

NuZar

Water Purification Systems

Compact
and powerful.



NuZar U	NuZar U+
NuZar Q	NuZar E
NuZar H	NuZar R
NuZar C	NuZar C-DI

The system is manufactured in our production facility registered by ISO 9001:2015 & ISO 14001:2015. It is CE/RoHS certified.

About NuZar Laboratory Water Systems

Consistent water quality, effortless operation, user-friendly monitoring, and a favorable cost of ownership.

The NuZar systems introduce a unique series to the RephiLe water purification portfolio. They deliver powerful performance in a compact size, meeting your pure water requirements while also saving valuable space for your research.

The NuZar system is ready to install right out of the packaging, and all setups are straightforward. The simplified and user-centered designs of the NuZar series make them easy to use, even for inexperienced users. This contributes to streamlining workflows, ultimately enhancing the quality and productivity of the laboratory.

This series offers a variety of options:

- A. Diverse pure water quality for different applications;
- B. Maximum pure water production up to 45 L/hr;
- C. Choose to dispense water using an integrated system-mounted dispenser or a standalone remote dispenser;
- D. Integrated 10-Liter pure water tank or independent high-capacity tanks (30 L, 60 L, 100 L, 350 L, or larger).



Feed Water			Product Water	
HP*	Tap		UP**	HP*
	●	NuZar U	●	● (RO)
	●	NuZar U+	●	● (DI)
	●	NuZar E		● (EDI)
	●	NuZar H		● (DI)
	●	NuZar R		● (RO)
● ● ●		NuZar Q	●	
	●	NuZar C		● (CLRW)
● ● ●		NuZar C-DI		● (CLRW)

*HP: Purified water **UP: Ultrapure Water

Key Features

Reliable, Stable, Traceable and Predictable

Simple installation and maintenance

- ◇ RFID tracking of consumables (RO Pack included) for enhanced management
- ◇ Easy to remove consumable access cover.
- ◇ Automatic RO membrane cleaning cycles (Cl₂ and pH cleaning)

Low running cost

- ◇ Self-maintenance functions for maximum RO membrane effectiveness and lifetime
- ◇ RFID record of cartridge history for predictable consumable replacements
- ◇ Highly-efficient cartridges

Reliable water quality and stable system performance

- ◇ Stable RO permeability over a wide range of temperatures
- ◇ Diversion to drain if quality of RO permeate falls below a pre-set set-point
- ◇ Automatic hourly recirculation of ultrapure water
- ◇ Mercury-free germicidal UV lamp preinstalled in tank sanitation module

Data traceability

- ◇ Automatic data backup for up to 2 years
- ◇ Easy data transfer through multiple interfaces, such as LAN, USB, etc.

Compact and small footprint

- ◇ An in-built single pretreatment P Pack
- ◇ Placement flexibility - on the bench or on a wall
- ◇ Two dispenser heights
- ◇ All-in-one design. Space-Saver



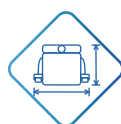
RFID technology



Data traceability



Low running cost



Small foot-print



Environmentally friendly

Components & Parts



Cartridge

- Optimized flow design to improve water quality stability & efficiency of polishing resins
- High pressure rated housings, proprietary sealing, and double O-ring design ensures operational confidence
- Cartridge color, label, and RFID recognition prevent incorrect installation



Ergonomic dispenser with 2.4" color touch screen

- One dispenser for one system (two for NuZar U & NuZar U+)
- Intuitive display - water quality with temperature compensation, volumetric dispensing and flow rate
- System alerts are displayed on the touch screen
- Effortless adjustment - dispensing rate (up to 2 L/min), manual and volumetric dispensing
- Two dispenser heights for the ultimate in flexibility
- Choice of final filters: RephiBio and 0.2 µm final filter



Placement flexibility:

- Under the bench
- On the bench
- Wall-mounted



Remote dispenser

Specially for NuZar U Extended, U+ Extended and Q Extended models

- A 3-meter remote water dispenser, providing convenient access to purified water from anywhere within the lab
- The dispenser is securely mounted on a standalone height-adjustable stand with an anti-skid base that keeps it securely in place
- The stand offers 360-degree rotation for ultimate convenience



