

Hyperpurex®

X

Flagship series

Laboratory water purification system

HyperPureX

Breakthrough and Innovation
All New Masterpiece



Hyperpurex®

X Flagship series (XU/XUS/XUE)

Intelligent Integration

Pure Water/High Pure Water/Ultrapure Water System



Breakthrough design to highlight the aesthetics of science and technology.

X series, using the innovative intelligent human-computer interactive control system and 7-inch colorful capacitive touch screen, integrating functions of Internet of Things (IOT) and cloud platform, embedding new purification cartridges with patented structure, rigorous double RO system[1], advanced EDI module[2] and DI ion-exchange cartridges with larger capacity, equipping with professional-grade pure water tank with 60-liter and HiDis water dispenser arm, can meet your critical and professional application requirements of lab pure water.

System output ranges from 10 to 60 liters/h. It can simultaneously produce ultrapure water (18.2MΩ.cm), high pure water (>17.5MΩ.cm) and pure water (<5μs/cm)[3]. The quality of pure water fully meets or exceeds the requirements of water quality standard specified by ASTM D1193-06, GB/T 11446.1-2013, GB/T 33087-2016, GB/T 6682-2008, CP, EP, USP, JP, CAP, CLSI, etc.

[1] The double RO system is only used for XUS/XUE series products.

[2] EDI module is only used for XUE series products.

[3] XUS/XUE series products can produce double RO water (<5μs/cm).

Application Area:

- HPLC、UPLC、LC-MS
- ICP-MS、ICP-AES、AAS、GC-MS
- MALDI-TOF-MS、IC、TOC analysis
- Electrochemical, spectrophotometric determination
- Preparation of microbial media and reagents
- Cell culture, PCR, IVF
- Protein purification, electrophoresis, biochemistry
- Proteomics, genomics, immunoassay
- Feed water of laboratory instruments, such as: autoclave, bottle washing machine, environmental test chamber, water bath, etc.

Innovative Control System Bringing Efficiency & Intelligence

All new intelligent human-computer interactive control system

- 7 inch colorful capacitive touch screen, with glass panel, achieve touch operation experience the same as mobile phone.
- LINUX system, resolution:1024×600, free switching in dual language (Chinese-English) display and 3 kinds of theme interface.
- Simple and intuitive UI interface design displays the newly defined cartridge, storage and water quality status. So that you can fully understand the system operating status and parameters. A glance for all important information.

Innovative Internet of Things (IOT) and cloud platform technology

- Access the internet by Ethernet and WIFI, achieve remote data acquisition, monitoring and management.
- Log into the cloud platform from PC, WAP or WeChat to get the device information.
- Timely alarm information to achieve fast customer service response.
- Health analysis based on big data makes fault judgment more accurate.
- Work order system can provide customers with efficient service guarantee.
- It can be connected to LIMS or BMS to realize equipment informatization and make laboratory information management more efficient and standardized.

Traceable comprehensive data management

- Store operating data records up to 5 years, including water dispensing, alarm and cartridge replacement, achieve data storage and paperless data management of the whole product life cycle by the cloud platform, meeting data tracking needs.
- With function of data exporting from USB port and data downloading from cloud platform.
- Data report documents in PDF format can prevent tampering, meeting traceability provisions of data integrity.
- Function of water dispensing report, including each water quality, water volume and user information, meet the regulatory requirements, easier to certificate.

Comprehensive water quality monitoring and alarm

- 4 water quality sensors, to monitor water quality and alarm (Feed water, RO water, DI water and UP water), electrode constant-0.01cm^{-1}, temperature sensitivity-0.1℃, and the conductivity/resistivity after temperature compensation and water temperature can be displayed simultaneously.
- 4 flow sensors, including 3 channels (RO water, DI water and UP water) quantitative dispensing and 1 channel of feed water accumulation function.
- With real-time display and alarm function of ion rejection rate of RO membrane.
- Equipped with feed water pressure sensor, real-timely monitor and display inlet pressure, convenient to timely understand the feed water condition.
- Built-in TOC detection module, real-timely monitor TOC of ultrapure water, detection range: 0.5-999.9ppb, detection accuracy:±0.1ppb, in line with USP and EP system adaptability test[1].

[1] Applicable to ultrapure water systems equipped with UV module.

Perfect consumables management

- Function of consumable life management (PP/PC/RO/DI/EDI/UP/UV/UF/TF[1]) combined with water quality, time and capacity, to reduce consumable costs.
- The remaining life of cartridges will display on the main interface with the form of dynamic icon percentage. Function of cartridge life reminder, step by step with 3 kinds of color, blue (normal), yellow (warning), red (alarm), all cartridges status is clearly visible.
- Click the cartridge icon to view the cartridge status, purification technology and cartridge function, and can realize the function of scanning code to buy the cartridge.
- Serial number verification function of original cartridges, encrypted long serial number verification code, to prevent misoperation of cartridges installation and replacement.

[1] According to different model,cartridges are different. For details, refer to the product manual.

Flexible and diverse water dispensing mode[1]

- One system with 5 water dispensing points, 3 kinds of pure water -RO water, DI water and UP water, to meet all lab water needs.
- The host is equipped with RO/DI/UP 3 standard pure water outlet, general and quantitative - 2 kinds of water dispensing mode, bringing all new dispensing experience.
- Dispenser arm[2] provides the fourth pure water outlet, with general, quantitative and instant - 3 kinds of water dispensing mode. More flexible to dispense.
- Professional-grade water tank provides the fifth pure water outlet, greatly improving water dispensing efficiency.

[1] According to different model, pure water kind and dispensing mode are different. For details, refer to the product manual.
[2] Up to 5 water dispenser arms can be equipped every host.



Sharing mode of multi-user management

- The main user can add multiple secondary users. Each user has an independent ID and password.
- The lock screen key can achieve the rapid locking and user switching of the device, allowing multiple departments and projects to share the device.
- Function of water dispensing record report, easy to view and export the water dispensing record of each ID, achieve the allocation of cartridges and maintenance costs according to the user ID.

