



ULUPURE ULTRAPURE WATER PURIFICATION SYSTEM

Premium Products, Accessible to All

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Technical Note: The parameters provided herein are theoretical; actual parameters may vary.

Welcome to ULUPURE



WhatsAPP

Company Introduction



As a renowned domestic supplier of laboratory/medical/industrial pure water and waste water treatment system solutions, ULUPURE upholds the business philosophy of "Professionalism, Innovation, Excellence, and Service". We provide comprehensive membrane-based water treatment solutions for ultrapure water/pure water/water reclamation to universities, research institutions, monitoring facilities, biotech, pharmaceutical, electronics, mining, chemical industries, and third-party testing organizations. We have established 30 offices and market service branches nationwide, providing professional and efficient services to over 100,000 users globally.

- 2003 Company Founded
- 2007 China Instrument Network market report: ULUPURE ranked 2nd after Millipore, 1st among domestic lab water purifier brands
- 2008 Top 20 "Best Employers in Sichuan"
- 2009 Annual orders exceeded 3,000 units; Millipore initiated joint venture negotiations
- 2011 Certified by EU CE quality system; products exported to EU market in batches
- 2012 "ULUPURE" recognized as "Famous Trademark of Chengdu"; ISO9001:2008 certified
- 2013 "ULUPURE" recognized as "Famous Trademark of Sichuan Province"
- 2015 "ULUPURE" recognized as Sichuan High-Tech Enterprise
- 2016 Launched ULUPURE 100 Rural Primary School Library Charity Project
- 2017 Recognized as Chengdu Intellectual Property Demonstration Enterprise and National Intellectual Property Advantage Enterprise
- 2019 Filed 130+ water treatment patents (13 invention patents)
- 2020 ¥70+ million ULUPURE Headquarters Base completed and put into operation
- 2021 Mr. Zhan Wei (CEO of ULUPURE) became a registered disciple of Go legend Nie Weiping (following Mr. Jin Yong)
- 2022 ULUPURE UPZGL model recognized as "Excellent Domestic Instrument"
- 2024 China Instrument Network report: Among 222 brands, ULUPURE ranked 1st with 12.96% market share by bid-winning quantity
- 2025 Recognized as "Sichuan Specialized, Refined, Special and New SME"

Two decades of dedication, chosen by 100,000+ users!

www.ULUPURE.com

Certifications & Patents



CE Certificate



High-Tech Enterprise Certificate



Credit Rating Certificate AAA



Intellectual Property Compliance Management System Certificate



Quality Management System Certificate ISO9001:2015



Invention Patent Certificates (Multiple)

Ulupure Ultra-Pure Water System

UPZGT Benchtop (Ultra) Pure Water System



The UPZGT bench-top (ultra)pure water system uses municipal tap water meeting GB5749-2022 Drinking Water Standards as feed water, employing multi-stage water treatment processes to produce RO pure water and UP ultrapure water compliant with national standard GB/T6682-2008.

System Features:

- Dual-purpose in one unit: simultaneously produces RO pure water and UP ultrapure water with excellent cost-performance.
- Fully automatic design for simple and convenient operation.
- Water quality monitoring with real-time display multiple data channels of feed water TDS, conductivity, resistivity, water temperature, room temperature.
- UV sterilizer integrated in pure water piping.
- Automatic system flushing to extend consumable life span.
- Water leakage protection function.

UPZGT Benchtop (Ultra) Pure Water System

Technical Specifications

Product Model	UPZGT-II-10/20/30T	Remarks
Feed Water Requirements	TDS <200 ppm, Water Pressure 0.10–0.40 MPa, Water Temperature 5–45°C.	Consumable life relates to feed water quality
Water Production Capacity	10/20/30(L/h)	
Water Dispensing Rate	2.2L/min(when tank is full)	
RO Water Quality	Conductivity ≤ Feed Water Conductivity × 2% (real-time monitoring)	
UP Water Quality	Resistivity 18.2 MΩ · cm @25°C (real-time monitoring), Micro Particles ≤ 1/ml, Microorganisms ≤ 1 cfu/ml	
Mercury-free UV Sterilizer	Wavelength 270nm	ULUPURE patented technology
Terminal Filter	0.2μm	
Unit Dimensions	325W×430D×515H(mm)	W: Width / D: Depth / H: Height
Unit Weight	Approx. 25 kg	
Power Supply	AC220V~50HZ(Power: 96W)	
Storage Tank	15 L constant pressure water tank	
Applications	Salt spray test chamber, aging tester, Atomic Absorption Spectroscopy (AAS), Atomic Emission Spectroscopy (AES), animal and plant cell culture, electrochemical interface research, ...	