Storage Tank

- A 10 L integrated HDPE tank (not for NuZar Q / NuZar C-DI) equipped with sanitization module, mercury-free germicidal UV lamp preinstalled.
- Tank recirculation function specifically for NuZar H to guarantee water quality in the tank

Extendable to 30/60/100/350 L (with mercury-free tank sanitization module) if needed

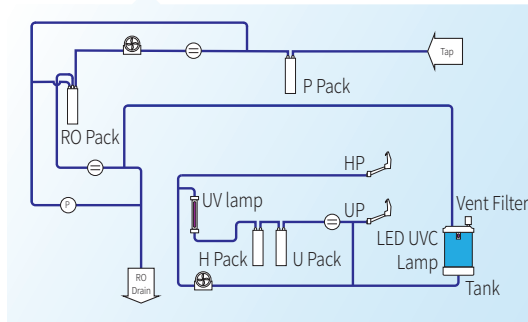


Flow Schematics

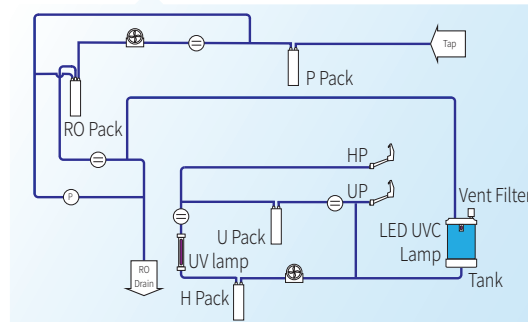
Rephile NuZar systems incorporate advanced technologies and optimized flow paths to ensure exceptional water quality for customers' applications.

Comprehensive process control management with continuous water purity monitoring after every purification step. This allows consistent and reliable operation which ensures the product meets the NuZar specifications.

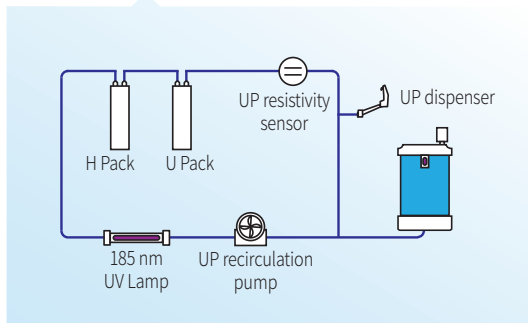
NuZar **U** Tap water to ultrapure & RO water



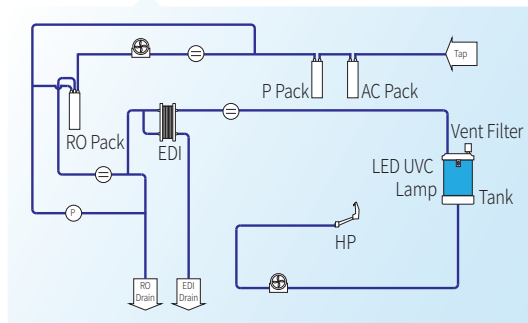
NuZar **U+** Tap water to ultrapure & DI water



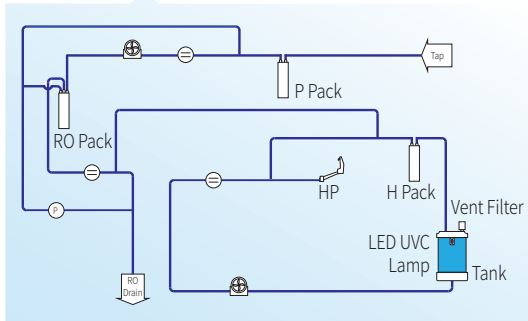
NuZar **Q** Pure water to ultrapure water



