up to 2L/min
- Dual wave length 185/254 nm UV lamp
- Data capture with printable option
- Cartridge traceability with data tag
- Interactive 7" touch screen
- Continuous TOC monitoring
- Endotoxin and Nuclease-free option available
- Volumetric and drop-by-drop dispensing
- Color coded dispensing stations with up to 2 flexible dispensing options

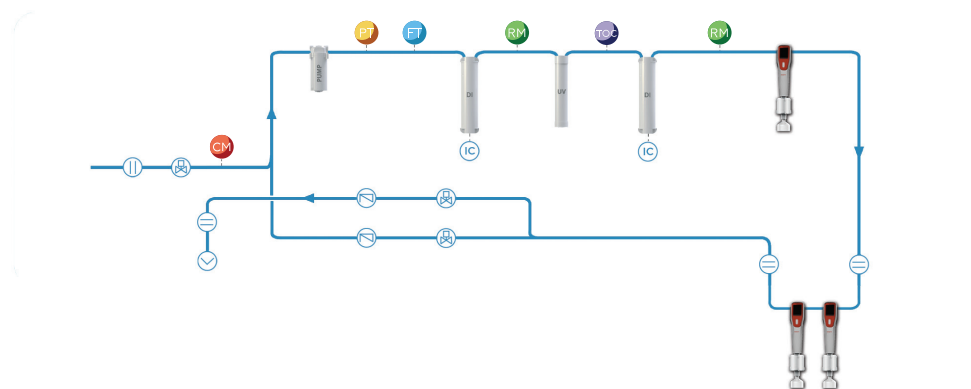
MODEL	DISPENSE WATER QUALITY (@25°C/77°F)	DISPENSE FLOW RATE*	PARTICLES (>0.2µM)*	BACTERIA	TOC****	ENDOTOXINS**	RNASE***	DNASE***	PROTEASE***
ALTO-i I	18.2MΩ·cm	≥2L/min	<1/ml	<0.01CFU/ml	≤5ppb	<0.001EU/mL	<1pg/mL	<5pg/mL	<0.15µg/mL