Ordering Notes

- 1.The water production capacity of this product refers to the rated output of the RO membrane at 25°C. For every 1°C decrease in water temperature, the RO membrane output decreases by approximately 3%. The RO membrane will cease production when the water temperature falls below 5°C. Customers must consider the drop in water temperature during winter in their region when selecting and ordering the model.
- 2.For areas with poor raw water quality (TDS > 200 ppm), it is recommended to add a water softener, which can effectively reduce the consumption of consumables in the subsequent system.

Ulupure Ultra-Pure Water System

UPZGR Benchtop (Ultra) Pure Water System



The UPZGR bench-top (ultra)pure water system adopts a dual-stage RO process standard (especially suitable for regions with poor water quality). RO pure water meets GB/T6682-2008 Grade III water standard; UP ultrapure water meets GB/T6682-2008, GB/T33087-2016 and other water quality standards.

System Features:

- ABS engineering plastic housing: acid/alkali corrosion resistant.
- 4.3-inch touchscreen display interface.
- High-precision instruments with real-time monitoring of water quality and flow rate for accuracy, intuitiveness and reliability.
- Reliable historical data logging with USB download for easy water sample traceability and fault retrieval.
- Quantitative and quick dispensing functions for hands-free operation.
- UV sterilizer integrated in pure water piping.
- ULUPURE patented double-layer PE sterile tank with vent filter for safer water storage.
- Optional TOC online display for high-end user requirements.
- Optional intelligent circulation system for simultaneous bacteria removal and inhibition.

Technical Specifications

Product Model	UPZGR-I-10/20T	UPZGR-II-10/20T	UPZGR-III-10/20T	Remarks
Feed Water Requirements	TDS <1000ppm, Water Pressure 0.10–0.40 MPa, Water Temperature 5–45°C.			Consumable life relates to feed water quality
Water Production Capacity	10/20(L/h)			
RO Water Quality	Conductivity Range: 1–5 μS/cm (real-time monitoring)			
UP Water Quality	/	Resistivity 18.2 MΩ · cm @ 25°C (real-time monitoring); Micro particles ≤ 1/ml; Microorganisms ≤ 1 cfu/ml; Heavy metal ions ≤ 0.1 ppb; Endotoxin ≤ 0.01 EU/ml.	Resistivity 18.2 MΩ · cm @ 25°C (real-time monitoring); Micro particles ≤ 1/ml; Microorganisms ≤ 1 cfu/ml; Heavy metal ions ≤ 0.1 ppb; TOC ≤ 8 ppb.	
UF Endotoxin Removal Membrane	/	3000Dalton	/	ULUPURE proprietary technology
Dual-Wavelength UV Digester	/		185/254nm	
Mercury-free UV Sterilizer	Wavelength 270 nm		/	ULUPURE proprietary technology
Terminal Filter	/	0.2μm		
Unit Dimensions	375W×505D×615H(mm)			W: Width / D: Depth / H: Height
Unit Weight	Approx. 30 kg			
Power Supply	AC220V ~ 50 Hz (Power: 170–200 W)			
Storage Tank	ULUPURE Sterile Water Tank (double-layer medical-grade PE; standard with vent filter & dispensing faucet)			
Applications	Pretreatment unit for ultrapure water systems; preparation of solutions, reagents, buffers; student experiments, glassware rinsing; routine qualitative analysis in physical/chemical testing, etc.	Suitable for HPLC, IVF, PCR, animal/plant cell culture, electrochemical interface research, etc.	Suitable for HPLC, IVF, PCR, animal/plant cell culture, electrochemical interface research, genetic studies, in vitro fertilization (IVF), etc.	

