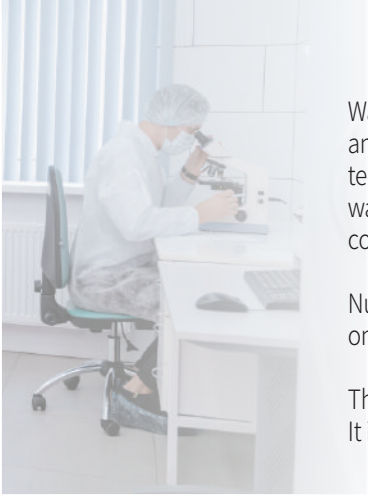


NuZar C24

Clinical Feed Water System

C

Tap water to clinical laboratory reagent water (24 L/h)



Water purity is of great importance in all aspects of clinical analyzer operation including diagnostics, sophisticated testing and device washing. The purpose-built NuZar C clinical water system is developed by combining proven water purification technologies, advanced control and monitoring functions to consistently feed analyzers with reliable clinical grade pure water generated directly from tap water. The pure water quality fulfills the critical needs within the clinical laboratory, in compliance with CLSI Clinical Laboratory Reagent Water (CLRW) quantitative specifications.

NuZar C24 is a good match for bench top clinical analyzers or multiple analyzers located throughout a clinical laboratory on a distribution loop system, daily pure water supply up to 500 liters.

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



A compact and reliable solution for clinical analyzers

Key Features

Stable and reliable system performance for uninterrupted pure water supply

- ◊ Optimized work flow sequence
- ◊ Comprehensive quality monitoring management after every purification stage with precisely controlled levels of purity
- ◊ Stable RO permeability over a wide range of temperatures
- ◊ Easy data traceability with automatic performance data backup for up to 2 years
- ◊ Mercury-free germicidal UVC LED lamp preinstalled in tank sanitation module

Straight Forward Operation

- ◊ Simple installation and maintenance with options to meet specific requirements of different analyzers, requiring no tools or experience
- ◊ RFID tracking of consumables (RO Pack included) for enhanced management
- ◊ Easy replacement of consumables- direct access from the front cover & quick-fit connections

Bacterial control

- ◊ A 0.22 um membrane filter (2.5 in) or an ultrafiltration filter can be used at the analyzer inlet to reduce the bacterial contamination risk

Cost-effectiveness

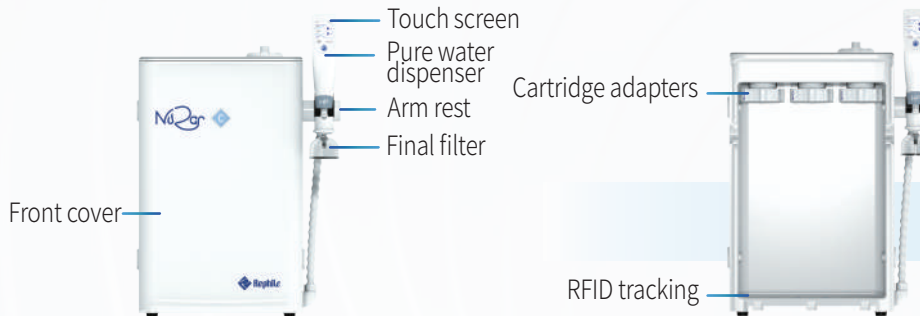
- ◊ Highly-efficient cartridges
- ◊ Environmentally friendly with high recovery rate
- ◊ RFID record of lifetime of consumables for predictable replacements to avoid any unnecessary running costs
- ◊ Self-maintenance functions for maximum RO membrane effectiveness and lifetime

Fully integrated system with maximum installation flexibilities

- ◊ Bench-mountable or wall-mountable
- ◊ Two dispenser heights



Components & Parts



Cartridges

- 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

- Intuitive display -water quality with temperature compensation, volumetric dispensing & flow rate
- System alerts are displayed on the touch screen
- Effortless adjustment -dispensing rate (up to 2 L/min), manual and volumetric dispensing
- Choice of final filters: RephiBio and 0.2 μm final filter

Two dispenser heights for the ultimate in flexibility



Storage Tank

- A 10 L integrated HDPE tank equipped with sanitization module, mercury-free germicidal UVC LED lamp (peak emission wavelength at 265 nm) preinstalled.

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



Water Quality Compliance

Quality of NuZar C24 product water meets clinical laboratory reagent water (CLRW) standards that complies with the CLSI* guideline.

Clinical Laboratory Reagent Water (CLRW) specification

Resistivity	> 10 $\text{M}\Omega \cdot \text{cm}$
Total Organic Carbon (TOC)	< 500 ppb
Bacteria	<10 CFU/ml
Particles	0.2 μm filtration or better

