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Ultrapure Water Systems

ACCU20, ACCU100, ACCU500

# Ultrapure Water Systems

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## Ultrapure Water Systems

ACCU20, ACCU100, ACCU500

# ACCU20 Ultrapure Water Systems

Produce Type I ultrapure water and reverse osmosis (RO) water on demand from tap

The small footprint ACCU20 system is an ideal choice for users who need up to 20 litres of ultrapure water or RO water per day. Quality of ultrapure product water meets or exceeds ASTM, CLSI, CAP, and ISO Type I water standards

- This compact system provides an easy way to produce ultrapure water or RO water on demand from tap water directly with no additional pre-treatment filters
- The system is equipped with a safeguard ACCUDuo 'P' pack cartridge and a dual-column ACCUDuo 'U' pack ultrapurification cartridge to ensure optimum quality of the final product water
- No external storage tank is required, which eliminates the risk of water degradation by contaminants from the container or the tubing
- The fully automatic controlled and maintained system contains automatic cleaning cycles and self-maintenance functions for the RO membrane, which increases the lifetime and efficiency of the RO membranes as well as the cartridges
- Automatic hourly system recirculation in the loop prevents bacterial growth and maintain water purity at all times
- System status and key quality parameters are clearly displayed on large LCD screen for easy system performance monitoring

### Applications:

Ultrapure water can be used in many areas. Here are some typical applications:

- HPLC mobile phase preparation
- Preparation of reagent blank solutions
- As sample diluent for GC, HPLC, AA, ICP-MS and other analytical techniques
- Preparation of buffers and culture media for mammalian cell culture
- Preparation of molecular biology reagents, etc.



# Ultrapure Water Systems

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## Specification:

### Feed Water Requirements

Tap water	Municipal water, TDS<500ppm (1000 µS/cm)
Operating temperature	5-45°C
Feedwater pressure	15-90psi (1-6 bar)

### Product Water Flow Rate

RO water (@25°C)	>0.5L/min
Ultrapure water (Type I) (@25°C)	>0.5L/min

### Product Water Quality

RO water conductivity (@25°C)	Typically <20µS/cm
Ultrapure water resistivity (@25°C)	18.2 MΩ-cm
TOC	<10ppb (<5ppb with a dual wavelength UV lamp in UV Model )
Particles in ultrapure water (>0.2µm)	<1/mL (with a 0.2µm final filter or terminal ultrafiltration cartridge)
Microorganisms	<0.1 cfu/mL (with a 0.2µm final filter or terminal ultrafiltration cartridge)
Pyrogens (endotoxins)	<0.001 Eu/mL ( with a terminal ultrafiltration cartridge )

### Dimensions

Length x Depth x Height	30cm x 51cm x 48cm
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**Warranty Water system Two years    Garantie 2 ans FR    Garantía 2 años ES    Garantie 2 Jahre DE**

## Ordering information:

Cat. No	Description	Pack qty
<b>Water systems</b>		
15489689	ACCU20 Ultrapure water system	1
15499689	ACCU20 UV Ultrapure water system	1
<b>Consumables</b>		
15449719	ACCUDuo P pack cartridge	1
15489729	ACCUDuo U pack cartridge	1
15499729	ACCUDuo U pack cartridge with a 0.2µm PES capsule filter	1
15409739	ACCUDuo U pack cartridge (low TOC)	1
15449669	Reverse osmosis membrane with housing	1
15469689	185/254nm dual-wavelength UV lamp	1





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## Ultrapure Water Systems

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# ACCU100 Ultrapure Water Systems

Ultrapure water for critical laboratory applications

Produces Type I ultrapure water from RO, distilled or deionised water. Product water quality meets or exceeds CLSI and CAP Type I water standards.

