

Total Service for Customer
The Leading Partner of Bioscience Technologies



We are searching for pureness,
overcoming limitness

EXL[®]7

Lab Water System

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Vivagen Co., Ltd. developed EXL[®]7 Lab Water System which consists of experts who have more than 10 years of experience in R&D. We are sure our expertise and technical know-how help customers solve their complex problems and achieve their goals.



Pure/Ultrapure Water System

EXL®7 can be used for both Pure Water and Ultrapure Water simultaneously.

In particular, Pure Water can be produced while dispensing Ultrapure Water, which allows for convenient experiment.

Fast Flow Rate

In EXL®7 Analysis/Bio, Pure Water is up to 16L(32L)/hour and Ultrapure Water is up to 120 L/hour.

In EXL®7 Pure, Pure Water is up to 16(32L)/hour.

Touch screen (7") & Voice guidance

For ease of use, the system is installed touch screen, the Setting of voice and Pop-up message guidance.

Built-In 20L Pressurized Tank

While open tanks from other companies have the risk of contamination by air, EXL®7 uses pressurized tank which can perfectly block external contamination.

Beyond basic inner tank, you can have option available outer tank 20L, 30L, 70L without additional sensor, the height of tank.

High Capacity DI Cartridge

It uses the filter with excellent processing capacity, which can assure best water quality.

UV Lamp & Leakage detector installed by default (Only for Type I Model)

EXL®7 has a UV lamp installed by default, which can produce Ultrapure Water with extremely low level of organic substances.

A leakage detector is installed by default, which issues alarming sound and message if water leakage occurs to ensure user safety.

Touch screen monitor

- System information ● The life of filter ● UV lamp indicator ● Tap water quality indicator
- The status of Pure /Ultrapure Water dispensing ● Pump monitor ● Pure /Ultrapure Water producing volume
- Total amount ● Print out ● Simple installation & initial setting guide ● Auto Flushing ● Record history
- USB port ● TOC(Optional) ● Software upgrade ● Tank level indicator ● Remote control

Foot switch (Option)

The system provides foot switch against busy two hands.





UV lamp light on/off 03

The name & The life of filter 04

01 Time & Date

02 Tap water quality indicator

07 Tank level indicator

06 Status indicator

Pure /Ultrapure Water producing button 13

05 Start & Stop button
Pure/Ultrpure Water dispensing

Pure /Ultrapure Water producing indicator 14

11 Print out button

08 Pure /Ultrapure Water producing volume

12 Pre filter flushing button

09 Pure /Ultrapure Water producing volume control button

10 Menu

01

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Time & Date

Year/Month/Day/Hour/Minute/Day of the week

Tap water quality indicator (Conductivity, Temperature)

By monitoring the supply status of the tap water, it secures the safety to protect the equipment in case of a shortage.

UV lamp light on/off

The real-time operation status of the UV lamp maintains optimum condition.

The name & The life of filter

It shows filter use, history and details.

Start & Stop button Pure/Ultrapure Water dispensing

Pure Water status indicator

Displays Conductivity, Temperature, Rejection rate (%)
System controlled operation has voice guidance and pop-up message whenever it is out of range set point under monitoring real time.

Ultrapure Water status indicator

Displays Conductivity, Temperature, TOC (Option)
System controlled operation has voice guidance and pop-up message whenever it is out of range set point under monitoring real time.

Tank level indicator

It is easy to check tank level displayed in real time.

Pure /Ultrapure Water producing volume

Pure /Ultrapure Water producing volume control button

User can produce water as wanted. (0.1L~99.9L)

Menu (System information indicator)

Displays Model, S/N, Software version, System alarm history, Setting.

Print out button

System can print out data.
(ex. Used & Available time of filter, Filter usage, Filter exchange history, Alarm history, Water quality)

Pre filter flushing button

Pure /Ultrapure Water producing button

Pure /Ultrapure Water producing indicator

Auto RO Flushing

It can flush RO filter automatically to control optimal filter quality before and after producing Pure Water.

History storage

Consumable exchange, Alarm, Set point

Data storage

Filter Information (Used & Available time, Total output), Alarm history, Consumable exchange history are saved in USB memory.

