

## PURELAB® Ultra Water Purification System

State-of-the-art intelligent water system delivers ASTM Type I ultrapure water for critical biological and analytical applications. Designed to ensure the highest quality water with the most advanced smart monitoring system.

### Standard Features and Benefits

- 18.2 Megohm purity water up to 2.0 lpm
- Direct on-line real time TOC monitoring (Analytic and Genetic)
- Unique CID (cartridge identification) technology provides full traceability and history of purification cartridge packs for validation
- 5 models to choose from
- Worker polisher purification design reduces annual costs by 50%
- Programmable dispense with auto alarm and shut off prevents flooding
- Volumetric Profile Memory dispense
- Friendly consumable change-out reminders



### PURELAB® ULTRA SYSTEM SPECIFICATIONS

#### Performance Specifications\*

MODEL	Resistivity	Flow Rate (lpm)	TOC (ppb)	Endotoxins EU/ml	Bacteria CFU10/ml
PURELAB Ultra Scientific	18.2	up to 2.0	3-10	NA	<1**
PURELAB Ultra Ionic	18.2	up to 2.0	3-10	NA	<1
PURELAB Ultra Analytic	18.2	up to 2.0	1-2	NA	<1
PURELAB Ultra Bioscience	18.2	up to 2.0	3-10	<0.001	<1
PURELAB Ultra Genetic	18.2	up to 2.0	1-3	<0.001	<1

\* Specifications based on RO pretreatment

\*\* < 1 CFU/ML w/0.2µm filter

#### System Dimensions

MODEL	HxWxD (in)	Weight lbs
PURELAB Ultra Scientific	19x16x14	38
PURELAB Ultra Ionic	19x16x14	39
PURELAB Ultra Analytic	19x16x14	40
PURELAB Ultra Bioscience	19x16x14	39
PURELAB Ultra Genetic	19x16x14	40

#### Feed Water Parameters

Maximum Fouling Index	<1*
Maximum Conductivity (RO Feed)	50 µS/cm
Minimum Resistivity (SDI Feed)	1 MΩ-cm
Maximum TOC	50 ppb
Maximum Free Chlorine	<0.05 ppm
Maximum Carbon Dioxide	30 ppm
Maximum Silica	2 ppm
Particulates	Down to 0.2 µm filtration
Temperature	1-40 °C
Feedwater Flow Rate	Maximum requirement 130 lph
Maximum Pressure	10 psi
Minimum Pressure	1 psi or flooded suction to the recirculation pump
Power Requirements	100-240 VAC, 50-60 Hz (all models)

\*A 0.2µm prefilter recommended for all non-RO feeds.

#### Purification Technology

MODEL	Dual Purification Cartridges	UV 254nm	UV 254/185nm	UF Ultrafilter	UMF Ultra Microfilter	TOC Monitor
PURELAB Ultra Scientific	●					
PURELAB Ultra Ionic	●	●			●	
PURELAB Ultra Analytic	●		●		●	●
PURELAB Ultra Bioscience	●			●		
PURELAB Ultra Genetic	●		●	●		●



## PURELAB® Ultra Water Purification System

Applications	PURELAB Ultra Scientific	PURELAB Ultra Ionic	PURELAB Ultra Analytic	PURELAB Ultra Bioscience	PURELAB Ultra Genetic
Invitro Fertilization					●
2D Electrophoresis					●
Glassware washing	●				
HPLC			●		
Immunology				●	
Microbiology				●	
Buffer Preparation	●				
Toxicology				●	
GC/MS			●		
Tissue Culture				●	
Flameless AA		●			
Ion Chromatography		●			
Protein/Peptide Sequencing				●	
Monoclonal Antibody production					●
TOC Analysis			●		
Endotoxin analysis				●	
DNA/RNA Research					●
PCR					●
ICP-MS		●			
Protein purification				●	
Mammalian Cell Culture					●
Atomic Absorption	●				
ICP-ES	●				

### PURELAB® Ultra Systems ORDERING INFORMATION

MODEL	Catalog Number
PURELAB Ultra Scientific	ULXXXSCM2
PURELAB Ultra Ionic	ULXXXIOM2
PURELAB Ultra Analytic	ULXXXANM2
PURELAB Ultra Bioscience	ULXXXBSM2
PURELAB Ultra Genetic	ULXXXGEM2
PURELAB Ultra Analytic under-bench system (with remote control station and dispense gun)	ULRSXANM2
PURELAB Ultra Genetic under-bench system (with remote control station and dispense gun)	ULRSXGEM2

Service and Maintenance packages available  
DI (Deionization) Cartridges must be ordered separately

### Consumables and Accessories

#### Consumables

Sanitization Tablets	CT1
UV Lamp 254nm (for Ionic)	LC105
UV Lamp 185nm/254nm	LC118
Ultra microfilter (0.05µm)	LC109
Ultrafilter (5,000 MWCO)	LC151
Point-of-Use Filter (0.2µm)	LC134
Labpure S1 DI Cartridge-RO Feed	LC182
Labpure S2 DI Cartridge-SDI Feed	LC183
Labpure S3 DI Cartridge-Low Ionic	LC184
Labpure S4 DI Cartridge-Low TOC	LC185

#### Accessories

Pressure Regulator Valve Inlet	SDIRG2613*
Wall Mounting Kit (PURELAB Ultra Unit)	LA622USA
RS232 Printer Kit	LA618
Installation Kit (PURELAB Ultra Unit) (supplied)	LA642
Remote Dispense Station (including dispense gun)	LA643
Integral Dispense Gun (PURELAB Ultra Unit)	LA644
Remote Control Station (PURELAB Ultra Unit)	LA645
Open Circuit Ring Main Kit	LA646
Closed Circuit Ring Main Kit	LA647
Pressure Regulator <60 psd	LA652

Storage reservoirs are located on pages 34.

\* For feed pressure above 60 psig, use pressure regulator LA575.

Note: Installation kit supplied with all Ultra systems

### PURELAB® Systems Validation Support

Siemens Water Technologies offers validation documentation support packages for all PURELAB® Ultra water purification products. Validation support manuals include Installation Qualification (IQ), Operational Qualification (OQ) documentation and other quality certification as required to complete validation of the water system. Our service engineers are fully trained to perform certification as required to complete the validation of water system.