Intuitive tank storage status

- Use advanced pressure sensor to measure liquid level. The dynamic icon on the main interface can display the tank liquid level, storage capacity (L) and storage percentage (%) in real time. A glance for storage status.
- The storage status LCD display integrated on the water tank can synchronize with the host in real time, providing second display platform, which is more convenient and intuitive.

Powerful system overview diagram

- Dynamically display process flow, cartridges configuration, water quality parameters, RO rejection rate, cartridges life and tank storage status, etc.
- Button of RO flushing, UF flushing[1] and system disinfection function can start the forced cleaning of RO membrane, UF membrane and the system disinfection with chemical dosing, and remaining time of 3 procedures above is real-time display. The flushing function significantly prolongs the service life of the RO membrane and UF membrane, and the disinfection function effectively sterilizes the pure water pipeline system.
- Ultrapure water circulation system with adjustable interval running times, to keep the system in low levels of bacterial contamination and reduce energy consumption.

[1] Applicable to ultrapure water systems equipped with UF module.

Full security protection

- With DC24V as the main power supply, fully use weak current components, to meet the safety standards.
- 3 level permission management, administrator and ordinary users have strict permission distinction.
- Integrated double water leakage protection and alarm device, to monitor water leakage inside the machine and on the desktop.
- With alarm protection of No feed water, low inlet water pressure, system high pressure and full tank.
- With alarm function of standard-exceeding of Feed/RO/DI/UP water quality, and end of cartridge life.
- All alarm information can be stored in the host and cloud platform, to meet data security requirements.

Advanced System Configuration Guaranteeing Strong Quality



1 Powerful 12-inch pretreated cartridge

- PP cartridge with deep folding membrane, accuracy of 5μm, to filter particles efficiently in source water.
- PC cartridge with high performance activated carbon fiber with catalyst, accuracy of 5μm, to adsorb organics and residual chlorine efficiently and avoid carbon powder precipitation maximumly.
- The combination of folding filter & carbon fiber filter can bring greater cartridge processing capacity, extend the replacement cycle and reduce the running cost.





2 Rigorous double RO system[1]

- Double RO system can remove up to 99% soluble inorganic ions, 99% soluble organics, microorganisms and particles.
- Compared with single RO system, the double RO water quality can be stable < 5μs/cm (feed water conductivity < 1500μs/cm), and the life of the ultrapure unit is longer.
- Equipped with DuPont RO membrane, to achieve combination of long life, stability and high ion rejection rate.
- Auto-flushing function of RO module with adjustable flushing interval and duration, to effectively prevent scale and prolong the life of the membrane.
- The automatic discharge function of unqualified RO water can ensure that the RO water quality is suitable to enter the back-end module.
- Integral package of discarded RO module, easy to install and maintain.

[1] Applicable to XUS/XUE.



3 High performance purification cartridge

- Patented cartridge structure uses full droop flow mode to prevent the stratification of resin and ensure the exchange capacity of cartridge.
- The resin filling capacity per cartridge is up to 1.36 liters, and up to 4 cartridges can be equipped every host[1], with a total filling capacity of 5.44 liters, achieving greater ion exchange capacity and significantly reducing the running cost.
- All DuPont resin and high purity material of column ensure absolute 18.2MΩ.cm of ultrapure water resistivity and reduce TOC precipitation.

[1] According to different model, cartridge configuration is different. For details, refer to the product manual.



4 Professional mini EDI module[1]

- Without softener and chemical regeneration, pure water in grade II , with resistivity > 10MΩ.cm@25 ℃ (generally above 15MΩ.cm), and TOC<30ppb[2], is available. It can prolong the life of back-end module and reduce the running cost.

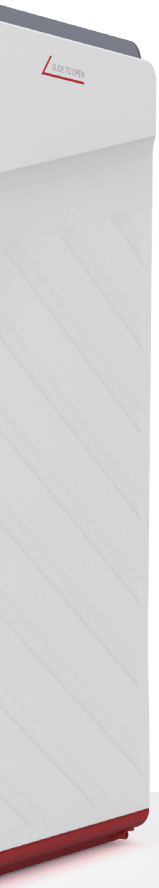
[1] Applicable to XUE.
[2] The values vary depending on the nature and concentration of contaminants in source water.

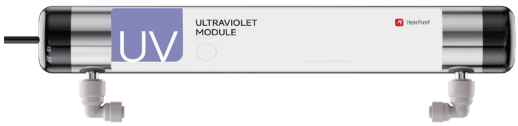


5 Built-in 1.8-liter pressure water tank[1]

- With dual functions of water storage and pressurization, FDA approved, its fully enclosed structure effectively isolates air, and prevent the touching of CO_2 and other pollutants with pure water. Up to 100 liters is optional volume.
- 60 or 120 liters pure water tank with liquid level sensor, equipped with air filter, is optional to achieve more professional pure water storage.

[1] Applicable to XUE.





6 Double wavelength UV module[1]

- Long-life ultraviolet lamp (185&254nm), combined with SUS316L flow shell, can reduce the value of TOC to ≤ 2ppb[2], and can achieve efficient sterilization and inhibit bacterial growth, suitable for HPLC, UPLC, LC-MS and other precision instruments.

[1] Applicable to ultrapure water systems equipped with UV module.
[2] The values vary depending on the nature and concentration of contaminants in source water.



7 Ultrafiltration module[1]

- With PES membrane and MWCO>5000D, effectively removes pyrogen/endotoxin, RNase, DNase, and produces nuclease-free, proteinase-free and bacterial-free ultrapure water, suitable for life science applications, such as cell culture/IVF.

[1] Applicable to ultrapure water systems equipped with UF module.



8 MF terminal microfilter[1]

- (0.45+0.2)μm double-layer PES membrane ensures microbial retention, effectively removes particles and bacteria, and meets critical application requirements.