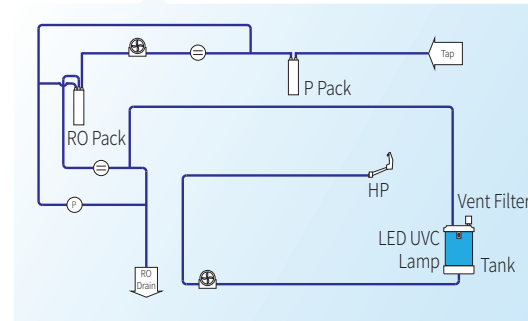
NuZar **E** Tap water to EDI water with an EDI module



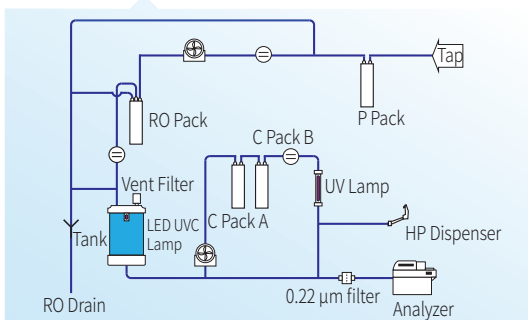
NuZar **H** Tap water to DI water with tank recirculation function



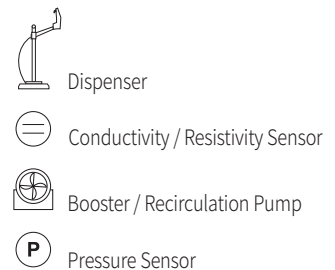
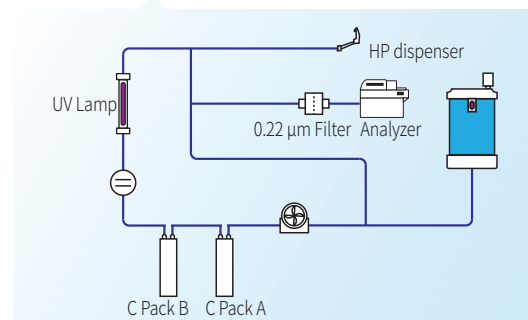
NuZar **R** Tap water to RO water with automatic RO flush and rinsing



NuZar **C** Tap water to Pure water (CLRW)



NuZar **C_{DI}** Pure water to Pure water (CLRW)



Specifications

Parameter	NuZar U	NuZar U+	NuZar Q	NuZar E	NuZar H	NuZar C	NuZar C-DI	NuZar R
Product water Specifications	Ultrapure & RO water	Ultrapure & DI water	Ultrapure water	EDI water	DI water	Pure water	Pure water	RO water
Production rate	24 / 45 L/hr	24 / 45 L/hr	-	10 L/hr	24 / 45 L/hr	24 / 45 L/hr	-	24 / 45 L/hr
Dispenser rate	Up to 2 L/min							
Conductivity (@25°C)	Typically < 20 µS/cm	-	-	-	-	-	-	Typically < 20 µS/cm
RO rejection (Not for Q or C-DI)	97 to 98% ionic rejection (new RO cartridge) > 99% organic rejection > 99% particulates & bacteria rejection							
Resistivity (@25°C)	18.2 MΩ · cm			> 5 MΩ · cm	> 1 MΩ · cm	> 10 MΩ · cm (typically > 16 MΩ · cm)		-
TOC	< 5 ppb*			< 30 ppb**	-	< 30 ppb		-
Particles	No Particles with size > 0.22 µm***			-	-	No Particles with size > 0.22 µm***		-
Microorganisms	< 0.01 cfu/ml***			-	-	< 1 CFU/ml		-
Pyrogens (endotoxins)	< 0.001 Eu/ml****			-	-	-		-
RNase	< 0.5 pg/ml****			-	-	-		-
DNase	< 10 pg/ml****			-	-	-		-
Silica	-			-	-	< 5 µg/L		-

*When TOC Level of feed water is < 50 ppb.

