Thermo Scientific™ Aquanex™ Ultrapure Water Purification System

Effortless purity redefined

Nov. 2023

Tap to Type I and Type II Water

The world leader in serving science

Aquanex Ultrapure Water Purification System

Value proposition

For lab managers who have a need for *pure and ultrapure water*, the Tap to Type I/II Thermo Scientific™ Aquanex™ Water Purification System includes **easy-to-use features**, **reliable water quality**, and a **reduced cost of ownership**. The Aquanex System offers precise *flexible dispensing* capabilities, an *intuitive user interface*, a *self-serviceable design*, and *a quick-install cartridge system* so that you can spend more time on your research.

Aquanex has many easy-to-use features

Features are designed to help improve the customer experience

Touch Smart Dispenser
Ergonomic volumetric dispenser allows for full usage right from point-of-dispense. Dispense up to 10ft from main unit.

Self-Service Design
Remove the magnetic font panel to access all consumables

Easy-Slide Cartridges
Change cartridges with ease. System recognizes new cartridges and records date of change.

Smart UI
Large touch screen on main unit allows for easy setup, use, and record keeping. Export use logs, access logs, etc.

1 SKU Ordering
Get system, all consumables, dispenser, tank, and pretreatment with 1 SKU at startup

System Choice
Choose the system that works for you.
- 10L or 30L with pretreatment
- 1 or 2 Dispensers, Type II Dispenser

1 touch volumetric and manual dispense

Pipette-style dispenser is made for one-handed control, up to 10 ft from the unit.

Touch Smart Dispenser

Ergonomic dispenser allows for full usage right from point-of-dispense. Dispense up to 10ft from main unit.

Intelligent and Ergonomic

Flexible and Intuitive

Pipette-style dispenser with self-contained UI for easy operation directly at the point of dispense.

Sturdy weighted base and magnetic handle allows for operation at a range of heights.

Remove the dispenser from the stand to fill large containers up to 10 ft away from the main unit.

View key parameters like water quality, tank level, and dispensing options. Operate manual and volumetric dispenses right from the dispenser.

1. Tank level
2. Dispenser ID
3. Dispense volume setting—touch screen
4. System health status indicator
5. Type 1 water temperature
6. Dispensing water purity
7. Dispense and flow speed selector buttons

Easy access, self-serviceable design

DIY maintenance with onscreen step-by-step instructions and easy access consumables

Self-Service Design

Remove the magnetic font panel to access all consumables

UV Light

RO Membrane

DI Pack B

UF Filter

DI Pack A
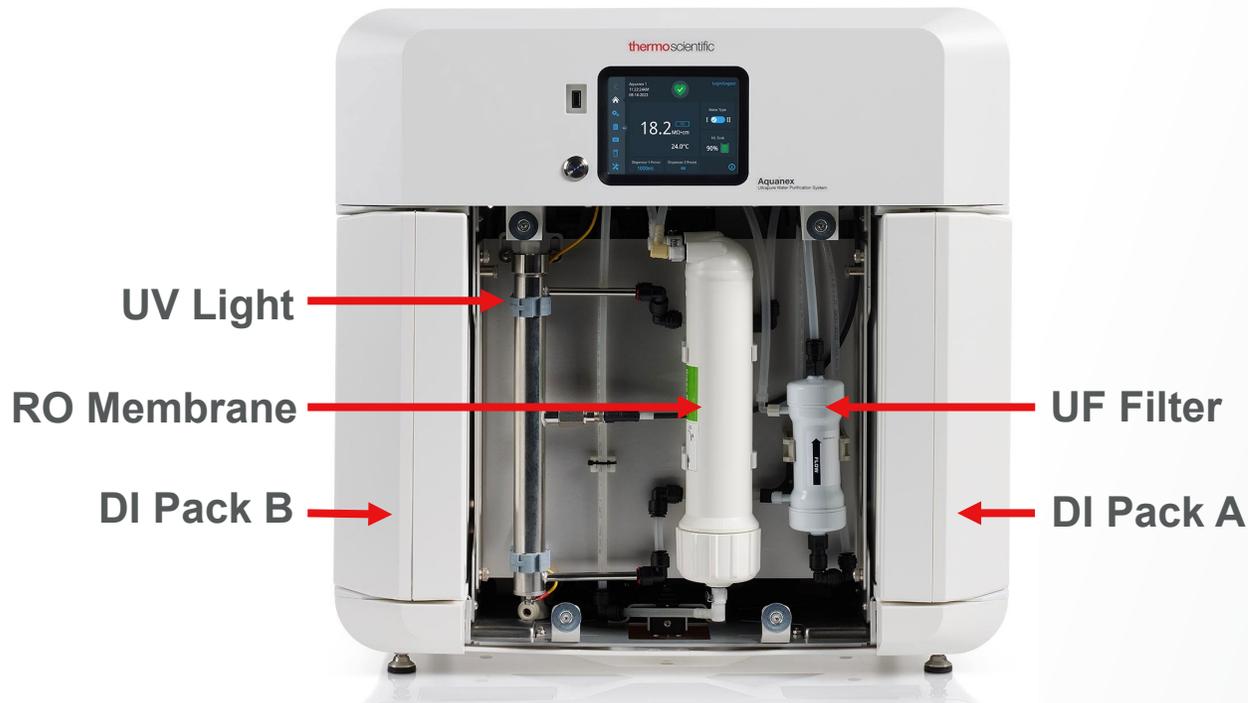
Auto-detection and event logging

- No complicated tools are required to change consumables

- System notification when consumables are nearing end-of-life

- Consumable installation and replacement dates can be viewed from the maintenance menu

- See history of alerts, alarms, event and dispense logs

Quick change DI packs make replacement a breeze

System prompted DI cartridge replacement keeps Aquanex running at its best

Easy-Slide Cartridges

Change cartridges with ease. System recognizes new cartridges and records date of change.