* With LWFS32302 final filter

** With LWFS32303 final filter

*** With TCO04 final filter

**** With feed water TOC less than 50ppb



Solo™

Revolutionary, Sustainable
Water Purification

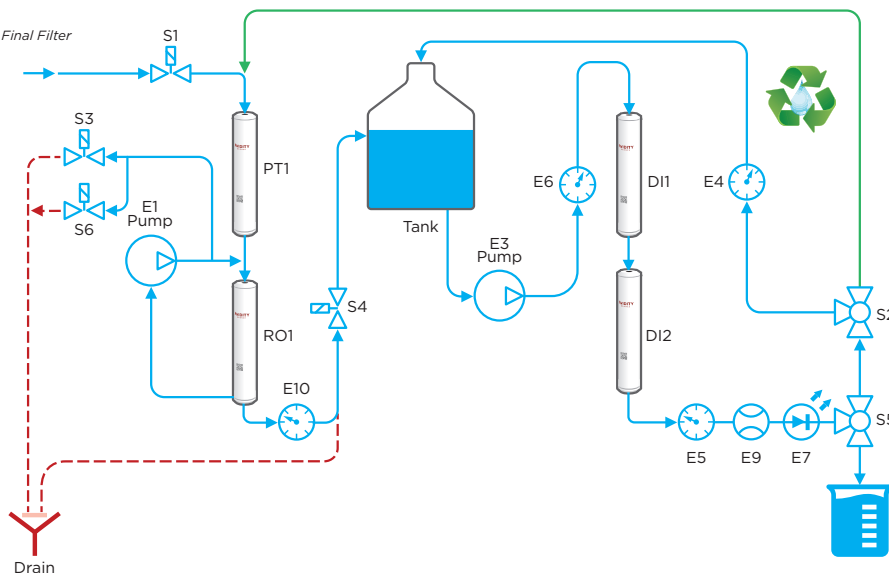


Ultrapure Water - Up to 15L/day

- Tap to Type 1 water up to 1.2L/min
- Real-time TOC monitoring and password protection for critical operating parameters
- Smart & flexible volumetric dispensing from 100ml to 4 liters
- Internal 4.2L tank and leak detection
- Dual wavelength 185/254nm UV
- 5-inch TFT color screen with simple icon navigation
- Re-useable cartridges with AvRecycle Program
- Effortless operation and maintenance with system status via color-coded Smart button
- Near Field Communication (NFC) for consumable identification and secure data logging

MODEL	DISPENSE WATER QUALITY (@25°C/77°F)	MAX DISPENSE FLOW RATE*	PARTICLES (<0.2µM)**	BACTERIA**	TOC****	RNASE*	DNASE*	PROTEASE*
SOLO S	18.2MΩ·cm	1.2L/min	1/ml	<0.01CF _u /ml	<2ppb	<1pg/mL	<5pg/mL	<0.15µg/mL

* With AvPOU01 Final Filter
** With AvPOU01 or AvPOU02 Final Filter



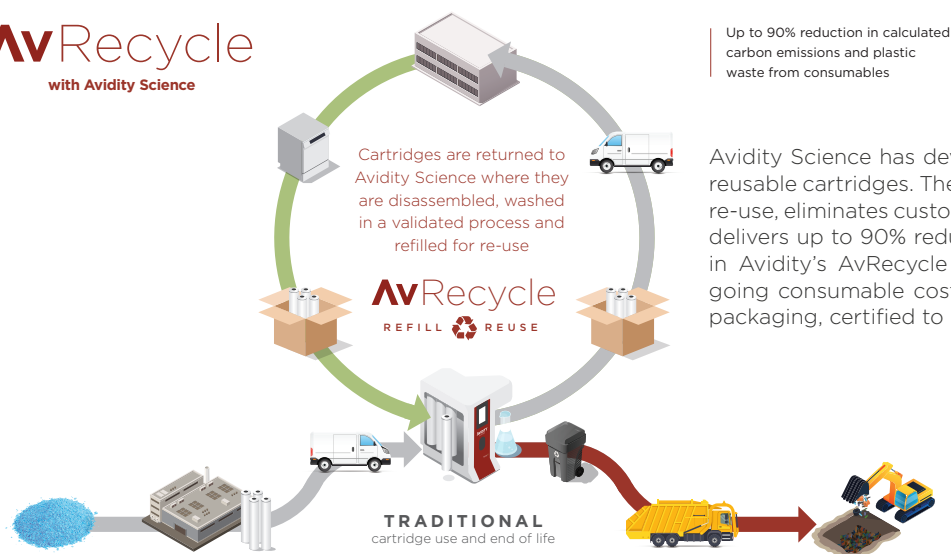
S1	Inlet Solenoid Valve	S4	Permeate Service Solenoid Valve	PT1	AvProtect01 Cartridge	E1	RO Water Cross Flow Pump	E6	Temperature and Pressure Sensor
S2	PW Loop Drain Solenoid Valve	S5	Dispense Solenoid Valve	RO1	AvRO01 Cartridge	E3	Ultrapure Water Pump	E7	AvLEDO1 or AvUV01
S3	RO Flush Solenoid Valve	S6	RO Drain Solenoid Valve	DI1	AvUltra01 Cartridge	E4	Resistivity Cell	E9	Flow Sensor
				DI2	AvUltra01 Cartridge	E5	Loop Resistivity Cell	E10	Permeate Conductivity Cell

