



PURELAB[®] Chorus

Solutions for Type I Ultrapure Water



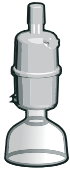


Configure your solution

Step 1: Choose your system

Typical Applications	Select The Impurities You Want To Remove	Integrated Purification Technology					Your System and Part Number
		Advanced deionization (PureSure)	Real Time TOC Monitoring	Ultra-filtration	Micro-filtration	185nm / 254nm UV lamp (Full Spectrum UV)	
PCR, Preparation of buffers and culture media for mammalian cell culture, IVF, reagents for molecular biology	Nucleases (RNase / DNase)						 <p>PURELAB Chorus 1 Life Science</p> <p>Part No. PC1LSCXM1</p>
	Bacterial Endotoxin and Pyrogens						
	Inorganics (e.g. Iron, Lead and Copper)						
	Organics (e.g. Pesticides, Herbicides, Decayed Plant and Animal Tissues)	✓	✓	✓	•	✓	
	Bacteria (<0.1 CFU/ml)						
Particulates (Ultrafiltration)							
HPLC mobile phase preparation; blanks Sample dilution in GC, HPLC, AA, ICP-MS and other advanced analytical techniques	Trace Ions (e.g. Silica & Boron)						 <p>PURELAB Chorus 1 Analytical Research</p> <p>Part No. PC1ANRXM1</p>
	Inorganics (e.g. Iron, Lead and Copper)						
	Organics (e.g. Pesticides, Herbicides, Decayed Plant and Animal Tissues)	✓	✓	•	✓	✓	
	Bacteria (<0.1 CFU/ml)						
	Particulates (Microfiltration 0.05µm)						
Electrochemistry Electrophoresis	Inorganics (e.g. Iron, Lead and Copper)						 <p>PURELAB Chorus 1 General Science</p> <p>Part No. PC1GSCXM1</p>
	Organics (e.g. Pesticides, Herbicides, Decayed Plant and Animal Tissues)						
	Bacteria (<1 CFU/ml)	✓	•	•	•	•	
	Particulates (ffl 0.2µm)						
PURELAB Chorus's unique integral recirculation maintains constant peak water purity and photo-oxidation ensures low bacterial counts. See TN014, TN015, TN016.		Technology Notes					
		TN024 TN025 TN026 TN027	TN028 TN029	TN038	TN038	TN017 TN036	TN014 TN015 TN016

Step 2: Choose how you dispense

Step 3: Optimize

Features						Optional Foot Switch Dispense	Your Dispenser and Part Number	Optimize Your Water Purity at the Point-of-use
Purity Monitoring Right to the Point-of-Use	Auto Volume Dispense	Variable Flow Rate Dispense	Drop by Drop Control	Locked Dispense	Flexible Handset			Filter and Part Number
✓	✓	✓	✓	✓	✓	✓	 <p>Halo Flexible Dispenser</p> <p>Part No. LA756</p>	<p>Biofilter</p> <p>Endotoxin removal (<0.001 EU/ml)</p> <p>DNase removal (<20 pg/ml)</p> <p>RNase removal (<0.002 ng/ml)</p>
✓	✓	✓	✓	✓	•	✓	 <p>Halo Advanced Dispenser</p> <p>Part No. LA755</p>	 <p>Part No. LC197</p>
•	•	✓	✓	✓	•	•	 <p>Halo Dispenser</p> <p>Part No. LA754</p>	<p>Microfilter</p> <p>Particulate removal (ffl0.2 µm)</p>  <p>Part No. LC134</p>

To download Technology Notes, please visit www.elgalabwater.com

Step 4: Choose your dispense position



Integrated Halo Dispenser



Wall Mounted with Halo Dispenser integrated underneath



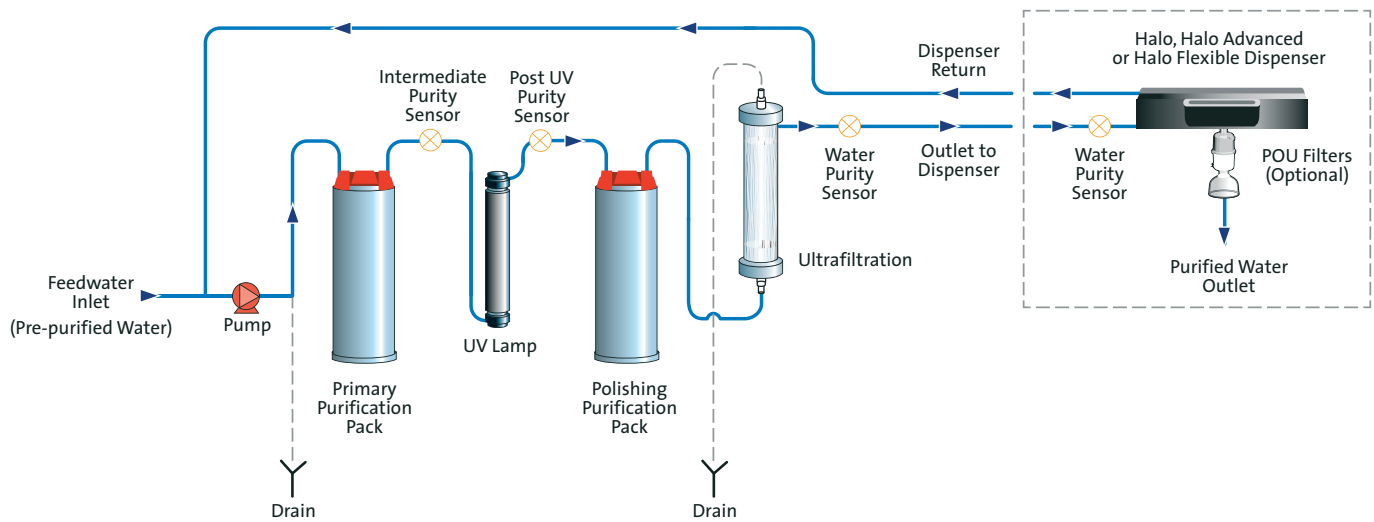
Independent Halo Dispenser (LA768 – Halo Dispense Mounting Kit)