TOC (Option)

Displays TOC value of Ultrapure Water and a message pops up on screen when it is out of set point.

Protection for Ultrapure Water filter and pump

System allows Ultrapure Water filter to stop automatically and alarm when water level in Pure Water storage tank falls below.

Software update

It is easy to be up to date software by USB memory anybody.

Remote control

Direct system control via internet network & technician's direct access.

POU (Point Of Use Gun) option

Built in quantitative sampling function to produce Pure and Ultrapure Water as much as user wants. (0.1L ~ 99.9L units)





EXL® 7 Bio

EXL® 7 Analysis

EXL® 7 Bio

ASTM Type III&I Grade (Bio) / ASTM Type II & I Grade (S Bio) / ASTM Type I Grade (U Bio)

- Molecular biology • PCR • DNA sequencing • Cell culture • Media preparation • Microbiology
- In-vitro fertilization • Electrophoresis • Monoclonal antibody production

EXL® 7 Analysis

ASTM Type III&I Grade (Analysis) / ASTM Type II & I Grade (S Analysis) / ASTM Type I Grade (U Analysis)

- Ultra-trace and trace-organic and organic analysis • HPLC • GC-MS • ICP-MS • TOC analysis
- Ion chromatography • Solid phase extraction • Electrochemistry

EXL® 7 Pure

ASTM Type III Grade

- Autoclaves • Lab glassware washers • Feed water for ultrapure water systems

EXL® 7 Pure Plus

ASTM Type II Grade

- Autoclaves • Lab glassware washers • Feed water for ultrapure water systems • Buffers and media preparation

EXL® 7 CLRW

CLSI type II Grade

- Clinical laboratory Reagent water



EXL® 7 Pure

- ❶ TOC specs - Test Conditions: EXL® System equipped with Pre Carbon filter and DI cartridge and with feed (tap) water quality within pecifications.
Product water quality may vary due to local feed water conditions.
- ❷ Results with 0.2 final filter.
- ❸ Applied to Bio Only.
- ❹ Results with Ultra Filter polisher in place.
- ❺ Without Final Filter.
- ❻ Applied to S-Analysis & Bio Only. (Type II)
- ❼ Not applied to U-Analysis & Bio Only. (Type I)

EXL®7 Lab Water System Pure & Ultrapure Water Quality

Ultrapure									RO Module Rejection Rates (Pure)							
Series	Resistivity (at 25°C)	TOC	Bacteria	Endotoxin	RNases (RNase-free)	DNases (DNase-free)	Particles (@0.2µs)	Flow Rate	Resistivity (at 25°C)	Monovalent Ions	Polyvalent Ions	Particles	Microorga- nisms	Dissolved Organics (>300MW)	Product Flow Rate,[l/h]	Maximum Recovery Rate*
	MΩxcm	ppb	CFU/mL	EU/mL	pg/mL	pg/mL	/ml	(l/min)	MΩ.cm	%	%	%	%	%	(±20%at25°C)	%
EXL®5 Analysis	18.2	<5	<0.01				< 1	Up to2	>5	Up to 98	Up to 98	>99	>99	>99	Up to 16/32	Approx. 50
EXL®5 Bio	18.2	<5	<0.01	<0.001	<1	<5	< 1	Up to 2	>5	Up to 98	Up to 98	>99	>99	>99	Up to 16/32	Approx. 50

* Depends on feed water quality and temperature.

EXL®7 Lab Water System Pure / Pure Plus Water Quality

RO Module Rejection Rates									
Series	Resistivity (at 25°C)	Conductivity (at 25°C)	Monovalent Ions	Polyvalent Ions	Particles	Microorganisms	Dissolved Organics (>300MW)	Product Flow Rate,[l/h]	Maximum Recovery Rate*
	MΩxcm	µS/cm	%	%	%	%	%	(±20% at 25°C)	%
EXL®7 Pure		< 20	Up to 98	Up to 98	>99	>99	>99	Up to 16 / 32	Approx. 50
EXL®7 Pure Plus		>5	<0.2		>99	>99	>99	Up to 16	Approx. 50

* Depends on feed water quality and temperature.