AvRecycle

A Reusable and Recyclable Purification Cartridge Program



AvRecycle with Avidity Science



s-Series Model Breakdown with VWR and Manufacturer Part Number

MODEL	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Solo s-Series - UVTOC	77322-862	7125-1000-002	Solo S Ultrapure Water System

s-Series Consumable Kits

Avidity Science recommends 6 and 12 month replacement of consumables for the s-Series water systems. Consumable kits are available for 6 month, 12 month and Full Year maintenance. Full Year kits include all consumables necessary for 6 month and 12 month maintenance, packaged for a discounted rate. Consumables can also be purchased individually. Check with your VWR or Avidity Science sales representative for more part number information.

s-Series Point-of-Use Filters and Consumable Kits

VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
77400-838	2100-8000-006	Endotoxin Point-Of-Use Filter
77400-866	7125-8000-007	Bacteria .2µm Point-Of-Use Filter
77506-664	7125-2000-641	Solo-UF Full Year Consumable Kit
77506-666	7125-2000-640	Solo Full Year Consumable Kit
77400-872	7125-9500-001	IQ / OQ Service Qualification - Solo-S

Geno™ CL

High Capacity,
Deionized Water Production

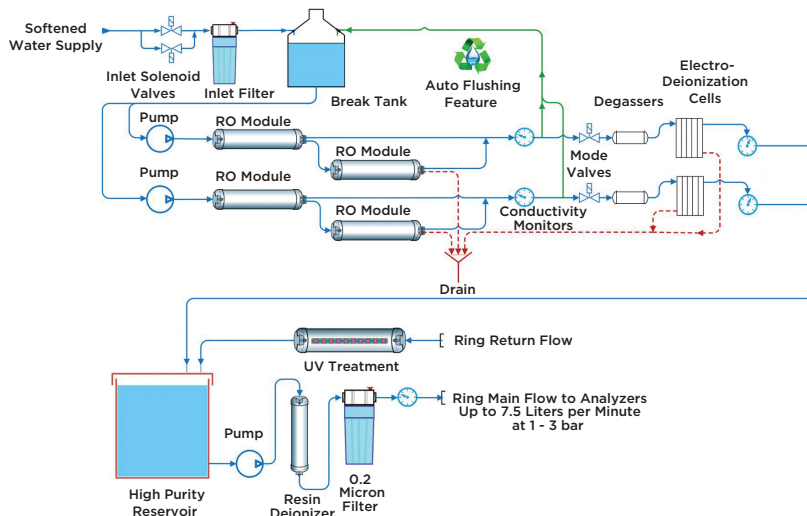


Deionized Water

- Unique two-stream RO/EDI cassette technology provides contingency, upgrade capability and minimizes downtime
- Flexible, Scalable DI Water system from 50L up to 200L per hour
- Integrated 100L tank
- 10" High resolution touchscreen with icon-based menus
- Password protected interface with customizable levels of user access
- Data logging via secure link to protected cloud storage is available
- Consumable maintenance notification with onscreen user guides
- Locking casters provide ease of access and unit mobility

Type 2 (DI) water or
CLSI-CLRW compliant water
delivered by whisper-quiet pumps

MODEL	MAKEUP FLOWRATE L / HR @ 20 °C	INORGANICS MΩ-cm @ 25 °C	ORGANICS TOC PPB	BACTERIA CFU / mL	PARTICLES μm FILTER	SILICA mg / L	DELIVERY FLOWRATE L / min @ 1 bar
GENO CL 50	50	> 10	< 30	< 10	0.2	< 0.05	7.5
GENO CL/CLD 100	100	> 10	< 30	< 10	0.2	< 0.05	7.5
GENO CLD 150	150	> 10	< 30	< 10	0.2	< 0.05	7.5
GENO CLD 200	200	> 10	< 30	< 10	0.2	< 0.05	7.5



