evoqua
WATER TECHNOLOGIES

PURELAB® CHORUS SYSTEMS

SOLUTIONS FOR TYPE I ULTRAPURE WATER

CONFIGURE YOUR SOLUTION

Integrated Purification Technology

STEP 1: CHOOSE YOUR SYSTEM

Typical Applications	Select the Impurities You Want to Remove	Advanced Deionization (PureSure®)	Real Time TOC Monitoring	Ultrafiltration	Microfiltration	185nm /254nm UV lamp (Full Spectrum UV)	Your System and Part Number
PCR, Preparation of buffers and culture media for mammalian cell culture, IVF, reagents for molecular biology	• Nucleases (RNase/DNase) • 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)	Yes	Yes	Yes	No	Yes	**PURELAB® Chorus 1 Life Science System** Part No. W2T826798
HPLC mobile phase preparation; blanks sample dilution in GC, HPLC, AA, ICP-MS and other advanced analytical techniques	• Trace Ions (e.g. Silica and Boron) • Inorganics (e.g. iron, lead and copper) • Organics (e.g. pesticides, herbicides, decayed plant and animal tissues) • Bacteria (<0.1 CFU/ml) • Particulates (Microfiltration 0.05 µm)	Yes	Yes	No	Yes	Yes	**PURELAB® Chorus 1 Analytical Research System** Part No. W2T826804
Electrochemistry Electrophoresis	• Inorganics (e.g. iron, lead and copper) • Organics (e.g. pesticides, herbicides, decayed plant and animal tissues) • Bacteria (<0.1 CFU/ml) • Particulates (≥0.02 µm)	Yes	No	No	No	No	**PURELAB® Chorus 1 General Science System** Part No. W2T835598

STEP 2: CHOOSE HOW YOU DISPENSE

Features

STEP 3: OPTIMIZE

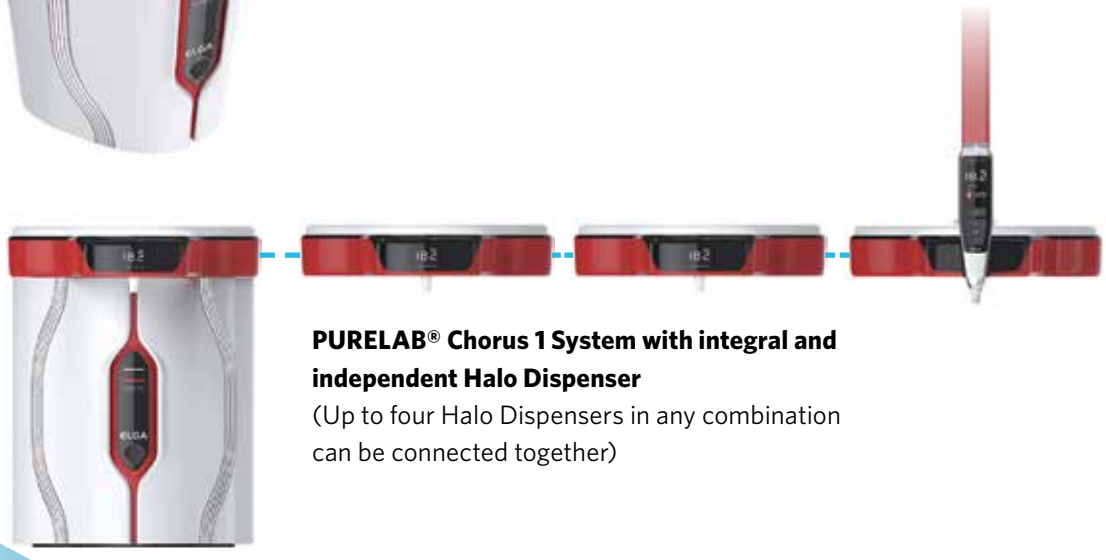
Purity Monitoring Right to the Point-of-Use	Auto Volume Dispense	Variable Flow Rate Dispense	Drop by Drop Control	Locked Dispense	Flexible Handset	Optional Foot Switch Dispense	Your Dispencer and Part Number	Optimize Your Water Purity at the Point-of-Use
Yes	Yes	Yes	Yes	Yes	Yes	Yes Part No. W2T826875	**Halo Flexible Dispenser** Part No. W2T826826 	**Biofilter** Endotoxin removal (<0.001 EU/ml) DNase removal (<20 pg/ ml) RNase removal (<0.002 ng/ml) Part No. W2T374911 
Yes	Yes	Yes	Yes	Yes	No	Yes Part No. W2T826875	**Halo Advanced Dispenser** Part No. W2T826801 	**Microfilter** **Particulate removal (ffl0.2µm)** Part No. W2T167459 
No	No	Yes	Yes	Yes	No	No	**Halo Dispenser** Part No. W2T826836 	

STEP 4: CHOOSE YOUR DISPENSE POSITION

Integrated Halo Dispenser

Wall Mounted with Halo Dispenser integrated underneath.