[1] Applicable to ultrapure or high-pure water system. For details, refer to the product manual.



10 Multiple communication interfaces[1]

- USB interface, to export running data or upgrade system version online.
- RJ45, USB/WIFI interface, to achieve the IOT and cloud platform connection, easy access to LIMS or BMS.
- HiDis pure water dispensing arm interface, to achieve power supply and data communication with the host.
- L-Tank pure water tank interface, to synchronize water tank level signal with the host.
- FS foot switch interface, easy to dispense, suitable for more dispensing scenarios.
- LS leakage sensor interface, timely alarm external water leakage, strengthen equipment safety.

[1] The interface configuration varies according to the model. For details, refer to the product manual.



9 UF terminal ultrafilter[1]

- With PES membrane and MWCO>15000D, effectively removes pyrogen/endotoxin, RNase, DNase, and produces nuclease-free, proteinase-free and bacterial-free ultrapure water, suitable for life science applications, such as cell culture/IVF.

[1] Optional accessory for ultrapure water system only.

Combination of Technology & Aesthetics Creating highlights both inside and out

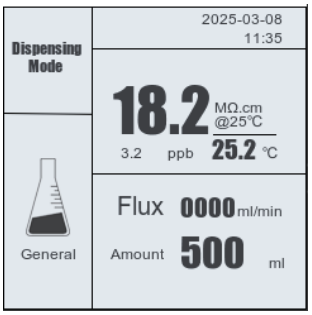


Professional PE pure water tank

- Material: HDPE, double layer design. Anti-UV inhibitor is added to the outer layer to prevent the growth of algae inside and improve the durability of the tank. Pure PE raw material is used in inner layer to reduce material precipitation and ensure water quality safety.
- Drainage valve is installed at the cone bottom, which can empty the water tank and ensure thorough cleaning.
- Feeding from the bottom can reduce CO_2 absorption.
- The enlarged cover with seal can prevent air from entering and facilitate manual cleaning.
- Compound air filter is in the standard configuration, containing special packing and microporous membrane, to absorb CO_2 and organics, and filtrate bacteria and particles.
- UV disinfection module is optional to sterilize tank and inhibit the growth of bacteria in the tank.
- Equipped with an independent pressure sensor,independent level control module and LCD display, it can display the liquid level, storage (L) and storage percentage (%) of the water tank in real-time in the form of dynamic icons. A clear glance for storage status.

Powerful HiDis water dispenser arm

- Color display, to monitor dispensing resistivity, water temperature, flow rate, single and cumulative water quantity.
- General, quantitative, instant - 3 water dispensing modes cycle, meeting with needs of different water dispensing mode.
- It can be fixed on the bracket in any direction of 360 degrees horizontally, making dispensing water more flexible in different directions.
- Function of circulating with the host can always ensure the quality of pure water.
- Equipped with 0.2μm MF terminal microfilter or UF terminal ultrafilter,to produce bacterial-free,nuclease-free, proteinase-free ultrapure water.
- Up to 5 sets of HiDis water dispenser arm can be connected to one host, fully covering the pure water usage range on the laboratory table.







Innovative design of cartridge structure

- Patented 3-chamber design, compatible with packaging of PP/PC/RO/DI cartridge, to ensure consistency.
- Patented clamping mechanism, easier and more efficient to install and replace the cartridge.
- Patented error-proofing design, effective to avoid installation errors of different cartridges.
- 12-inch cylinder with 1.36L resin filling capacity brings more bigger ion exchange capacity and more effective filtration.
- Encrypted long serial number verification code can identify the authenticity of cartridges, record the use and replacement of cartridges, and ensure the safety of the system.





All injection molded housing

- New and advanced manufacturing process bring compelling customer experience.
- With geometric surfaces and simple lines, to show rich three-dimensional sense. With extraordinary imagination, to highlight the aesthetics of science and technology. Beautiful & Easy to use.

Hyperpurex® lab water system

Bring you products and services beyond expected



PRODUCT

- Under management system of ISO9001 and ISO14001, in accordance with CE quality standards, we carry out product design, research & development and manufacturing to ensure long-term stability and reliability of quality.
- To help you meet industry specifications, we can assist in providing certificates of conformity, calibration certificates, quality certificates, performance reports, water quality compliance certificates and other supporting documents upon request.
- Hyperpurex® X Flagship series - lab water system can produce pure water/ultrapure water to meet the requirements of the following organizations:
- Chinese Pharmacopoeia-CP, United States Pharmacopoeia-USP, European Pharmacopoeia-EP, Japanese Pharmacopoeia -JP, GB/T 33087-2016,GB/T 6682-2008,GB/T 11446.1-2013,ASTM D1193,ASTM D 5196,ISO 3696,CLSI,JIS K 0557.

SERVICE

We wholeheartedly serve, only for your full satisfaction.

With customer satisfaction as the service goal, to continue to create value for customers as the direction, to grow together with customers as the concept, based on professionalism, we are full of sincerity and enthusiasm, committing to providing customers with professional and perfect technical support and after-sales service. So that you can devote all your energy to focus on the work.

Our service include:

- 36 months product warranty (excluding filter consumables)
- On-site professional training of installation, use and maintenance.
- Regular engineer return visit service
- Free continuous optimization and upgrading service of product life cycle.
- Professional and rigorous 3Q(IQ/OQ/PQ) verification documentation and verification services in both English and Chinese, to help you meet compliance requirements of GLP, GMP and cGMP.