Ordering Notes

- 1.The water production capacity stated for this product refers to the rated output of the RO membrane at a water temperature of 25°C. For every 1°C decrease in water temperature, the RO membrane’s production decreases by approximately 3%. When the water temperature falls below 5°C, the RO membrane will cease water production. Users should consider the seasonal drop in water temperature in their local region when selecting and ordering the system.
- 2.For areas with poor feed water quality (TDS ≥ 200 ppm), it is recommended to equip a water softener, which can effectively reduce consumable consumption in subsequent system components.
- 3.Users with high water purity requirements are advised to select the combined solution of UPZGR-I + ULZGW.
- 4.An optional 3000 Dalton imported ultrafiltration membrane (for applications such as animal cell experiments) is available, which can reduce endotoxin levels to below 0.001 EU/ml.

Ulpure Ultra-Pure Water System

UPZGH Benchtop (Ultra) Pure Water System



The UPZGH bench-top (ultra)pure water system uses municipal tap water meeting GB5749-2022 Drinking Water Standards, employing multi-stage water treatment processes. The product water complies with GB/T6682-2008, GB/T33087-2016 and other national standards.

System Features:

- ABS engineering plastic housing: acid/alkali corrosion resistant.
- 4.3-inch touchscreen display interface.
- High-precision instruments with real-time monitoring of water quality and flow rate for accuracy, intuitiveness and reliability.
- Historical data recording (dispensing volume/water quality/total volume) downloadable via USB.
- Quantitative and quick dispensing functions for hands-free operation.
- UV sterilizer integrated in pure water piping.
- Standard 15L sterile constant-pressure tank.
- Optional TOC online display for high-end user requirements.
- Optional intelligent circulation system for simultaneous bacteria removal and inhibition.

Technical Specifications

Product Model	UPZGH-I-10/20/30T	UPZGH-II-10/20/30T	UPZGH-III-10/20/30T	Remarks
Feed Water Requirements	TDS < 200 ppm, Water Pressure 0.10-0.40 MPa, Water Temperature 5-45°C			Consumable life relates to feed water quality
Water Production Capacity	10/20/30(L/h)			
RO Water Quality	Conductivity ≤ Feed Water Conductivity × 2% (real-time monitoring)			
UP Water Quality	Resistivity 18.2 MΩ · cm@25°C (real-time monitoring); Micro particles ≤ 1/ml; Microorganisms ≤ 1 cfu/ml; Heavy metal ions ≤ 0.1 ppb.	Resistivity 18.2 MΩ · cm @25°C (real-time monitoring); Micro particles ≤ 1/ml; Microorganisms ≤ 1 cfu/ml; Heavy metal ions ≤ 0.1 ppb; Endotoxin ≤ 0.01 EU/ml.	Resistivity 18.2 MΩ · cm @25°C (real-time monitoring); Micro particles ≤ 1/ml; Microorganisms ≤ 1 cfu/ml; eavy metal ions ≤ 0.1 ppb; T OC < 10 ppb.	
UF Endotoxin Removal Membrane	/	3000Dalton	/	ULUPURE proprietary technology
Dual-Wavelength UV Digester	/		185/254nm	
Mercury-free UV Sterilizer	Wavelength 270 nm		/	ULUPURE proprietary technology
MF Terminal Filter	0.2μm			
Unit Dimensions	375W×505D×615H(mm)			W: Width / D: Depth / H: Height
Unit Weight	Approx. 28 kg			
Power Supply	AC220V ~ 50 Hz (Power: 170-200 W)			
Storage Tank	15 L constant pressure water tank			
Applications	Atomic Absorption Spectroscopy (AAS), Atomic Emission Spectroscopy (AES), Ion Chromatography (IC), Gas/Liquid Chromatography (HPLC).	Mass Spectrometry (MS), Inductively Coupled Plasma (ICP), Gas/Liquid Chromatography (HPLC), Electrophoresis, gel analysis, Animal and plant cell culture...	Suitable for HPLC, IVF, PCR, Animal and plant cell culture, Electrochemical interface research, etc.	

Ordering Notes

- 1.The water production capacity stated for this product refers to the rated output of the RO membrane at a water temperature of 25°C. For every 1°C decrease in water temperature, the RO membrane' s production decreases by approximately 3%. When the water temperature falls below 5°C, the RO membrane will cease water production. Users should consider the seasonal drop in water temperature in their local region when selecting and ordering the system.
- 2.For areas with poor feed water quality (TDS ≥ 200 ppm), it is recommended to equip a water softener, which can effectively reduce consuma- ble consumption in subsequent system components.
- 3.Users with high water purity requirements are advised to select the combined solution of UPZGR-I + a designated ultrapure water system (a more optimized configuration within the same budget).
- 4.An optional 3000 Dalton imported ultrafiltration membrane (for applications such as animal cell experiments) is available, which can reduce endotoxin levels to below 0.001 EU/ml.