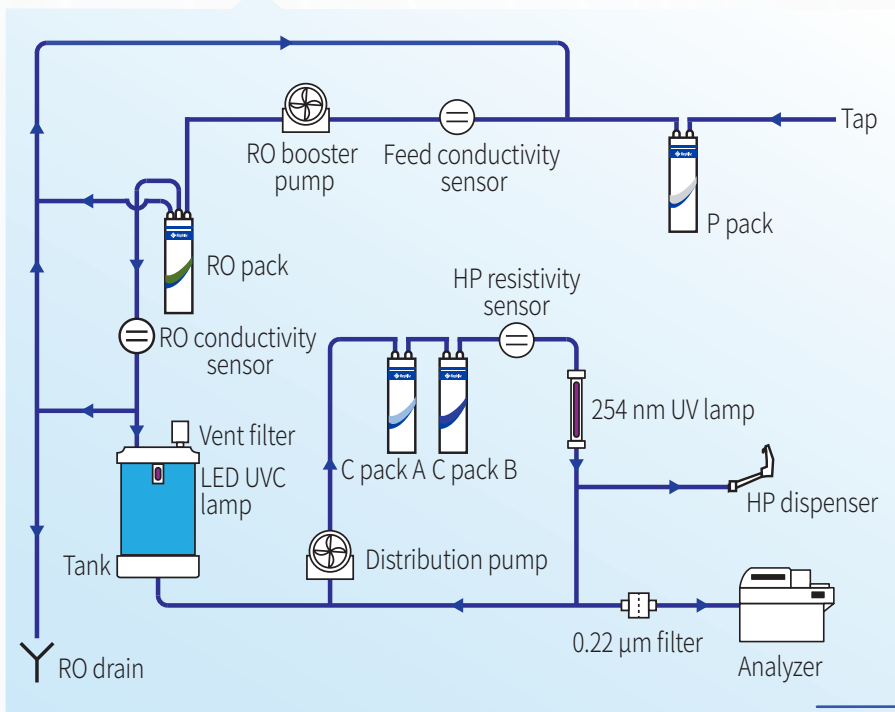
Main Application


Purified water generated by NuZar C can be used for almost all processes of a clinical analyzer, including:


- 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





Flow Schematics



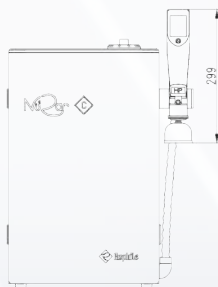
 P Pack:
removes oxidants, organics, particles and scaling ions to prevent them from fouling the RO membranes

 RO Pack:
removes over 99% of large molecules and particles and 95% of ions in water

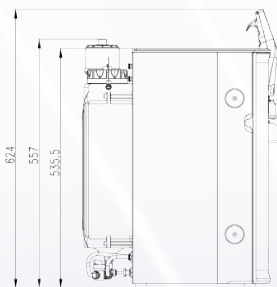
 C Pack A / C Pack B:
remove trace ions and organics

 254 nm UV Lamp:
kills bacteria

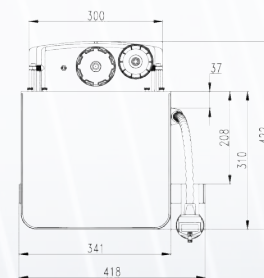
Installation Information



Front view



Side view



Top view

Specifications

General Specifications		NuZar C
Operating voltage		24 VDC
Input voltage		100 - 240 VAC
Main system power		< 190 W
Feed Water Requirements		
Feed water		Tap water
conductivity		< 2000 $\mu\text{S/cm}$
TDS		< 1000 ppm
Operating temperature		5 - 35 $^{\circ}\text{C}$
Feed water pressure		1 - 6 bar (15 - 90 psi)
Product Water Type		CLRW water
Dimensions W x D x H	w/ integrated tank	414 x 422 x 624 mm (16.3 x 16.6 x 24.5 in)
Weight (Approximate)	net	20 kg
	gross	29 kg

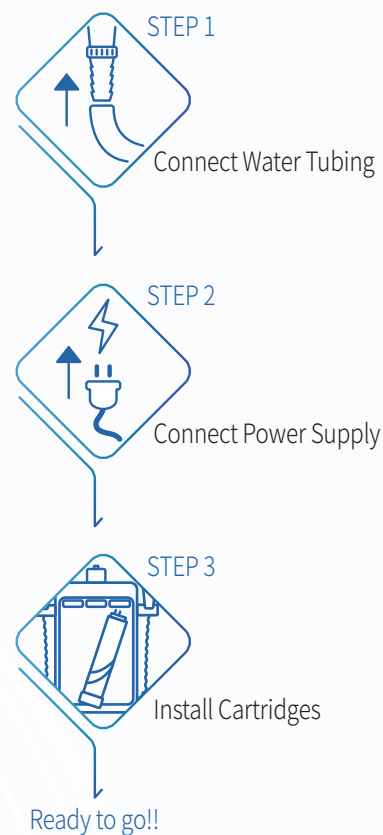
Product water Specifications

● Pure water

Production rate (@25 $^{\circ}\text{C}$)	24 L/hr
Dispenser rate	Up to 2 L/min
RO rejection	97 to 98% ionic rejection (new RO cartridge) > 99% organic rejection > 99% particulates & bacteria rejection
Resistivity (@25 $^{\circ}\text{C}$)	>10 $\text{M}\Omega \cdot \text{cm}$ (Typically >16 $\text{M}\Omega \cdot \text{cm}$)
TOC	< 30 ppb
Particles	No Particles with size > 0.22 μm^*
Silica	< 5 $\mu\text{g/L}$
Bacteria	< 1 CFU/ml

* With 0.2 μm filters

Plug-N-Play with only 3 steps



Ordering Info

Description	Cat. No.
NuZar water system set, C24	RN0C020T1K



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Literature: RFPR1592304