XU Flagship series

Intelligent Integration Ultrapure Water System

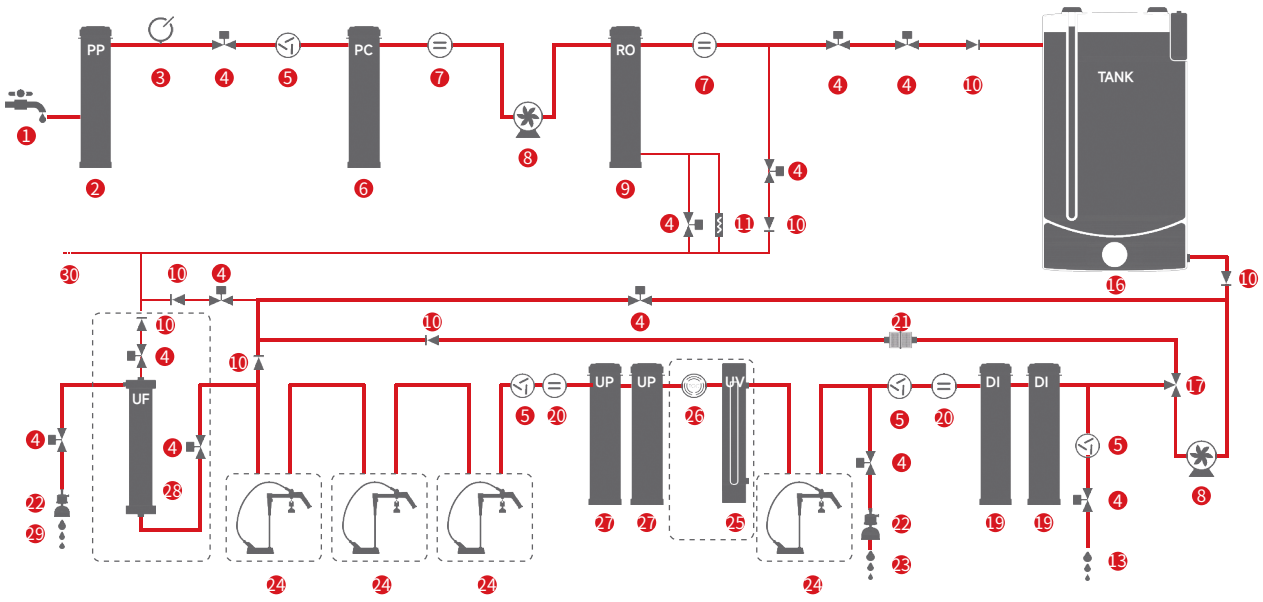
—Ultrapure water, high pure water, and RO[1st] water



With tap water inlet, using the innovative intelligent human-computer interactive control system and 7-inch colorful capacitive touch screen, integrating functions of Internet of Things (IOT) and cloud platform, embedding new purification cartridges with patented structure, stable and reliable single RO system, and DI ion-exchange cartridges with larger capacity, equipping with professional-grade pure water tank with 60-liter and HiDis water dispenser arm.

System output: 20, 40, 60 liters/h. It can simultaneously produce ultrapure water (18.2MΩ.cm), high pure water (>17.5MΩ.cm) and single RO water. The quality of pure water fully meets or exceeds the requirements of water quality standard specified by ASTM D1193-06, GB/T 11446.1-2013, GB/T 33087-2016, GB/T 6682-2008, CP, EP, USP, JP, CAP, CLSI, etc.

Flow Diagram



1. Feed Water
2. PP Pretreatment Cartridge
3. Pressure sensor
4. Solenoid valve
5. Flow sensor
6. PC Pretreatment Cartridge
7. Conductivity Sensor
8. Pump
9. RO cartridge
10. One way valve
11. Flow Restrictor
12. Pressure water tank
13. RO Water Outlet
14. Low tension switch
15. EDI Component
16. PE water tank
17. Three way valve
18. High tension switch
19. DI Cartridge
20. Resistivity Sensor
21. Sanitization Block
22. Final Filter
23. DI Water Outlet
24. Dispenser arm
25. UV Component
26. TOC Component
27. UP Ultrapure cartridge
28. UF Cartridge
29. UP Water Outlet
30. Drain Outlet

XU Specifications

Name	Standard	Low TOC	Eliminating endotoxin	Synthesizing
Model	**XU-20/40/60**	**XU-20/40/60UV**	**XU-20/40/60UF**	**XU-20/40/60UVF**
Production rate [1]	20 series: 20 L/hour, 40 series: 40 L/hour, 60 series: 60 L/hour			
Dispensing rate [2]	Up to 2 liters/minute	Up to 2 liters/minute	Up to 2 liters/minute	Up to 2 liters/minute
Ultrapure water quality [3]				
Resistivity (25°C) [4]	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm
Conductivity (25°C)	0.055 μs/cm	0.055 μs/cm	0.055 μs/cm	0.055 μs/cm
TOC [5]	5 ppb[6]	2 ppb[7]	5 ppb[6]	2 ppb[7]
Particles [8]	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)
Bacteria [9]	<0.01 CFU/1000ml	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml
Endotoxin [10]	N/A	N/A	<0.001EUml	<0.001EU/ml
RNases [10]	N/A	N/A	1 pg/ml	1 pg/ml
DNases [10]	N/A	N/A	5 pg/ml	5 pg/ml
Protease [10]	N/A	N/A	0.15 μg/ml	0.15 μg/ml
DI water quality [3]				
Resistivity (25°C) [4]	>17.5 MΩ.cm	>17.5 MΩ.cm	>17.5 MΩ.cm	>17.5 MΩ.cm
Conductivity (25°C)	<0.057 μs/cm	<0.057 μs/cm	<0.057 μs/cm	<0.057 μs/cm
Particles [8]	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)
Bacteria [9]	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml
RO^{1st} water quality [3]				
Ion rejection rate	98%-99% (with new RO module)	98%-99% (with new RO module)	98%-99% (with new RO module)	98%-99% (with new RO module)
Organic rejection rate	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)
Particles and bacteria rejection rate	>99%	>99%	>99%	>99%
Feed water requirements				
Water source type	Tap water	Tap water	Tap water	Tap water
Pressure	1-6 bar	1-6 bar	1-6 bar	1-6 bar
Temperature	5-40 °C	5-40 °C	5-40 °C	5-40 °C
Conductivity	<2000 μs/cm	<2000 μs/cm	<2000 μs/cm	<2000 μs/cm
Total hardness (In $CaCO_3$)	<300 ppm	<300 ppm	<300 ppm	<300 ppm
TOC	<2000 ppb	<2000 ppb	<2000 ppb	<2000 ppb
Free chlorine	<3 ppm	<3 ppm	<3 ppm	<3 ppm
PH	4-10	4-10	4-10	4-10
Dissolved CO_2	<30 ppm	<30 ppm	<30 ppm	<30 ppm
Power supply	200-240V, 50/60Hz	200-240V, 50/60Hz	200-240V, 50/60Hz	200-240V, 50/60Hz
Total Power	240W	240W	240W	240W
Dimension (L×W×H)	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm
Weight	Main host: about 30KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 30KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 30KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 30KG Dispenser arm: about 4KG Tank: about 16KG
Standard configuration	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set