**Product water quality may vary due to local feed water conditions.

***with a 0.2 µm final filter

****with a RephiBio filter and ISO Type I water standards



Select a right NuZar system for your applications

Water type

Main Applications

Ultrapure water

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

Pure water

- Dilution of clinical reagents, samples and detergents
- Automatic medical device and equipment rinsing
- Reaction cuvettes cleaning
- Feeding washing stations for probe tips and stirrer paddles
- Temperature controlled Incubator baths
- An interface between syringe and sample

EDI / DI water

- Preparation of chemical and bio-reagents
- Preparation of culture media / buffer
- Water supply for clinical analyzers
- Medical device and equipment rinsing
- For serum and blood fractionation
- Water supply for ultrapure water systems

RO water

- Washing machine for glassware cleaning
- Feed water for laboratory animals
- Feed water for humidifiers, autoclaves, etc.
- Water supply for ultrapure water systems
- Hydroponics

Water Quality Compliance

Quality of ultrapure water meets or exceeds ASTM, CLSI, CAP and ISO Type I water standards.

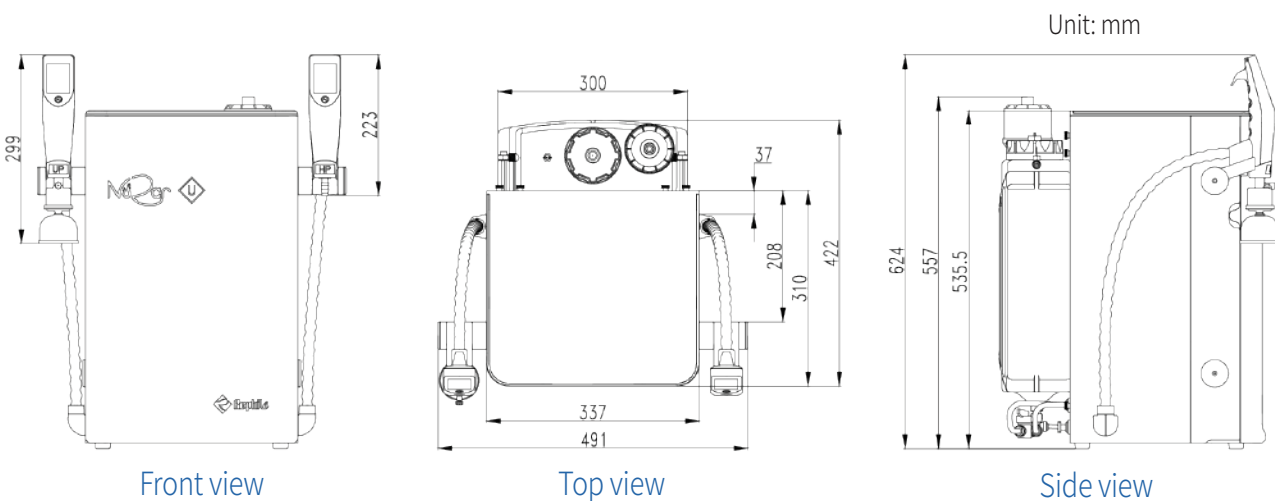
Quality of high pure water meets or exceeds ASTM, CLSI, CAP and ISO Type II water standards and also complies with the Purified Water requirements from the European and U.S. Pharmacopoeia.

NuZar C / NuZar C-DI: The product water quality fulfills the critical needs within the clinical laboratory, in compliance with CLSI Clinical Laboratory Reagent Water (CLRW) quantitative specifications.