Ulupure Ultra-Pure Water System

UPZGE Benchtop (Ultra) Pure Water System



The UPZGE bench-top (ultra)pure water system features dual-stage RO reverse osmosis/EDI electrodeionization and other multi-stage deep purification processes, significantly improving ultrapure water quality while reducing system O&M costs. The produced pure/ultrapure water exceeds standards including GB/T6682-2008, GB/T 33087-2016, GB/T11446.1-2013, ISO3696-1995, ASTM1193, ASTM-D1125, CHP, USP, EP, CAP and CLSI.

System Features:

- ABS engineering plastic housing: acid/alkali corrosion resistant.
- 4.3-inch touchscreen display interface.
- Dual-stage RO combined with modular EDI design effectively improves water quality and reduces O&M costs.
- Four-channel water quality monitoring: RO product/RO dispense/EDI product/UP dispense.
- Historical data recording (volume/water quality/time) downloadable via USB.
- Intelligent multi-channel circulation system with over-standard discharge function for simultaneous bacteria removal and inhibition.
- Fixed-quality/quantity dispensing and quick dispensing; optional dispensing handle for hands-free operation
- ULUPURE patented double-layer PE sterile tank with vent filter for safer water storage
- UV sterilizer integrated in pure water piping

UPZGE Benchtop (Ultra) Pure Water System

Technical Specifications

Product Model	UPZGE-10/20T	Remarks
Feed Water Requirements	TDS < 200 ppm, Water Pressure 0.10–0.40 MPa, Water Temperature 5–45°C	Consumable life relates to feed water quality
Water Production Capacity	10/20 (L/h)	
Water Dispensing Rate	1.0~1.5L/min	
RO Water Quality	Conductivity Range: 1–5 µS/cm (real-time monitoring)	
UP Water Quality	18.2 MΩ·cm @25°C (real-time monitoring), Heavy metal ions ≤ 0.1 ppb, Micro particles ≤ 1/ml, Microorganisms ≤ 1 CFU/ml.	
	RNases < 0.5 pg/ml, DNases < 5 pg/ml.	Need to equip with ultrafiltration
Mercury-free UV Sterilizer	Wavelength 270 nm	ULUPURE patented technology
MF Terminal Filter	0.2µm	
Unit Dimensions	375Wx 505D x 615H (mm)	W: Width / D: Depth / H: Height
Unit Weight	Approx. 35 kg	
Power Supply	AC220V ~ 50 Hz (Power: 200–410 W)	
Storage Tank	ULUPURE Sterile Water Tank (double-layer medical-grade PE; standard with vent filter & dispensing faucet)	
Applications	AAS, AES, IC, HPLC, ICP/MS, VOC, IVF, PCR, LC/GC, amino acid analysis, protein purification, electrophoresis/gel analysis, toxicology analysis, animal/plant cell culture, molecular biology, genetic research, in vitro fertilization (IVF), ...	

Ordering Notes

- 1.The water production capacity of the product refers to the rated output of the RO membrane at a water temperature of 25°C. For every 1°C decrease in water temperature, the RO membrane’s production decreases by approximately 3%. When the water temperature falls below 5°C, the RO membrane will cease water production. Users should consider the seasonal drop in water temperature in their local region when selecting and ordering the system.
- 2.For areas with poor feed water quality (TDS ≥ 200 ppm), it is recommended to equip a fully automatic water softener, which can effectively reduce consumable consumption in subsequent system components.
- 3.With an optional 3000 Dalton ultrafiltration membrane (for applications such as animal cell experiments), endotoxin levels can be reduced to below 0.001 EU/ml.
- 4.With an optional 185/254 nm dual-wavelength ultraviolet digester, TOC can be reduced to below 10 ppb.

Ulupure Ultra-Pure Water System

UPZGHW Ultra-low TOC Ultrapure Water System



The UPZGHW ultra-low TOC ultrapure water system uses pure water (UPZGR product water or commercial purified water) as feed water, producing ultra-low TOC level ultrapure water meeting GB/T33087-2016, GB/T11446.1-2013, ISO3696-1995, ASTM-D1193, USP, EP, CAP and CLSI standards for molecular biology labs and pharmaceutical testing centers.