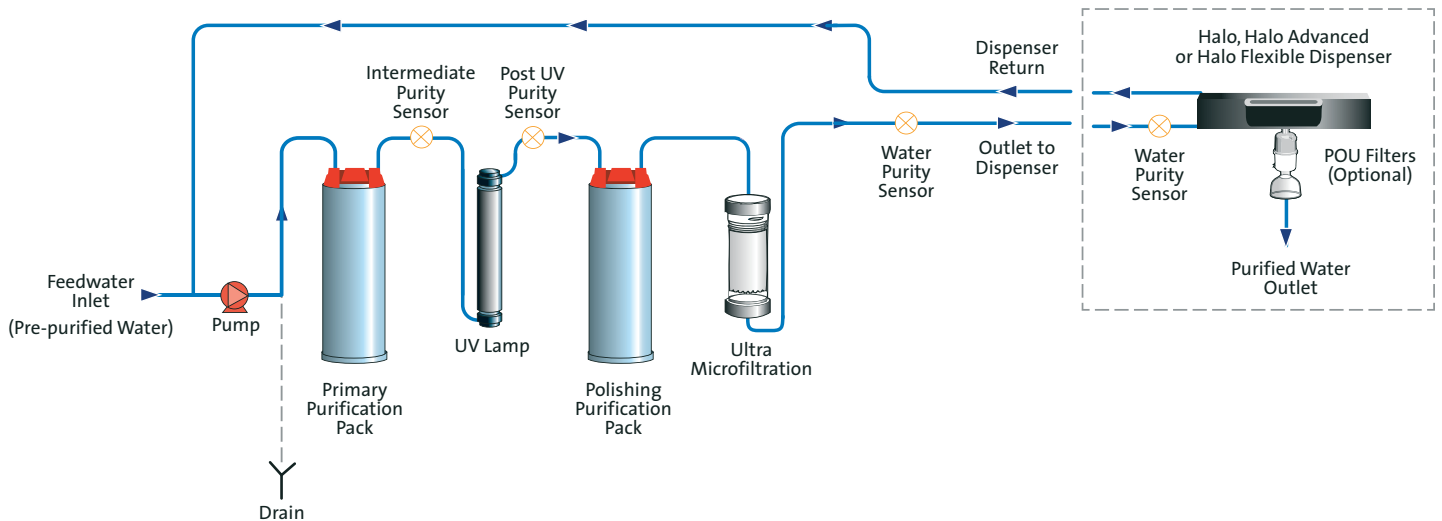
PURELAB Chorus 1 with integral and independent Halo Dispenser (Up to four Halo Dispensers in any combination can be connected together)

What's inside?

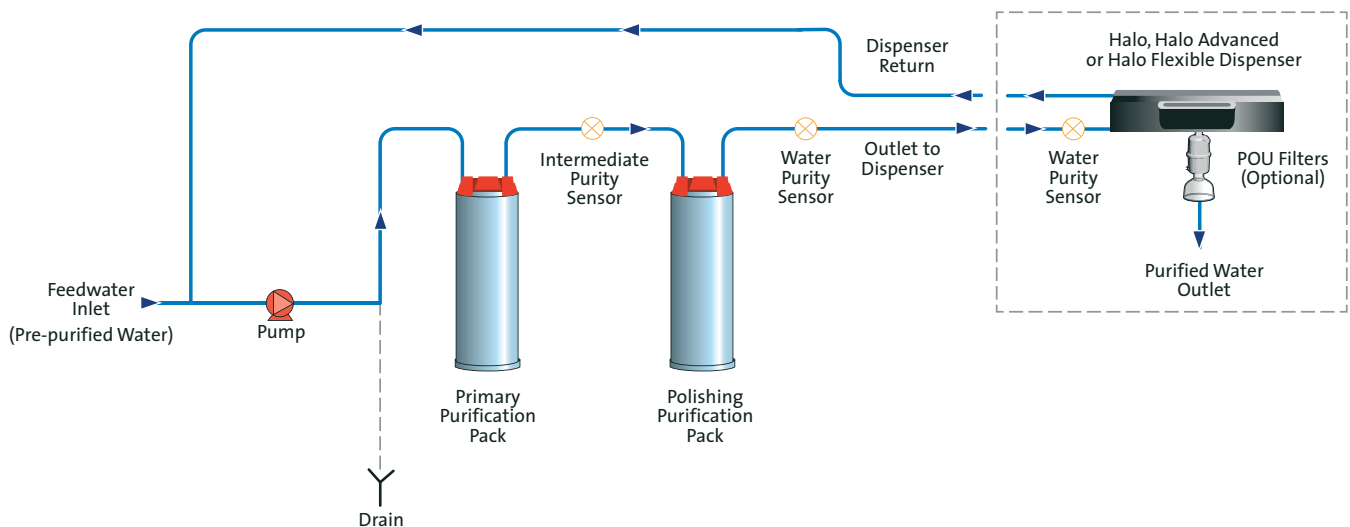
PURELAB® Chorus 1 – Ultrapure Water for Life Science Applications