[1] Affected by inlet water quality, pressure, temperature and status of RO membrane
[2] Affected by the tank status and terminal filter
[3] The following values are typical and may vary depending on the nature and concentration of feed water contaminants
[4] According to USP requirements, the resistivity can be displayed as a non-temperature-compensated value
[5] Affected by the type of organics
[6] Inlet TOC<1000ppb, follow professional operating procedures and correct sampling conditions
[7] Inlet TOC<50ppb, follow professional operating procedures and correct sampling conditions
[8] Equip with terminal microfilter and follow professional operating procedures and correct sampling conditions
[9] Equip with terminal microfilter and follow professional operating procedures and correct sampling conditions
[10] Equip with terminal ultrafilter and follow professional operating procedures and correct sampling conditions

XUS Flagship series

Intelligent Integration Ultrapure Water System

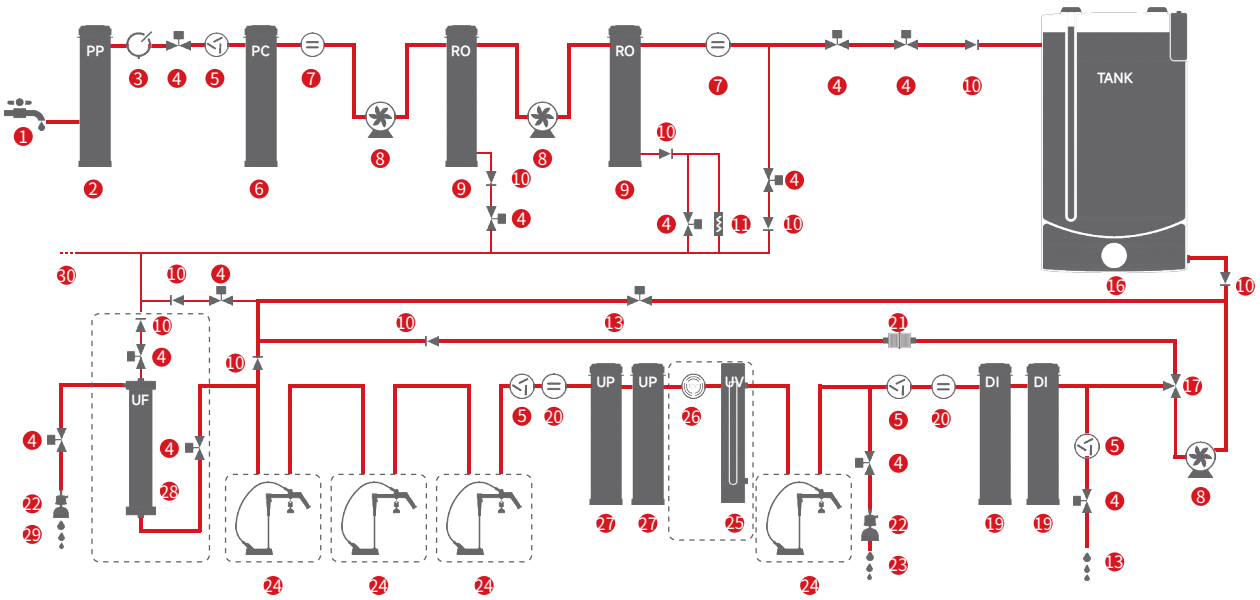
—Ultrapure water, high pure water, and RO^{2nd} water



With tap water inlet, using the innovative intelligent human-computer interactive control system and 7-inch colorful capacitive touch screen, integrating functions of Internet of Things (IOT) and cloud platform, embedding new purification cartridges with patented structure, rigorous double RO system, and DI ion-exchange cartridges with larger capacity, equipping with professional-grade pure water tank with 60-liter and HiDis water dispenser arm.

System output: 13, 25 liters/h. It can simultaneously produce ultrapure water (18.2MΩ.cm), high pure water (>17.5MΩ.cm) and double RO water(<5μs/cm). The quality of pure water fully meets or exceeds the requirements of water quality standard specified by ASTM D1193-06, GB/T 11446.1-2013, GB/T 33087-2016, GB/T 6682-2008, CP, EP, USP, JP, CAP, CLSI, etc.