System Features:

- ABS engineering plastic housing: acid/alkali corrosion resistant.
- 4.3-inch touchscreen display interface.
- Historical data inquiry (volume/time/water quality) downloadable via USB.
- System functions include: automatic cleaning, quantitative dispensing, consumable replacement alerts, low water alarm.
- Function to prevent unqualified feed water from entering, eliminating system contamination and consumable waste.
- UV sterilizer integrated in pure water piping.

Technical Specifications

Product Model	UPZGHW-I	UPZGHW-II	UPZGHW-III	Remarks
Feed Water Requirements	Purified water / Distilled water meeting the Chinese Pharmacopoeia requirements (TOC < 50 ppb)			
Water Production Capacity	1.0~1.5L/min	0.6~1.0L/min		
Output Water Quality	18.2 MΩ·cm @25°C (real-time monitoring); Bacteria < 1 cfu/ml; Microparticles ≤ 1/ml (0.2 μm); Anions and cations better than national standards			
	/	Endotoxin ≤ 0.001 EU/ml		
		Rnases < 0.5 pg/ml		
		Dnases < 5 pg/ml		
	TOC≤8ppb	TOC≤5ppb	TOC≤3ppb	
Dual-Wavelength UV Digester	185/254nm			
UF Endotoxin Removal Membrane	/	Molecular weight cut-off: 1000 Dalton		ULUPURE proprietary technology
MF Terminal Filter	0.45+0.2μm			Imported brand
Unit Dimensions	388W×520D×590H (mm)			W: Width / D: Depth / H: Height
Unit Weight	Approx. 25 kg			
Power Supply	220 V ~ 50 Hz (Power: 190–220 W)			
Applications	Ultra-trace and trace inorganic/organic analysis; Mammalian cell analysis; HPLC, GC-MS, ICP-AES, ICP-MS, AAS, GF-AAS, IC; Molecular biology, microbiology, cell and culture media preparation; PCR applications and analysis, TOC analysis; Monoclonal antibody production; DNA sequencing, electrophoresis, gel analysis; Electrochemistry...			

Ordering Notes

1. Customers shall provide their own pure water feed tank (or opt the ULUPURE UPZGR-I pure water system as pretreatment).
2. Both the produced water quality and the service life of consumables are directly related to the feed water quality.
3. A TOC real-time monitor (imported or domestic) is available as an optional accessory.

Ulupure Ultra-Pure Water System

UPZGL Floor-standing (Ultra)Pure Water System



The UPZGL floor-standing (ultra)pure water system combines ABS engineering plastic and sheet metal, which contributes to the stylish and durability, featuring a 7-inch large color touchscreen for more convenient operation. It produces RO pure water and UP ultrapure water meeting GB/T6682-2008, GB/T33087-2016, GB/T11446.1-2013, ISO3696-1995, ASTM-D1193, ASTM-D1125, CHP, USP, EP, CAP and CLSI standards.

System Features:

- Real-time display of dispense type/temperature/water quality/flow rate/volume.
- User authority management and password protection.
- Three dispensing modes: quick, scheduled, and fixed-quality/quantity.
- Function to prevent RO product water from entering storage system during initial RO membrane operation (within 60 seconds).
- Unique pre-filter flushing function for better water quality.
- Real-time monitoring and usage recording of feed water/RO product/pre-ultrapurification column product/RO pure water/UP ultrapure water flow rates.
- Real-time monitoring and lifespan determination of pre-treatment column/RO membrane/pre-ultrapurification column/ultrapurification column.
- Efficient bacteria regeneration inhibition through dispensing cycle, standby cycle and multi-channel cycle technologies.
- UV sterilizer integrated in pure water piping.
- Multiple alarm functions: low water protection, high/low water level protection, consumable identification, water quality non-compliance, consumable life expiration, fault alarm, water leakage protection (optional)
- Automatic recording and storage of all fault/dispensing/consumable replacement records; complete data downloadable via USB; real-time printing (optional) for full traceability