Specifications

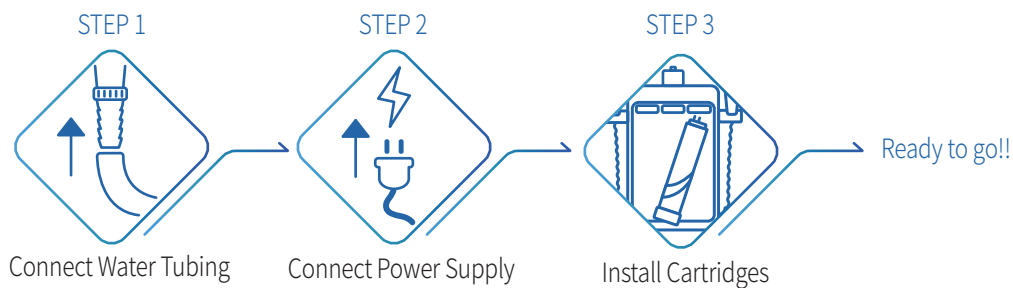
General Specifications		NuZar Q	NuZar C-DI	NuZar U	NuZar U+	NuZar E	NuZar H	NuZar C	NuZar R
Operating voltage		24 VDC							
Input voltage		100 - 240 VAC							
Main system power		< 190 W							
Feed Water Requirements									
Feed water conductivity / TDS		EDI, RO, Distilled, Deionized water		Tap water < 2000 µS/cm / < 1000 ppm					
Operating temperature		5 – 35 °C							
Feed water pressure		0 - 1 bar (0 - 15 psi)*		1 – 6 bar (15 – 90 psi)					
Dimensions W x D x H	w/ integrated tank	NuZar U / U+: 491 x 422 x 624 mm (19.3 x 16.6 x 24.5 in) NuZar E / H / R / C: 414 x 422 x 624 mm (16.3 x 16.6 x 24.5 in)							
		NuZar Q / C-DI: 414 x 310 x 624 mm (16.3 x 12.2 x 24.5 in)							
Weight (Approximate)	net	18 kg	18 kg	21 kg	21 kg	21 kg	20 kg	20 kg	19 kg
	gross	27 kg	27 kg	30 kg	30 kg	30 kg	29 kg	29 kg	28 kg

*It's recommended to use a pressure regulator if feed water pressure is above 15 psi (1 bar)



Installation Information

Plug-N-Play with only 3 steps



Ordering Info

Description	Cat. No.
NuZar water system, U 24 set	RN0U02000K
NuZar water system, U 24 set, with 10L tank	RN0U0200TK
NuZar water system, U 45 set	RN0U04000K
NuZar water system, U 45 set, with 10L tank	RN0U0400TK
NuZar water system, U 24 Extendedset	RN0UP2000K
NuZar water system, U 24 Extended set, with 10L tank	RN0UP200TK
NuZar water system, U 45 Extended set	RN0UP4000K
NuZar water system, U 45 Extended set, with 10L tank	RN0UP400TK
NuZar water system, U+ 24 set	RNHU02000K
NuZar water system, U+ 24 set, with 10L tank	RNHU0200TK
NuZar water system, U+ 45 set	RNHU04000K
NuZar water system, U+ 45 set, with 10L tank	RNHU0400TK
NuZar water system, U+ 24 Extended set	RNHU02000K
NuZar water system, U+ 24 Extended set, with 10L tank	RNHU0200TK
NuZar water system, U+ 45 Extended set	RNHU04000K
NuZar water system, U+ 45 Extended set, with 10L tank	RNHU0400TK
NuZar water system, Q set	RN0Q00000K
NuZar water system, Q Extended set	RN0QP0000K
NuZar water system, H 24 set	RN0H02000K
NuZar water system, H 24 set, with 10L tank	RN0H0200TK
NuZar water system, H 45 set	RN0H04000K
NuZar water system, H 45 set, with 10L tank	RN0H0400TK
NuZar water system, R 24 set	RN0R02000K
NuZar water system, R 24 set, with 10L tank	RN0R0200TK
NuZar water system, R 45 set	RN0R04000K
NuZar water system, R 45 set, with 10L tank	RN0R0400TK
NuZar water system, C 24 set	RN0C02000K
NuZar water system, C 24 set, with 10L tank	RN0C0200TK
NuZar water system, C 45 set	RN0C04000K
NuZar water system, C 45 set, with 10L tank	RN0C0400TK
NuZar water system, C-DI	RN0CD0000K
NuZar water system, E set	RN0E01000K
NuZar water system, E set, with 10L tank	RN0E0100TK

All rights reserved © 2025 RephiLe Bioscience, Ltd.
RephiLe and NuZar are registered trademarks of RephiLe Bioscience, Ltd.
All other trademarks mentioned are the property of their respective owners.
™ and ® may be omitted in this brochure.
RephiLe Bioscience, Ltd.

Toll Free: +1-855-RephiLe (+1-855-737-4453)
E-mail: info@rephile.com

Literature: RFPR1442503