Flow Diagram



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21. Sanitization Block
22. Final Filter
23. DI Water Outlet
24. Dispenser arm
25. UV Component
26. TOC Component
27. UP Ultrapure cartridge
28. UF Cartridge
29. UP Water Outlet
30. Drain Outlet

XUS Specifications

Name	Standard	Low TOC	Eliminating endotoxin	Synthesizing
Model	**XUS-13/25**	**XUS-13/25UV**	**XUS-13/25UF**	**XUS-13/25UVF**
Production rate [1]	13 series: 13 L/hour, 25 series: 25 L/hour			
Dispensing rate [2]	Up to 2 liters/minute	Up to 2 liters/minute	Up to 2 liters/minute	Up to 2 liters/minute
Ultrapure water quality [3]				
Resistivity (25°C) [4]	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm
Conductivity (25°C)	0.055 μs/cm	0.055 μs/cm	0.055 μs/cm	0.055 μs/cm
TOC[5]	5 ppb[6]	2 ppb[7]	5 ppb[6]	2 ppb[7]
Particles [8]	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)
Bacteria [9]	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml
Endotoxin [10]	N/A	N/A	<0.001 EU/ml	<0.001 EU/ml
RNases [10]	N/A	N/A	1 pg/ml	1 pg/ml
DNases [10]	N/A	N/A	5 pg/ml	5 pg/ml
Protease [10]	N/A	N/A	0.15 μg/ml	0.15 μg/ml
DI water quality [3]				
Resistivity (25°C) [4]	>17.5 MΩ.cm	>17.5 MΩ.cm	>17.5 MΩ.cm	>17.5 MΩ.cm
Conductivity (25°C)	<0.057 μs/cm	<0.057 μs/cm	<0.057 μs/cm	<0.057 μs/cm
Particles [8]	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)
Bacteria [9]	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml
RO^{2nd} water quality [3]				
Resistivity (25°C) [4]	>0.2 MΩ.cm	>0.2 MΩ.cm	>0.2 MΩ.cm	>0.2 MΩ.cm
Conductivity (25°C)	<5 μs/cm	<5 μs/cm	<5 μs/cm	<5 μs/cm
Organic rejection rate	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)
Particles and bacteria rejection rate	>99%	>99%	>99%	>99%
Feed water requirements				
Water source type	Tap water	Tap water	Tap water	Tap water
Pressure	1-6 bar	1-6 bar	1-6 bar	1-6 bar
Temperature	5-40 °C	5-40 °C	5-40 °C	5-40 °C
Conductivity	<2000 μs/cm	<2000 μs/cm	<2000 μs/cm	<2000 μs/cm
Total hardness (In $CaCO_3$)	<300 ppm	<300 ppm	<300 ppm	<300 ppm
TOC	<2000 ppb	<2000 ppb	<2000 ppb	<2000 ppb
Free chlorine	<3 ppm	<3 ppm	<3 ppm	<3 ppm
PH	4-10	4-10	4-10	4-10
Dissolved CO_2	<30 ppm	<30 ppm	<30 ppm	<30 ppm
Power supply	200-240V, 50/60Hz	200-240V, 50/60Hz	200-240V, 50/60Hz	200-240V, 50/60Hz
Total Power	240W	240W	240W	240W
Dimension (L×W×H)	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm
Weight	Main host: about 34KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 34KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 34KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 34KG Dispenser arm: about 4KG Tank: about 16KG
Standard configuration	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set

[1] Affected by inlet water quality, pressure, temperature and status of RO membrane
[2] Affected by the tank status and terminal filter
[3] The following values are typical and may vary depending on the nature and concentration of feed water contaminants
[4] According to USP requirements, the resistivity can be displayed as a non-temperature-compensated value
[5] Affected by the type of organics
[6] Inlet TOC<1000ppb, follow professional operating procedures and correct sampling conditions
[7] Inlet TOC<50ppb, follow professional operating procedures and correct sampling conditions
[8] Equip with terminal microfilter and follow professional operating procedures and correct sampling conditions
[9] Equip with terminal microfilter and follow professional operating procedures and correct sampling conditions
[10] Equip with terminal ultrafilter and follow professional operating procedures and correct sampling conditions

XUE Flagship series

Intelligent Integration Ultrapure Water System

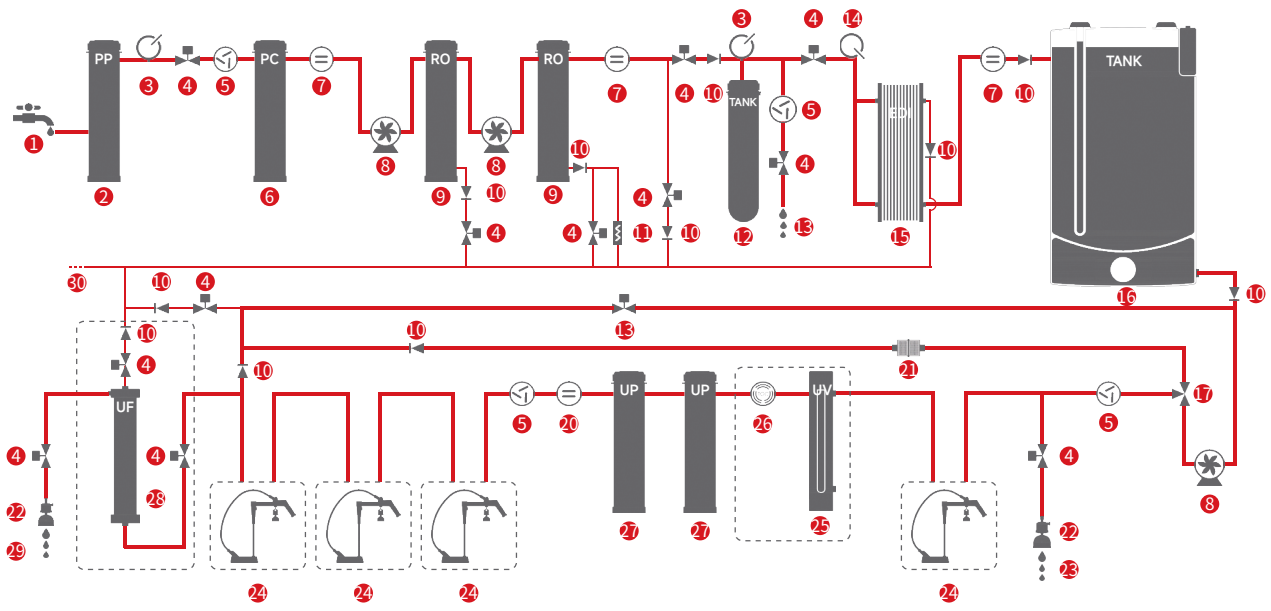
—Ultrapure water, EDI water, and RO^{2nd} water



With tap water inlet, using the innovative intelligent human-computer interactive control system and 7-inch colorful capacitive touch screen, integrating functions of Internet of Things (IOT) and cloud platform, embedding new purification cartridges with patented structure, rigorous double RO system, advanced EDI module and DI ion-exchange cartridges with larger capacity, equipping with built-in 1.8-liter pressure water tank,professional-grade pure water tank with 60-liter and HiDis water dispenser arm.