Technical Specifications

Product Model	UZGPL-I	UPZGL-II	UPZGL-III	Remarks
Feed Water Requirements	TDS < 200 ppm, Water Pressure 0.10–0.40 MPa, Water Temperature 5–45°C			Consumable life relates to feed water quality
Process Technology	Single-stage RO + Ultrapurification	Double-stage RO + Ultrapurification	Double-stage RO + EDI + Ultrapurification	
Water Production Capacity	30/60/90/120 (L/h)	20/40/60 (L/h)	30/50 (L/h)	
Water Dispensing Rate	2.0 L/min			
RO Water Quality	Conductivity ≤ Feed Water Conductivity × 2%	Conductivity Range: 1–5 μS/cm		real-time monitoring
UP Water Quality	18.2 MΩ·cm @25°C (real-time monitoring); Microparticles ≤ 1/ml; Microorganisms ≤ 1 CFU/ml; Heavy metal ions ≤ 0.1 ppb.			
	/		TOC≤5ppb	
Dual-Wavelength UV Digester	/		185/254nm	
Mercury-free UV Sterilizer	Wavelength 270 nm		/	ULUPURE patented technology
Unit Dimensions	500W×650D×1205H (mm)			W: Front Width / D: Side Depth / H: Height
Unit Weight	Approx. 85–115 kg			
Power Supply	AC220V ~ 50 Hz (Power: 170–605 W)			
Storage Tank	30 L model: standard 40 L constant-pressure tank; 60/90 L model: standard 80 L constant-pressure tank; 120 L model: standard 100 L constant-pressure tank.	100 L PE pure water tank		
Applications	AAS, AES, IC, HPLC, ICP/MS, VOC, IVF, PCR, LC/GC, amino acid analysis, protein purification, electrophoresis/gel analysis, toxicology analysis, animal/plant cell culture, molecular biology, genetic research, in vitro fertilization (IVF)...			

Ordering Notes

- 1.The water production capacity stated for this product refers to the rated output of the RO membrane at a water temperature of 25°C. For every 1°C decrease in water temperature, the RO membrane’s production decreases by approximately 3%. When the water temperature falls below 5°C, the RO membrane will cease water production. Users must consider the seasonal drop in water temperature in their local region when selecting and ordering the system.
- 2.The TOC level of the produced water is related to the TOC value of the feed water and the system configuration.
- 3.For areas with poor feed water quality (TDS ≥ 200 ppm), it is recommended to equip a fully automatic water softener, which can effectively reduce consumable consumption in subsequent system components.
- 4.With an optional ultrafiltration membrane (3000 Dalton, for applications such as animal cell experiments), endotoxin levels can be reduced to below 0.001 EU/ml.

Ulupure Ultra-Pure Water System

UPZGT Economy Floor-standing (Ultra)Pure Water System



The UPZGT economy floor-standing (ultra)pure water system uses municipal tap water meeting GB5749-2022 Drinking Water Standards, employing multi-stage water treatment processes to produce RO pure water and UP ultrapure water compliant with GB/T6682-2008 standard.

System Features:

- Fully automatic water production design for simple and convenient operation.
- Multi-stage pre-treatment for stable water quality and lower consumable costs.
- Online water quality monitoring with real-time display.
- Automatic system flushing to extend consumable life.
- UV sterilizer integrated in pure water piping.

Technical Specifications

Product Model	UPZGT-I-L	UPZGT-II-L
Feed Water Requirements	Total Dissolved Solids (TDS) < 200 ppm, Pressure: 0.30-0.40 MPa, Water Temperature: 5-45°C	Total Dissolved Solids (TDS) ≤ 1000 ppm, Pressure: 0.30-0.40 MPa, Water Temperature: 5-45°C
Water Production Process	Single-stage RO	Double-stage RO
Water Production Capacity	20/40/60/100 (L/h)	20/40 (L/h)
Water Draw Flow Rate	1.5-1.8 L/min (when the water tank is full)	
RO Water Quality	Conductivity ≤ Feed Water Conductivity × 2%	Conductivity ≤ Feed Water Conductivity × 2% (real-time monitoring)
UP Water Quality	Resistivity 17-18.2 MΩ·cm @ 25°C (real-time monitoring)	Resistivity 18.2 MΩ·cm @ 25°C (real-time monitoring), Heavy Metal Ions ≤ 0.1 ppb, Microparticles ≤ 1 count/ml, Microorganisms ≤ 1 cfu/ml.
Mercury-free UV Sterilizer	270 nm wavelength	
Main Unit Dimensions	530W×575D×1070H (mm)	420W×560D×1120H (mm)
Main Unit Weight	20L-40L models net weight approx.: 38 (kg) 60L model net weight approx.: 50 (kg) 100L model net weight approx.: 65 (kg)	Approx. 45-53 (kg)
Operating Power Supply	AC 220 V ~ 50 Hz (Power: 75-350 W)	AC 220 V ~ 50 Hz (Power: 150-350 W)
Storage Tank	20/40 L models: standard 40 L constant pressure tank; 60 L model: standard 80 L constant pressure tank; 100 L model: standard 100 L constant pressure tank.	100 L PE tank
Applications	Feed water for ultrapure water systems, preparation of solutions, reagents, buffer solutions, student experiments/glassware rinsing, routine qualitative analysis for physical and chemical testing...	Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy (AES); Ion Chromatography (IC); Inductively Coupled Plasma (ICP); High-Performance Liquid Chromatography (HPLC)...