PURELAB® Chorus 1 – Ultrapure Water for Analytical Research Applications



PURELAB® Chorus 1 – Ultrapure Water for General Science Applications



Treated Water Specifications

APPLICATION	Life Science	Analytical Research	General Science
Dispense Flowrate	Up to 2.0 l/min ³	Up to 2.0 l/min ³	Up to 2.0 l/min ³
Inorganics @ 25°C	18.2 MΩ-cm	18.2 MΩ-cm	18.2 MΩ-cm
Total organic carbon (TOC)	1-3 ppb ¹	1-3 ppb ¹	3-10 ppb ¹
Bacteria	<0.1 CFU/ml ²	<0.1 CFU/ml ²	<1 CFU/ml ²
Bacterial endotoxin	<0.001 EU/ml	–	–
pH	Effectively neutral	Effectively neutral	Effectively neutral
Particles	Ultrafiltration	0.05µm	0.2µm ²
RNase	<0.002 ng/ml	–	–
DNase	<20 pg/ml	–	–
Purification pack capacity	Liters to 18.2 MΩ-cm = 80,000/(µS/cm + (2.3 x ppm CO ₂))		

¹ Dependent on feed water – recommended feed <50ppb TOC. ² With POU filter fitted. ³ When connected to Halo, Advanced or Flexible dispense module.

Dimensions and Weights

Dimensions	Height minimum 435mm, Width 375mm, Depth 340mm		
Weight	19kg (42lb)	19kg (42lb)	18kg (40lb)

Halo Dispense Dimensions

LA754 - Halo Dispense	Height 80mm, Width 390mm, Depth 475mm
LA755 - Halo Advanced Dispense	Height 80mm, Width 390mm, Depth 475mm
LA756 - Halo Flexible Dispense	Height 550mm, Width 390mm, Depth 530mm

Feedwater Requirement

Source – originally from potable supply, then pre-treated ⁵	Preferably reverse osmosis (RO) produced by PURELAB Chorus 3 or filtered service deionization (SDI) or distilled. Note: mixed bed or twin bed deionized supplies should be cation limited at exhaustion.
Fouling index (max)	1 for all models. A 5-10 micron membrane prefilter is recommended for all non-RO feeds
Service deionization (SDI) – MΩ-cm	1 MΩ-cm minimum resistivity at exhaustion
Reverse Osmosis (RO) – µS/cm	Recommended <30 µS/cm
Free Chlorine	0.05 ppm max
TOC	Recommended 50 ppb max (RO feed)
Carbon dioxide	30 ppm max
Silica	2 ppm max
Particulates	Filtration down to 0.2 micron advisable to protect internal and/or point of use filters
Temperature	1 - 40°C – Recommended 10 - 15°C
Flowrate (maximum requirement)	130 l/hr (34 USG)
Drain requirements (gravity fall with air gap). Maximum during service	Up to 2 l/min (0.5 USG)
Feedwater pressure	0.7 bar (10 psi) maximum, 0.07 bar (1 psi) minimum ⁴

⁴ Fit LA652 Pressure Regulator where feedwater pressure exceeds specified limits

Electrical Requirements

Mains Input	100 - 240V AC, 50 - 60Hz all models
System voltage	24V DC
Power consumption during peak demand (dispense)	90VA
Noise level during recirculation	<40 dBA

⁵ Choosing the correct Purification Pack

Part No.	When used
LC232	Feed water is General Grade RO (Type III) such as PURELAB Chorus 3 or distribution loop
LC244	Feed water is SDI (service deionization) with a 0.2µm prefilter fitted
LC245	Feed water is a filtered DI distribution loop or reservoir with recirculation maintaining a purity >1MΩ-cm
LC246	Guarantee the lowest TOC specification feed water is a filtered DI distribution loop or reservoir with recirculation maintaining a purity >1MΩ-cm

ELGA LabWater

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