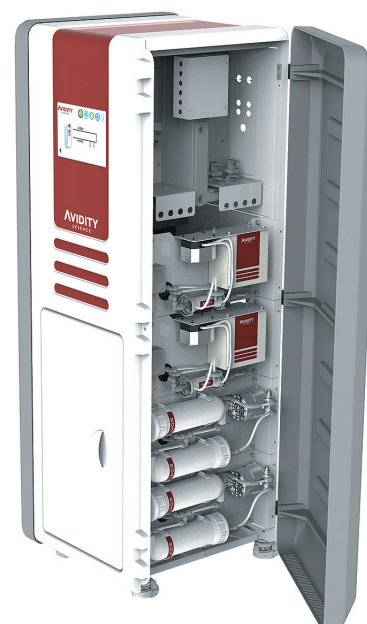
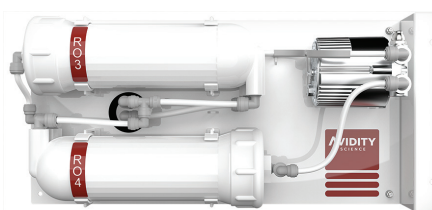


Geno™ CL

*High Capacity,
Deionized Water Production*

Geno™ CL Model Breakdown with VWR Part Number

VWR PART NO.	DESCRIPTION
76595-734	GenoCL-50 Water System Type 2 EDI - 50L/HR
76595-736	GenoCL-100 Water System Type 2 EDI - 100L/HR
76595-738	GenoCLD-100 Water System Type 2 EDI - 100L/HR
76595-740	GenoCLD-150 Water System Type 2 EDI - 150L/HR
76595-742	GenoCLD-200 Water System Type 2 EDI - 200L/HR



Geno™ CL Consumable Kits

Avidity Science recommends 6 and 12 month replacement of consumables for Geno CL water systems. Consumable kits are available for 6 month, 12 month and Full Year maintenance. Full Year kits include all consumables necessary for 6 month and 12 month maintenance, packaged for a discounted rate. Consumables can also be purchased individually. Check with your VWR or Avidity Science sales representative for more part number information.

Geno™ CL Service and Consumable Kits

VWR PART NO.	DESCRIPTION
76595-778	GenoCL Installation Service
76339-384	Preventative Maintenance Service Plan
76533-388	IQ/OQ Validation Service - GenoCL
76595-756	DI Cartridge For All GenoCL Models
76595-758	Geno CL - 50 / 100 Annual Consumable Kit
76595-760	Geno CL - 150 / 200 Annual Consumable Kit



Storage Reservoirs

Reservoir Specifications

- Smooth, crevice-free interior, fully drainable
- Made from high quality polyethylene
- Connection to feed a laboratory dishwasher
- Optional UV light kit available
- Optional distribution pump on the 100L tank*



RESERVOIR	UNIT DIMENSIONS (HxWxD)	IN USE WEIGHT
30L	495 x 450 x 230mm 19.5" x 17.7" x 9.1"	29.9kg 66lbs
60L	495 x 480 x 330mm 19.5" x 18.9" x 12.9"	74.8kg 165lbs
100L	810 x 480 x 360mm 31.8" x 18.9" x 14.1"	99.8kg 220lbs

* Applicable to e-Series systems only.



RESERVOIR	TOC MONITORING	UNIT DIMENSIONS (HxWxD)	IN USE WEIGHT
35L	✓	600 x 390 x 384mm 23.6" x 15.4" x 15.1"	40kg 88lbs
70L	✓	900 x 390 x 384mm 35.4" x 15.4" x 15.1"	81.82kg 180lbs
105L	✓	1200 x 390 x 384mm 47.3" x 15.4" x 15.1"	113kg 250lbs

** Applicable to Puro-i III, Duo-i II.I and Duo-i III.I models only.

Peripherals and Consumables

Remote Dispensers

UNIT DIMENSIONS (HxWxD)	DRY WEIGHT
845 x 280 x 300mm 33.3" x 11" x 11.8"	6kg 13.2lbs

** Applies to all i-Series models*

UNIT DIMENSIONS (HxWxD)	DRY WEIGHT
640 x 250 x 255mm 25.2" x 9.84" x 10"	3kg 6.6lbs