*Dimensions: W: Width / D: Depth / H: Height.

Ordering Notes

1. The rated water production capacity of the product refers to the standard production volume of the RO membrane at a water temperature of 25°C. For every 1°C decrease in water temperature, the water production capacity of the RO membrane will drop by approximately 3%. When the water temperature falls below 5°C, the RO membrane will cease to produce water. Customers must take into account the decrease in water temperature during winter in their region when selecting and ordering the product.
2. The quality of the feed water will directly impact the quality of the produced water and the lifespan of the consumables.
3. For regions with poor raw water quality (TDS ≥ 200ppm), it is recommended to equip a fully automatic water softener, which can effectively reduce the consumption of subsequent consumables.

Technical Principles

ULUPURE upholds the development philosophy of "Humanized Design · Standardized Products" and is committed to establishing industry norms and product standards for laboratory pure water systems. We deeply understand the fundamental differences between lab water purifiers and household RO systems, from the pre-filter development&selection to RO membrane customization and purification column development—clearly distinguishing ourselves from low-cost brands based on household RO materials. Understanding customers' nuanced operational needs, all products use PE/POM/PFA quick-connect piping systems to rapidly link various purification components (pre-treatment columns/RO membranes/UP ultrapurification columns/UF ultrafiltration columns), making installation and maintenance more convenient through modular processes.

Pre-treatment System

PL Wound Filter: Polypropylene fiber wound filter with filtration precision up to 5μm, effectively removing sediment, rust, algae and other particulate impurities from feed water.

AC Activated Carbon: High-quality acid-washed activated carbon with large surface area and rich porosity for strong filtration, efficiently adsorbing most organic substances and residual chlorine/strong oxidizers in tap water.

ULU Composite Filter Media: Contains high-purity copper-zinc alloy/FOF scale inhibitor/chlorine remover. The alloy media continuously removes residual chlorine and iron/manganese heavy metal ions while inhibiting microbial reproduction. FOF scale inhibitor is food-grade safe material that prevents calcium/magnesium crystallization and scale formation through ion exchange and chelation.

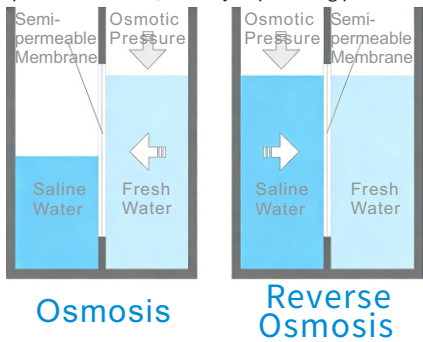
ULUPURE's pre-treatment system significantly improves water treatment efficiency vs conventional three-channel filters, with replacement cycle of 3-6 months.

Note: For regions with high-hardness groundwater, a water softener should be selected.

RO Purification System

RO (REVERSE OSMOSIS) is a pressure-driven membrane separation technology originating from 1960s US aerospace research. RO membrane pores are nanometer-scale (1nm=10⁻⁹m). Under pressure, H₂O molecules pass through while inorganic salt ions, organic matter, colloids, bacteria, pyrogens and other impurities cannot, strictly separating permeable pure water from non-permeable concentrate.

RO membranes remove >99% of high-valence ions, colloids, bacteria and organic matter >300Dalton (including pyrogens), with 90-95% removal of low-valence ions (Na⁺, K⁺). When feed water conductivity is <250μS/cm, RO pure water conductivity is typically ≤5μS/cm, meeting national lab Grade III water standards. Reverse osmosis is the most economical method for 90-99% impurity removal and the best pre-treatment for ultrapure water systems.