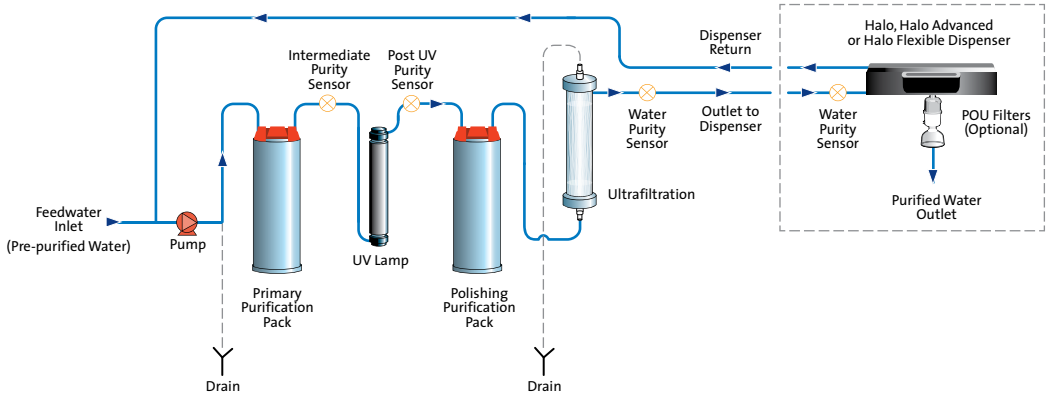
Independent Halo Dispenser
Part No. W2T826834



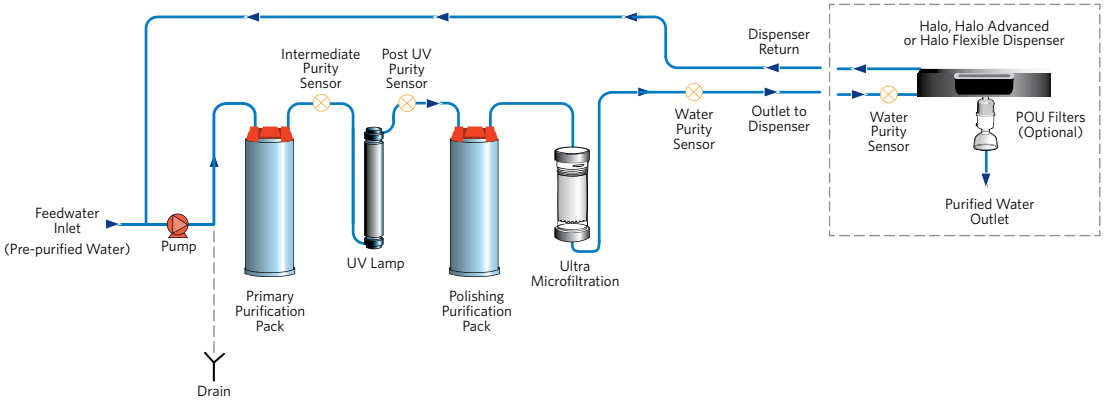
PURELAB® Chorus 1 System with integral and independent Halo Dispenser
(Up to four Halo Dispensers in any combination can be connected together)

WHAT'S INSIDE?

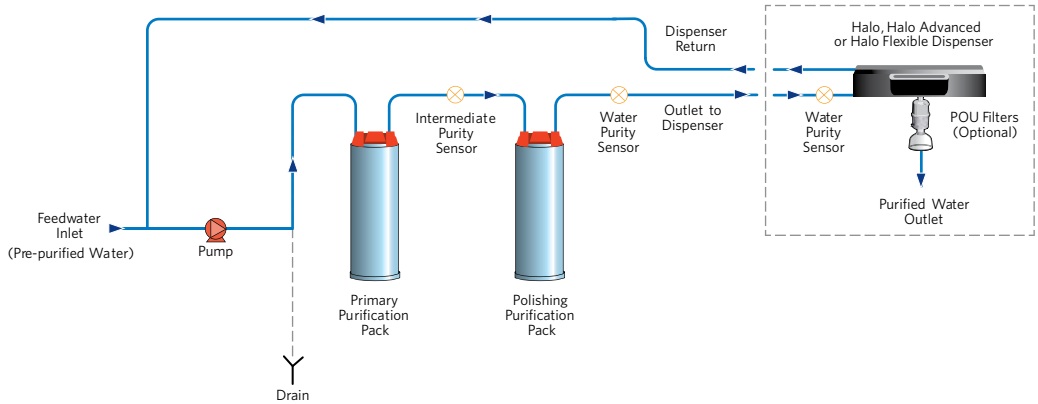
PURELAB® Chorus 1 System – Ultrapure Water for Life Science Applications



PURELAB® Chorus 1 System – Ultrapure Water for Analytical Research Applications



PURELAB® Chorus 1 System – 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	0.05 µm	0.2 µm[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 DIMENSION

WT2826836 - Halo Dispense	Height 80mm, Width 390mm, Depth 475mm
WT282689 - Halo Advanced Dispense	Height 80mm, Width 390mm, Depth 475mm
WT2826826 - 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 M Ω-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 W2T178426 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

CHOOSING THE CORRECT PURIFICATION PACK

Part No.	When used
W2T826876	Feed water is General Grade RO (Type III) such as PURELAB Chorus 3 or distribution loop
W2T826877	Feed water is SDI (service deionization) with a 0.2µ prefilter fitted
W2T826878	Feed water is a filtered DI distribution loop or reservoir with recirculation maintaining a purity>1M Ω-cm
W2T826879	Guarantee the lowest TOC specification feed water is a filtered DI distribution loop or reservoir with recirculation maintaining a purity >1MΩ-cm

210 Sixth Avenue, Suite 3300, Pittsburgh, PA 15222

+1 (800) 466-7873 (toll-free) **+1 (978) 614-7233** (toll) **www.evoqua.com**