System output: 10, 20 liters/h. Maximum output per day is up to 480 liters. It can simultaneously produce ultrapure water (18.2MΩ.cm), EDI water (Resistivity>15MΩ.cm, TOC<30ppb) and double RO water(<5μs/cm)with optimized running cost. The quality of pure water fully meets or exceeds the requirements of water quality standard specified by ASTM D1193-06, GB/T 11446.1-2013, GB/T 33087-2016, GB/T 6682-2008, CP, EP, USP, JP, CAP, CLSI, etc.

Flow Diagram



1. Feed Water
2. PP Pretreatment Cartridge
3. Pressure sensor
4. Solenoid valve
5. Flow sensor
6. PC Pretreatment Cartridge
7. Conductivity Sensor
8. Pump
9. RO cartridge
10. One way valve
11. Flow Restrictor
12. Pressure water tank
13. RO Water Outlet
14. Low tension switch
15. EDI Component
16. PE water tank
17. Three way valve
18. High tension switch
19. DI Cartridge
20. Resistivity Sensor
21. Sanitization Block
22. Final Filter
23. DI Water Outlet
24. Dispenser arm
25. UV Component
26. TOC Component
27. UP Ultrapure cartridge
28. UF Cartridge
29. UP Water Outlet
30. Drain Outlet

XUE Specifications

Name	Standard	Low TOC	Eliminating endotoxin	Synthesizing
Model	**XUE-10/20**	**XUE-10/20UV**	**XUE-10/20UF**	**XUE-10/20UVF**
Production rate [1]	10 series: 10 L/hour, 20 series: 20 L/hour			
Dispensing rate [2]	Up to 2 liters/minute	Up to 2 liters/minute	Up to 2 liters/minute	Up to 2 liters/minute
Ultrapure water quality [3]				
Resistivity (25°C) [4]	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm
Conductivity (25°C)	0.055 μs/cm	0.055 μs/cm	0.055 μs/cm	0.055 μs/cm
TOC[5]	5 ppb[6]	2 ppb[7]	5 ppb[6]	2 ppb[7]
Particles [8]	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)
Bacteria [9]	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml
Endotoxin [10]	N/A	N/A	<0.001 EU/ml	<0.001 EU/ml
RNases [10]	N/A	N/A	1 pg/ml	1 pg/ml
DNases [10]	N/A	N/A	5 pg/ml	5 pg/ml
Protease [10]	N/A	N/A	0.15 μg/ml	0.15 μg/ml
EDI water quality [3]				
Resistivity (25°C) [4]	>15 MΩ.cm	>15 MΩ.cm	>15 MΩ.cm	>15 MΩ.cm
Conductivity (25°C)	<0.067 μs/cm	<0.067 μs/cm	<0.067 μs/cm	<0.067 μs/cm
TOC[5]	≤ 30 ppb	≤ 30 ppb	≤ 30 ppb	≤ 30 ppb
Particles [8]	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)	<1 /ml (>0.2μm)
Bacteria [9]	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml	<0.01 CFU/ml
RO^{2nd} water quality [3]				
Resistivity (25°C) [4]	>0.2 MΩ.cm	>0.2 MΩ.cm	>0.2 MΩ.cm	>0.2 MΩ.cm
Conductivity (25°C)	<5 μs/cm	<5 μs/cm	<5 μs/cm	<5 μs/cm
Organic rejection rate	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)	>99% (MW>300 Dalton)
Particles and bacteria rejection rate	>99%	>99%	>99%	>99%
Feed water requirements				
Water source type	Tap water	Tap water	Tap water	Tap water
Pressure	1-6 bar	1-6 bar	1-6 bar	1-6 bar
Temperature	5-40 °C	5-40 °C	5-40 °C	5-40 °C
Conductivity	<2000 μs/cm	<2000 μs/cm	<2000 μs/cm	<2000 μs/cm
Total hardness (In $CaCO_3$)	<300 ppm	<300 ppm	<300 ppm	<300 ppm
TOC	<2000 ppb	<2000 ppb	<2000 ppb	<2000 ppb
Free chlorine	<3 ppm	<3 ppm	<3 ppm	<3 ppm
PH	4-10	4-10	4-10	4-10
Dissolved CO_2	<30 ppm	<30 ppm	<30 ppm	<30 ppm
Power supply	200-240V, 50/60Hz	200-240V, 50/60Hz	200-240V, 50/60Hz	200-240V, 50/60Hz
Total Power	240W	240W	240W	240W
Dimension (L×W×H)	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm	Main host: 370×623×600mm Dispenser arm: 181×626×795mm Tank: 392×518×772mm
Weight	Main host: about 35KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 35KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 35KG Dispenser arm: about 4KG Tank: about 16KG	Main host: about 35KG Dispenser arm: about 4KG Tank: about 16KG
Standard configuration	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set	Main host 1 set All cartridges 1 set HiDis dispenser arm 1 set 60-liter water tank 1 set Foot switch 1 set External leak sensor 1 set