** Applies to Alto I and Duo II.I e-Series models.*



i-Series

e-Series

i-Series Pre-treatment Module*

UNIT DIMENSIONS (HxWxD)	DRY WEIGHT
463 x 220 x 380mm 18.2" x 8.6" x 14.9"	7kg 15.4lbs

** Fully integrated pretreatment module comes standard on Puro-i III, Duo-i III.I and Duo-i II.I models.*



Consumables

We manufacture and supply consumables for all of our Laboratory Water Systems:

- Pre-treatment cartridges
- RO cartridges
- DI cartridges
- Point of use filters
- Tank vent filters



e-Series Model Breakdown with VWR and Manufacturer Part Number

MODEL	WATER QUALITY	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Puro™ III	Type III	76337-354	Puro20	Puro III RO Water System 20L/hr
		76533-360	Puro40	Puro III RO Water System 40L/hr
		76337-358	Puro80	Puro III RO Water System 80L/hr
Puro™ III T	Type III	76337-258	Puro-T-10	Puro III T - RO Water System 10L/hr Integrated 35L Tank
		76337-260	Puro-T-10UV	Puro III T - RO Water System 10L/hr Integrated 35L Tank & UV
		76337-266	Puro-T-20	Puro III T - RO Water System 20L/hr Integrated 35L Tank
		76337-268	Puro-T-20UV	Puro III T - RO Water System 20L/hr Integrated 35L Tank & UV
Geno™ II	Type II	76337-348	Geno20	Geno II - DI Water System 20L/hr
		76337-358	Geno40	Geno II - DI Water System 40L/hr
Geno™ II T	Type II	76337-254	Geno-T-10	Geno II T - DI Water System 10L/hr 35L Integrated Tank
		76337-256	Geno-T-10UV	Geno II T - DI Water System 10L/hr 35L Integrated Tank and UV
		76337-262	Geno-T-20	Geno II T - DI Water System 20L/hr 35L Integrated Tank
		76337-264	Geno-T-20UV	Geno II T - DI Water System 20L/hr 35L Integrated Tank and UV
Duo™ II I	Type II & I	76337-342	Duo-e 2.1	Duo II.I - DI and Ultrapure Water ≥25L/hr Integrated Dispenser
		76337-344	Duo-e 2.1-R	Duo II.I - DI and Ultrapure Water ≥25L/hr Remote Dispenser
Alto™ I	Type I	76337-330	Alto-e	Alto I - Ultrapure Water Polisher Integrated Dispenser
		76337-332	Alto-e R	Alto I - Ultrapure Water Polisher Remote Dispenser
		76337-334	Alto-e T	Alto I - Ultrapure Water Polisher Tank Feed Integrated Dipenser
		76337-336	Alto-e T-R	Alto I - Ultrapure Water Polisher Tank Feed Remote Dispenser

* Alto I systems require a pretreated water source.

e-Series Reservoirs, Distribution and Accessories

	E-SERIES MODEL	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Reservoirs	Puro, Geno, Duo	76337-274	TANK30	30L Storage Reservoir
	Puro, Geno, Duo	76337-276	TANK60	60L Storage Reservoir
	Puro, Geno, Duo	76337-270	TANK100	100L Storage Reservoir
	Puro, Geno, Duo	76337-272	TANK100-PUMP	100L Storage Reservoir with Pump (8 Liters / Minute)
	Puro, Geno, Duo	76339-354	AV012	UV Upgrade Kit (TANK30 / TANK60 / TANK100)
Distribution	All	76339-370	AV004	Single Valve Kit for Feeding Equipment
	All	76488-236	76488-236	Boost Pump Kit - 120V / 60 Hz
	All	76488-238	2300-7120-004	Boost Pump Kit - Installation
Accessories	Puro, Geno, Duo, Alto	76339-374	AV006	Wall Mounting Kit - eSeries Puro / Geno / Duo / Alto
	Puro, Geno, Duo	76339-376	AV008	Wall Mounting Kit - 30 Liter Storage Reservoir
	Puro, Geno, Duo	76339-378	AV009	Wall Mounting Kit - 60 Liter Storage Reservoir
	Puro T, Geno T	76333-522	AV001	Wall Mounting Kit - Puro T / Geno T