The system is CE and FCC certified

### Independent ultrapure water dispenser

- The remote dispenser has a built-in high precision resistivity sensor with cell constant of  $0.01\text{cm}^{-1}$  to measure the quality of ultrapure water just prior to the dispensing point
- Volumetric dispensing and calibration
- The handle is 360 degree-rotatable and detachable from its support for effortless and instant dispensing with maximum flexibility

### Multi-functional control panel

- Volumetric dispensing and calibration
- Alarms and maintenance information on a large colour LCD screen
- Real-time monitoring of system status:
  - Product water quality/resistivity
  - Cartridge/UV lamp remaining service life

### ACCUQuatro U Pack

- The patented large capacity ultrapurification cartridge
- Minimal dead water volume
- Production of ion-free and organic-free ultrapure water
- Choices of ultrapurification cartridges for feed water types



# Ultrapure Water Systems

ACCU20, ACCU100, ACCU500

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## Specification:

	ACCU100	ACCU100 UV
<b>Feed Water Requirements</b>		
Feed water	EDI water, RO water, distilled water, deionised water	EDI water, RO water, distilled water, deionised water
Operating temperature	5-45°C	5-45°C
Feed water pressure	0-15psi (0-1bar)	0-15psi (0-1bar)
<b>Product Water Quality</b>		
Flow rate (@25 °C )	1.0-1.5L/min	1.0-1.5L/min
Resistivity (@25°C )	18.2 MΩ·cm	18.2 MΩ·cm
TOC level	<5 ppb	<10 ppb
Particles (> 0.2 µm)	<1 /mL	<1 /mL
Microorganisms	<0.1cfu/mL	<0.1cfu/mL
Pyrogens (endotoxins)	<0.001Eu/mL (with a terminal ultrafiltration filter)	<0.001Eu/mL (with a terminal ultrafiltration filter)
<b>Dimensions</b>		
Length × Depth × Height	21 cm × 35 cm × 44 cm	21 cm × 35 cm × 44 cm
Net weight (operation weight)	6 kg (10.5 kg)	7 kg (11.5 kg)
<b>Warranty Water system Two years</b>		

## Ordering information:

Water systems		Pack qty
15489749	ACCU100 Ultrapure water system	1
15499749	ACCU100 UV Ultrapure water system	1
15409759	ACCU100 UV Ultrapure water system, with dispenser	1
<b>Consumables</b>		
15479709	ACCUQuatro U pack cartridge (RO Feed)	1
15499709	ACCUQuatro U pack cartridge (DI Feed)	1
15419719	ACCUQuatro U pack cartridge (Low TOC)	1
15489709	ACCUQuatro U pack cartridge kit with 0.2µm final filter (RO Feed)	1
15409719	ACCUQuatro U pack cartridge kit with 0.2µm final filter (DI Feed)	1
15409659	0.2µm PES capsule filter	1
15449689	UV lamp, dual wavelength 185/254 nm	1







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## Ultrapure Water Systems

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# ACCU500 Ultrapure Water Systems

Produces ultrapure and reverse osmosis (RO) water from tap water directly

Quality of ultrapure water meets or exceeds ASTM, CLSI, CAP, and ISO Type I water standards.  
The system is CE and RoSH certified

- The fully automated control system contains pre-rinse, a 'flush' feature preventing RO membrane fouling, RO membrane and cartridge life monitoring as well as many other programs for convenient operation
- The pre-rinsing program starts automatically once a new RO membrane is installed so there is no need for user to set additional cleaning procedures
- Two sets of dual-column purification cartridges work sequentially to ensure thorough removal of ions and organics in water
- Automatic hourly system recirculation prevents bacterial growth
- Resistivity is measured by a highly sensitive resistivity sensor
- Electrical and water compartments are completely segregated, thus safer to operate
- User can set water dispensing time for easy water collection
- Both RO and ultrapure water can be dispensed from the water system
- The system can be fitted with a 30L or 60L PE tank with a liquid level sensor and a tank vent filter with CO<sub>2</sub> scavenger to protect purified water from atmospheric degradation
- A 0.2µm filter or ultrafiltration filter (optional) removes final contaminants
- Independent ultrapure water dispenser
- The remote dispenser has a built-in high precision resistivity sensor with cell constant of 0.01cm<sup>-1</sup> to measure the quality of ultrapure water just prior to the dispensing point
- Volumetric dispensing and calibration
- The handle is 360 degree-rotatable and detachable from its support for effortless and instant dispensing with maximum flexibility

### Applications:

Ultrapure and RO water can be used in many areas. Here are some typical applications.