Post-treatment Ultrapurification System

Ion Exchange Purification Column: Ion exchange resins use H⁺ to exchange and remove cations, and OH⁻ to exchange and remove anions. The displaced H⁺ and OH⁻ combine to form H₂O. ULUPURE's integrated injection-molded ultrapurification column is packed with imported nuclear-grade mixed-bed polishing resin, achieving product water resistivity up to 18.2MΩ·cm.

Removal Endotoxin UF Membrane: Ultrafiltration membrane pore size is between RO and microfiltration (0.01-0.1μm), capable of filtering fine colloids, microorganisms and pyrogens within its rated molecular weight cut-off. Pyrogen removal membranes require a molecular weight cut-off of at least 5,000 Dalton.

Dual-wavelength UV Oxidizer: Simultaneously generates 185nm and 254nm UV. 254nm UV destroys bacterial cells causing death; 185nm UV generates hydroxyl radicals in water to rapidly oxidize residual organic matter into CO₂ and H₂O.

Mercury-free UV Sterilizer: High-efficiency sterilization based on UV-LED technology, destroying microbial DNA/RNA structure for rapid sterilization without chemicals, residue-free, environmentally friendly and convenient.

Terminal Microfilter: 0.2μm microporous membrane filter positioned at final outlet to remove residual resin fragments and microorganisms from ultrapure water.

Relevant Standards

GB/T 33087-2016 High-Purity Water for Instrumental Analysis	
Item	Specification
Resistivity (25°C) (MΩ·cm)	≥18
Total Organic Carbon (TOC) (μg/L)	≤50
Sodium Ion (μg/L)	≤1
Chloride Ion (μg/L)	≤1
Silicon (μg/L)	≤10
Total Bacterial Count (CFU/mL)	Pass
Note: Total bacterial count shall be tested when necessary.	

GB/T 6682-2008 Water for Analytical Laboratory Use			
Item	Grade 1 Water	Grade 2 Water	Grade 3 Water
pH Range (25°C)	—	—	5.0-7.5
Conductivity (25°C), mS/m	≤0.01	≤0.10	≤0.50
Oxidizable Matter (as O), mg/L	—	≤0.08	≤0.4
Absorbance (254 nm, 1 cm path length)	≤0.001	≤0.01	—
Residue after Evaporation (105±2°C), mg/L	—	≤1.0	≤2.0
Soluble Silica (as SiO ₂), mg/L	≤0.01	≤0.02	—

GB/T 11446.1-2013 Technical Specifications for Electronic Grade Water

Item	Technical Specifications			
	EW-I	EW- II	EW-III	EW-IV
Resistivity (25°C) / MΩ·cm	≥18 (≥17 for 95% of time)	≥15 (≥13 for 95% of time)	≥12.0	≥0.5
Total Silicon / (μg/L)	≤2	≤10	≤50	≤1000
Particles/ (pc/L)	0.05μm~0.1μm	500	—	—
	0.1μm~0.2μm	300	—	—
	0.2μm~0.3μm	50	—	—
	0.3μm~0.5μm	20	—	—
	>0.5μm	4	—	—
Bacterial Count / (CFU/mL)	≤0.01	≤0.1	≤10	≤100
Copper / (μg/L)	≤0.2	≤1	≤2	≤500
Zinc / (μg/L)	≤0.2	≤1	≤5	≤500
Nickel / (μg/L)	≤0.1	≤1	≤2	≤500
Sodium / (μg/L)	≤0.5	≤2	≤5	≤1000
Potassium / (μg/L)	≤0.5	≤2	≤5	≤500
Iron / (μg/L)	≤0.1	—	—	—
Lead / (μg/L)	≤0.1	—	—	—
Fluorine / (μg/L)	≤1	—	—	—
Chlorine / (μg/L)	≤1	≤1	≤10	≤1000
Nitrite / (μg/L)	≤1	—	—	—
Bromine / (μg/L)	≤1	—	—	—
Nitrate / (μg/L)	≤1	≤1	≤5	≤500
Phosphate / (μg/L)	≤1	≤1	≤5	≤500
Sulfate / (μg/L)	≤1	≤1	≤5	≤500
Total Organic Carbon (TOC) / (μg/L)	≤20	≤100	≤200	≤1000