i-Series Model Breakdown with VWR and Manufacturer Part Number

MODEL	WATER QUALITY	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Puro™-i III	Type III	76533-362 76533-364	Puro-i 10L Puro-i 30L	Puro-i III RO Water System 10L/hr Puro-i III RO Water System 30L/hr
Duo™-i III I	Type III & I	76499-370 76499-372	Duo-i 3.1 10L Duo-i 3.1 30L	Duo-i III.I RO and Ultrapure Water 10L/hr Remote Dispenser Duo-i III.I RO and Ultrapure Water 30L/hr Remote Dispenser
Duo™-i II I	Type II & I	76509-500 76533-356	Duo-i 2.1 10L Duo-i 2.1 20L	Duo-i II.I DI and Ultrapure Water 10L/hr Remote Dispenser Duo-i II.I DI and Ultrapure Water 20L/hr Remote Dispenser
Alto™-i I	Type I	76509-498	Alto-i	Alto-i I - Ultrapure Water Polisher Remote Dispenser

* Alto-i systems require a pretreated water source.

i-Series Reservoirs, Distribution and Accessories

	I-SERIES MODEL	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Reservoirs	Puro-i, Duo-i Puro-i, Duo-i Puro-i, Duo-i	76509-504 76509-506 76509-508	8400-8000-083 8400-8000-084 8400-8000-085	35L Reservoir, Sanitization Module and Reservoir Conductivity 70L Reservoir, Sanitization Module and Reservoir Conductivity 105L Reservoir, Sanitization Module and Reservoir Conductivity
Distribution	All All All All	76339-370 76339-390 76488-236 76488-238	AV004 AV016 76488-236 2300-7120-004	Single Valve Kit for Feeding Equipment Double Valve Kit for Feeding Equipment Boost Pump 120V/60 Hz Boost Pump Install Kit
Accessories	All All All All All All	76509-568 76509-540 76509-570 76509-510 76509-512 76509-514	8400-8000-021 8400-8000-010 8400-8000-022 8400-8000-086 8400-8000-087 8400-8000-088	Foot Switch (Hands-free operation) Reservoir UV Lamp, 254nm Printer Remote Dispenser with Station, Type I Remote Dispenser with Station, Type II Remote Dispenser with Station, Type III





e-Series Consumable Kits

Avidity Science recommends 6 and 12 month replacement of consumables for the e-series water systems. Consumable kits are available for 6 month, 12 month and Full Year maintenance. Full Year kits include all consumables necessary for 6 month and 12 month maintenance, packaged for a discounted rate. Consumables can also be purchased individually. Check with your VWR or Avidity Science sales representative for more part number information.

e-Series Point-of-Use, Pre-Treatment Filters and RO Membranes

	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Point-of-Use	76337-284	TC004	Point-of-Use - Ultrafilter
	76337-290	TC011	Point-of-Use - 0.2µm Standard Filter
Pre-Treatment	76638-968	2100-3000-100	Prefilter Housing Assembly & .5µm Filter
	76339-372	AV007	Prefilter Housing Only (13.75" H x 4.65" W x 5.38" D)
	76339-346	TC039	Filter - Pleated Element (5µm)
	76339-348	TC040	Filter - Carbon Element
RO Membrane	76361-240	TC026	RO Membrane