[1] Affected by inlet water quality, pressure, temperature and status of RO membrane
[2] Affected by the tank status and terminal filter
[3] The following values are typical and may vary depending on the nature and concentration of feed water contaminants
[4] According to USP requirements, the resistivity can be displayed as a non-temperature-compensated value
[5] Affected by the type of organics
[6] Inlet TOC<1000ppb, follow professional operating procedures and correct sampling conditions
[7] Inlet TOC<50ppb, follow professional operating procedures and correct sampling conditions
[8] Equip with terminal microfilter and follow professional operating procedures and correct sampling conditions
[9] Equip with terminal microfilter and follow professional operating procedures and correct sampling conditions
[10] Equip with terminal ultrafilter and follow professional operating procedures and correct sampling conditions

Ordering Information

	Item No	Product description
Host	XU-20	Intelligent integration ultrapure water system,20L/h, Standard, Ultrapure water, high pure water, and RO^{1st} water
	XU-40	Intelligent integration ultrapure water system,40L/h, Standard, Ultrapure water, high pure water, and RO^{1st} water
	XU-60	Intelligent integration ultrapure water system,60L/h, Standard, Ultrapure water, high pure water, and RO^{1st} water
	XU-20UV	Intelligent integration ultrapure water system,20L/h, Low TOC, Ultrapure water, high pure water, and RO^{1st} water
	XU-40UV	Intelligent integration ultrapure water system,40L/h, Low TOC, Ultrapure water, high pure water, and RO^{1st} water
	XU-60UV	Intelligent integration ultrapure water system,60L/h, Low TOC, Ultrapure water, high pure water, and RO^{1st} water
	XU-20UF	Intelligent integration ultrapure water system,20L/h, Eliminating endotoxin, Ultrapure water, high pure water, and RO^{1st} water
	XU-40UF	Intelligent integration ultrapure water system,40L/h, Eliminating endotoxin, Ultrapure water, high pure water, and RO^{1st} water
	XU-60UF	Intelligent integration ultrapure water system,60L/h, Eliminating endotoxin, Ultrapure water, high pure water, and RO^{1st} water
	XU-20UVF	Intelligent integration ultrapure water system,20L/h, Synthesizing, Ultrapure water, high pure water, and RO^{1st} water
	XU-40UVF	Intelligent integration ultrapure water system,40L/h, Synthesizing, Ultrapure water, high pure water, and RO^{1st} water
	XU-60UVF	Intelligent integration ultrapure water system,60L/h, Synthesizing, Ultrapure water, high pure water, and RO^{1st} water
	XUS-13	Intelligent integration ultrapure water system,13L/h, Standard, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-25	Intelligent integration ultrapure water system,25L/h, Standard, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-13UV	Intelligent integration ultrapure water system,13L/h, Low TOC, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-25UV	Intelligent integration ultrapure water system,25L/h, Low TOC, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-13UF	Intelligent integration ultrapure water system,13L/h, Eliminating endotoxin, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-25UF	Intelligent integration ultrapure water system,25L/h, Eliminating endotoxin, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-13UVF	Intelligent integration ultrapure water system,13L/h, Synthesizing, Ultrapure water, high pure water, and RO^{2nd} water
	XUS-25UVF	Intelligent integration ultrapure water system,25L/h, Synthesizing, Ultrapure water, high pure water, and RO^{2nd} water
	XUE-10	Intelligent integration ultrapure water system,10L/h, Standard, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-20	Intelligent integration ultrapure water system,20L/h, Standard, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-10UV	Intelligent integration ultrapure water system,10L/h, Low TOC, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-20UV	Intelligent integration ultrapure water system,20L/h, Low TOC, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-10UF	Intelligent integration ultrapure water system,10L/h, Eliminating endotoxin, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-20UF	Intelligent integration ultrapure water system,20L/h, Eliminating endotoxin, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-10UVF	Intelligent integration ultrapure water system,10L/h, Synthesizing, Ultrapure water, EDI water, and RO^{2nd} water
	XUE-20UVF	Intelligent integration ultrapure water system,20L/h, Synthesizing, Ultrapure water, EDI water, and RO^{2nd} water

	Item No	Product description	Item No	Product description
Cartridge	HPC101	Pretreatment cartridge A	HPC601	UP cartridge, standard
	HPC102	Pretreatment cartridge B	HPC602	UP cartridge, Low TOC
	HPC302	RO^{1st} module S2	HPC700	Air filter for tank
	HPC304	RO^{1st} module S4	HPC703	185&254nm double wavelength UV lamp
	HPC306	RO^{1st} module S6	HPC702	254nm UV lamp
	HPC303	RO^{1st} module F3	HPC709	UF ultrafiltration module
	HPC305	RO^{1st} module F5	HPC801	TF terminal microfilter
	HPC403	RO^{2nd} module D3	HPC802	TF terminal microfilter
	HPC405	RO^{2nd} module D5	HPC810	UF terminal ultrafilter
	HPC501	DI cartridge		

	Item No	Product description	Item No	Product description
Accessory	TANK1061	60-liter PE pure water tank, equipped with air filter and independent level control module with LCD display	PWA7011	PP cartridge for pretreatment filter (5 μm,10 inch)
	TANK1121	120-liter PE pure water tank, equipped with air filter and independent level control module with LCD display	PWA7012	RS cartridge for pretreatment filter (10 inch)
	DISP2000	HiDis dispenser arm, equipped with 2M connection kit	PWA7501	Foot switch
	PWA7200	Automatic water softener (salt required)	PWA7502	External leak sensor
	PWA7010	Pretreatment filter for source water	PWA1301	Wall-mounted mounting bracket for XLE

	Item No	Product description	Item No	Product description
Service	HPS51001	1-year extended warranty service (except for consumables)	HPS59001*	1-year, one-price all-inclusive maintenance agreement, including regular consumables replacement, maintenance and calibration
	HPS51003	3-year extended warranty service (except for consumables)		
	HPS52001	Verification documents in English	HPS59003*	3-year, one-price all-inclusive maintenance agreement, including regular consumables replacement, maintenance and calibration
	HPS53001	Basic verification service		

*On the basis of mutual confirmation of pure water consumption and feed water quality.

Web YouTube Instagram

For more product details, please login: www.hpurex.com

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