EXL®7 Lab Water System CLRW Water Quality

Series	Resistivity (at 25°C)	TOC	Bacteria	Particulate Content	Continuous Flow Rate (to Tank)	Peak Flow Rate (to Product)	Pressure Range
	MΩxcm	ppb	cfu/mL	µm Ultra filter filtration	L/hour	L/min	PSI
EXL®7 CLRW	>15	< 30	< 1	0.1	16	2	30~45

Feed Water Quality

*Exclusively potable water according to the drinking water regulations of the USA, the European Union, Korea or Japan.

Temperature	Conductivity (at 25°C)	TDS	TOC	Max. Permanent Hardness (max. CaCO ₃)	Free chlorine	Iron (Total Fe Content)	Fouling Index	Turbidity	pH Value	Input Pressure
°C	µS/cm	ppm	ppb	ppm	ppm	ppm	SDI	NTU		
2 – 30	< 500	<250	< 2000	360	<3	< 0.1	< 5	< 1	4 – 10	0.5 – 6.9 bar, Recommended > 2 bar

Specifications

	EXL®7 Analysis	EXL®7 Bio	EXL®7 Pure	EXL®7 Pure Plus	EXL®7 CLRW
Power	220~240VAC/ 50/60Hz (100W)				
System Weight	37kg		37kg		37kg
System Dimension	375 (W) X 600 (D) X 600 (H) mm				
Packing Dimension	500 (W) X 700 (D) X 800 (H)mm				
Operation Temperature & Humidity Range	2~35 ℃ / Under 80% Relative Humidity				
Storage Temperature & Humidity Range	5~35 ℃ / Under 80% Relative Humidity				

Founded in 2003, Vivagen Co., Ltd. is the company which consists of experts who have more than 10 years of experience in sales, marketing and R&D.

Our products consist of self-developed Pure & Ultrapure integrated water system (EXL® Series), Gas control module for cell culture (EXL® Navigator), Transfection Reagent (VivaMagic), Taq Polymerase and Marker. The patent of Lab Water System is registered with Korean Intellectual Property Office in Oct. 2010. In 2016, we released new product, EXL®7.

Vivagen Co., Ltd. provides differentiated services to customers in various experiments such as filtration, purification, concentration, incubation and analysis.

We are sure our expertise and technical know-how help customers solve their complex problems and achieve their goals.



Ordering Information

Order No.	Description	Type
EXL®7 Analysis 16	EXL®7 Analysis 16 Pure & Ultrapure Water System (w/UV lamp) & 20L Tank	III & I Grade
EXL®7 Analysis 32	EXL®7 Analysis 32 Pure & Ultrapure Water System (w/UV lamp) & 20L Tank	III & I Grade
EXL®7 Bio 16	EXL®7 Bio 16 Pure & Ultrapure Water System (w/UV lamp & Ultrafilter) & 20L Tank	III & I Grade
EXL®7 Bio 32	EXL®7 Bio 32 Pure & Ultrapure Water System (w/UV lamp & Ultrafilter) & 20L Tank	III & I Grade
EXL®7 S Analysis 16	EXL®7 S Analysis Pure & Ultrapure Water System (w/UV Lamp) & 20L Tank	II & I Grade
EXL®7 S Bio 16	EXL®7 S Bio Pure & Ultrapure Water System (w/UV Lamp & Ultra filter) & 20L Tank	II & I Grade
EXL®7 U Analysis	EXL®7 U Analysis Ultrapure Water System (w/UV Lamp)	I Grade
EXL®7 U Bio	EXL®7 U Bio Ultrapure Water System (w/UV Lamp & Ultra filter)	I Grade
EXL®7 Pure 16	EXL®7 Pure 16 & 20L Tank	III Grade
EXL®7 Pure 32	EXL®7 Pure 32 & 20L Tank	III Grade
EXL®7 Pure Plus 16	EXL®7 Pure Plus 16 & 20L Tank	II Grade
EXL®7 CLRW	EXL®7 Clinical Laboratory Reagent Water System (w/UV Lamp) & 20L Tank	II Grade



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