Prefilter Housing

e-Series Consumables By Model

MODEL	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Puro™ III	76337-302	TC016	Puro III Annual Consumable Kit
	76337-278	TC001	Puro III Pre-Treatment Module
	76339-352	TC013	Puro III RO Membrane for Puro20
	76339-350	TC006	Puro III RO Membrane for Puro40 and Puro80
Puro™ III T	76337-318	TC032	Puro-T-10 Annual Consumable Kit
	76337-320	TC033	Puro-T-10UV Annual Consumable Kit
	76337-326	TC036	Puro-T-20 Annual Consumable Kit
	76337-328	TC037	Puro-T-20UV Annual Consumable Kit
Geno™ II	76337-296	TC017	Geno II Annual Consumable Kit
Geno™ II T	76337-314	TC030	Geno-T-10 Annual Consumable Kit
	76337-316	TC031	Geno-T-10UV Annual Consumable Kit
	76337-322	TC034	Geno-T-20 Annual Consumable Kit
	76337-324	TC035	Geno-T-20UV Annual Consumable Kit
Duo™ II I	76448-228	6MONTH-DUO	6 Month Duo Consumable Kit
	76448-232	6MONTH-DUO-UF	6 Month Duo-UF Consumable Kit
	76448-230	12MONTH-DUO	12 Month Duo Consumable Kit
	76448-234	12MONTH-DUO-UF	12 Month Duo-UF Consumable Kit
	76509-174	ANNUAL-DUO	Full Year Duo Consumable Kit
	76509-176	ANNUAL-DUO-UF	Full Year Duo-UF Consumable Kit
Alto™ I	76488-220	6MONTH-ALTO	6 Month Alto Consumable Kit
	76488-224	6MONTH-ALTO-UF	6 Month Alto-UF Consumable Kit
	76488-222	12MONTH-ALTO	12 Month Alto Consumable Kit
	76488-226	12MONTH-ALTO-UF	12 Month Alto-UF Consumable Kit
	76509-170	ANNUAL-ALTO	Full Year Alto Consumable Kit
	76509-172	ANNUAL-ALTO-UF	Full Year Alto-UF Consumable Kit

	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Avidity Installation Services	76339-380	LS-INSTALL	Avidity Installation Services (Required for e-Series models except GenoT and PuroT)

Annual PM Service	76339-384	LS-ANN-SER	Avidity Preventative Maintenance Service Visit (Spare parts included)
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i-Series Consumable Kits & Preventative Maintenance Service Plan

Avidity Science recommends 6 month replacement of Pre-treatment * and Point-of-Use Filters and 12 month replacement for all remaining consumables for *i-Series* water systems. Annual Consumable Kits include all consumables necessary for annual maintenance, packaged for a discounted rate. Consumables can also be purchased individually.

* Pretreatment standard on Puro-*i* & Duo-*i* models only.

i-Series Point-of-Use Filters and Pre-Treatment

	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Point-of-Use Filters	76337-284	TC004	Point-of-Use - Ultrafilter
	76337-290	TC011	Point-of-Use - 0.2µm Standard Filter
Pre-Treatment	76509-516	LWFS32101	Pre-treatment Twin-Cartridge - 5µm+5µm - Standard for <i>i-Series</i> RO units
	76509-522	LWFS32104	Pretreatment Twin-Cartridge - Activated Carbon - Standard for <i>i-Series</i> RO units

i-Series Consumables By Model

MODEL	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Puro™-i III	76533-378	7120-4500-263	Puro- <i>i</i> III Annual Consumable Kit
Duo™-i III I	76533-376	7120-4500-261	Duo- <i>i</i> 3.1 Annual Consumable Kit
	76533-374	7120-4500-262	Duo- <i>i</i> 3.1 UF Annual Consumable Kit
Duo™-i II I	76533-370	7120-4500-259	Duo- <i>i</i> 2.1 Annual Consumable Kit
	76533-372	7120-4500-260	Duo- <i>i</i> 2.1 UF Annual Consumable Kit
Alto™-i I	76533-366	7120-4500-257	Alto- <i>i</i> Annual Consumable Kit
	76533-368	7120-4500-258	Alto- <i>i</i> UF Annual Consumable Kit