#### *Ultrapure water*

- HPLC mobile phase preparation
- Preparation of reagent blank solutions
- As sample diluent for GC, HPLC, AA, ICP-MS and other analytical techniques
- Preparation of buffers and culture media for mammalian cell culture
- Preparation of molecular biology reagents, etc.

#### *RO water*

- Glassware cleaning
- Washing machine for glassware
- Waterbath water
- Autoclaving



# Ultrapure Water Systems

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## Specification:

### Feed Water Requirements

Tap water	Municipal water, TDS <1000 ppm (2000 µS/cm)
Operating temperature	5-45 °C
Feed water pressure	15-90 psi (1-6 bar)

### Product Water Flow Rate

RO water (@25°C)	10, 15, 20 and 30 L/hr
Ultrapure water (Type I) (@25°C)	1.5L/min

### Product Water Quality

RO water conductivity*	Typically <20µS/cm
Ultrapure water resistivity (@25°C)	18.2 MΩ·cm
TOC	<10 ppb(<5ppb with a dual wavelength UV lamp in all UV models)
Particles in ultrapure water (> 0.2 µm)	<1/mL (with a 0.2 µm final filter or terminal ultrafiltration cartridge)
Microorganisms	<0.1 cfu/mL (with a 0.2 µm final filter or terminal ultrafiltration cartridge)
Pyrogens (endotoxins)	<0.001 Eu/mL (with a terminal ultrafiltration cartridge)

### Dimensions

Main System: Length x Depth x Height	30 cm × 51 cm × 48 cm
Dispenser: Diameter x Height	22 cm × 74 cm

### Warranty Water system Two years



## Ordering information:

Cat. No	Description	Pack qty
<b>Water systems</b>		
15409699	ACCU500 Ultrapure water system, 10L	1
15429699	ACCU500 Ultrapure water system, 15L	1
15449699	ACCU500 Ultrapure water system, 20L	1
15469699	ACCU500 Ultrapure water system, 30L	1
15419699	ACCU500 UV Ultrapure water system, 10L	1
15439699	ACCU500 UV Ultrapure water system, 15L	1
15459699	ACCU500 UV Ultrapure water system, 20L	1
15479699	ACCU500 UV Ultrapure water system, 30L	1
15409709	ACCU500 UV Ultrapure water system, 10L, with dispenser	1
15419709	ACCU500 UV Ultrapure water system, 15L, with dispenser	1
15429709	ACCU500 UV Ultrapure water system, 20L, with dispenser	1
15439709	ACCU500 UV Ultrapure water system, 30L, with dispenser	1
<b>Consumables</b>		
15459719	ACCUDuo H pack cartridge	1
15489729	ACCUDuo U pack cartridge	1
15499729	ACCUDuo U pack cartridge with a 0.2µm PES capsule filter	1
15409739	ACCUDuo U pack cartridge (low TOC)	1
15469689	185/254nm dual-wavelength UV lamp	1
15469669	Reverse osmosis membrane with housing, for ACCU500 10L /20L	1
15449669	Reverse osmosis membrane with housing, for ACCU500 15L /30L	1
15479679	30L PE tank	1
15489679	60L PE tank	1
15409669	Tank sanitisation module	1
15409689	Tank vent filter	1
15419759	POU	1
15419669	Leak protector with auto water shut-off valve	1
15439759	Prefiltration kit (10", 3-stage)	1
15409649	Polypropylene depth filter, 10 inch, 1µm	12
15419649	Polypropylene depth filter, 10inch, 10µm	12
15489639	Activated carbon cartridge, 10 inch,	12
15499639	Softening cartridge, 10 inch,	12

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12023\_EN\_2016

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