	VWR PART NO.	AVIDITY SCIENCE PART NO.	DESCRIPTION
Avidity Installation Services	76339-380	LS-INSTALL	Avidity Installation Services (Required for all <i>i-Series</i> models)
Annual PM Service	76339-384	LS-ANN-SER	Avidity Preventative Maintenance Service Visit (Spare parts included)



Annual PM Service Plan for e-Series and i-Series Water Systems

Avidity Science service plans allow you to have total peace of mind by eliminating down time and providing rapid solutions to minimize risk.

SERVICE HIGHLIGHTS:

- Comprehensive commission process for system and its functionality
- Calibration protocols and documentation
- Sanitization of unit and implementation of software updates as available
- Check on feed water quality and pressure
- Replacement of consumables or spare parts if required (consumables sold separately)
- Electronic diagnostic report of visit

Sustainability and Green Innovations

Passing the benefits on to you



Our RO water systems recover a percentage of water processed through the RO membranes.

Due to the innovative configuration of the RO membrane and boost pump, when the final conductivity measurement is taken, any permeate water not meeting the required set point is recirculated back through the RO membrane rather than being flushed to drain. This process greatly improves the quality of the water and minimizes water waste.



Low Energy Consumption.

Avidity Science laboratory water systems use less electricity, when in standby. This helps to preserve natural resources, reduce pollution and save money.



Energy Saving Mode.

Avidity Science water systems automatically switch to energy saving mode after a period of inactivity. This reduces running costs and creates a quieter working environment.



Twin pass RO technology on *i*-Series models.

This technology is able to process incoming feed water of up to 2000 μ S/cm, which will provide consumers with high quality water of 5 μ S/cm and a 99% ion rejection. This in turn improves life expectancy on DI cartridges, therefore reducing the frequency of change and environmental impact. Less waste.



Anti-vibration and dampening technology for non *i*-Series models.

Using a unique dampening method, we have reduced pump noise and increased component life expectancy with less need for replacing critical parts.



Our Reservoirs and Purification Packs are manufactured from recyclable materials.

All of our reservoirs are smooth and crevice-free, which makes them easier to sanitize and less likely to cultivate microbial growth.

A Global Presence

We are where you are, speaking your language



Avidity Science, LLC

819 Bakke Avenue, Waterford,
Wisconsin 53185 USA
T: +1 262-534-5181
E: US.Info@avidityscience.com
www.AvidityScience.com

Avidity Science, Ltd.

Unit 1A, Drakes Park,
Crendon Industrial Estate,
Long Crendon,
Buckinghamshire,
HP18 9BA, United Kingdom
T: +44 (0) 1844 201142
E: EMEA.Info@avidityscience.com
www.AvidityScience.com/en_gb

Avidity Science, SAS

250 bis boulevard Saint Germain,
75007 Paris. France
T: +33 (0) 1 87 65 09 95
E: France@avidityscience.com
www.AvidityScience.com/en_gb

Avidity Science (Zhejiang) Co., Ltd.

Bld F, No. 1332, WanGuo Road, EDZ, Jiaxing,
Zhejiang, China 341001
T: +86 (0) 573 8282 8199
E: CH.Info@avidityscience.com
www.AvidityScience.cn

Avidity Science, K.K.

Izumi Akasaka Building 6th Floor, 2-22-24
Akasaka Minato-ku, Tokyo 107-0052
T: +81 (0) 3 6277 8440
E: JP.Info@avidityscience.com
www.AvidityScience.jp

Avidity Science has offices and distributors worldwide. Contact us for our full partner listing.



Avantor, Inc., 100 Matsonford Road
Building 1, Suite 200, Radnor, PA 19087
800 932 5000 | VWR.COM