Step 1.
Press the black triangular button to release cartridge

Step 2.
Gently slide the cartridge on the rail
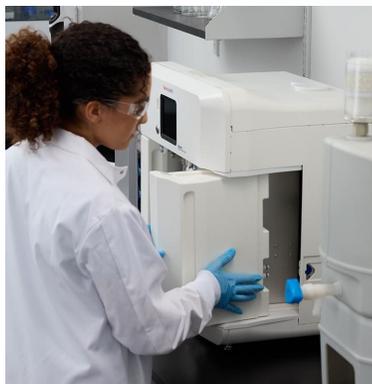
Step 3.
Insert the new cartridge
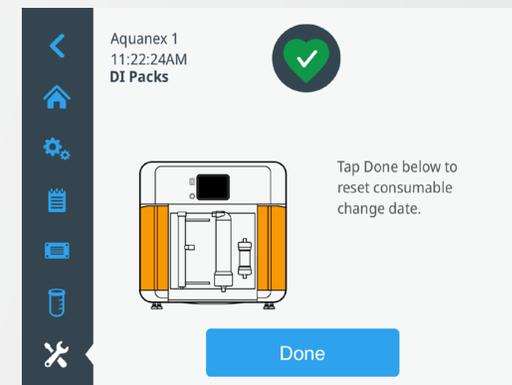
Step 4.
System recognizes the new cartridge

System guided changeout of DI Packs. Straightforward and uncomplicated

Modern touchscreen UI enhances the user experience

Set water type and dispenser, choose secure or open mode, export dispense logs and more

Smart UI

Large touch screen on main unit allows for easy setup, use, and record keeping. Export use logs, access logs, etc.

Operate with ease

The intuitive, full-color touchscreen is easy to read simple to operate

- Multilanguage system
- View water quality, water type, tank fill, etc
- See history of alerts, alarms, event and dispense logs

Just tap to set, run, and monitor vital conditions
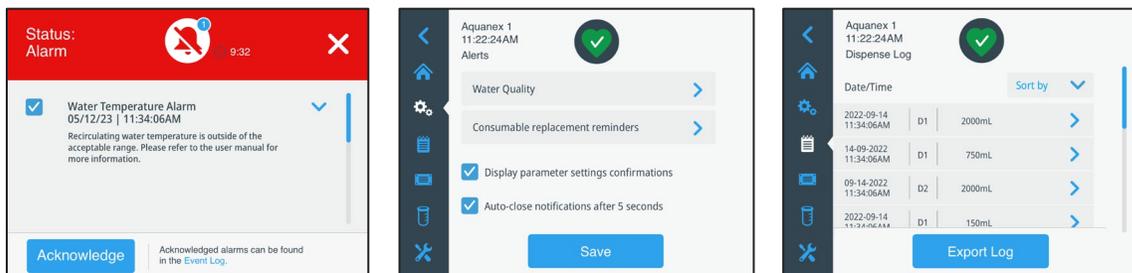
1. System health/status indicator
2. Unit name, time and date
3. Home screen navigation bar
4. Dispenser volume setting
5. Dispensing water purity
6. Type 1 water temperature
7. Tank level
8. Water type selector
9. Secure mode log in/out

1 SKU ordering of the complete Aquanex System

Get everything needed for ultrapure water with 1 SKU, no matter the system you choose.

Choose the system that works for you
- **10L or 30L System**
- **Includes all start up consumables**

10L System	10L System with Pretreatment	30L System	30L System with Pretreatment
7101010	**7101011**	**7201030**	**7201031**

Aquanex Main Unit with 10L Internal Tank, Aquanex Touch Smart Dispenser with Stand, Aquanex DI Pack Set, UV/UF, RO Filter, 0.1μm final filter

Aquanex Main Unit, 30L External Tank, Aquanex Touch Smart Dispenser with Stand, Aquanex DI Pack Set, UV/UF, RO Filter, 0.1μm final filter

Aquanex offers reliable water quality

Ultrapure, Type I water from Aquanex meets and exceeds industry standards

Parameter	Value
Conductivity	0.055 µS/cm
Resistance	18.2 MΩ·cm
TOC	**< 3 ppb**
RNase	1 pg/mL
DNase	5 pg/mL
Protease	0.15 µg/mL
Bacteria	0.001 CFU/mL
Bacterial endotoxins	0.001 EU/mL
Particle	99.9% Reduction > 0.1 µm
Sodium	< 1 ppb
Chloride	< 1 ppb
Silica, total	< 3 ppb
Dispense Rate (10L)	**≥ 1.5 L/min**
Dispense Rate (30L)	**≥ 2.0 L/min**
Volumetric Dispense	± 2% at > 100 mL

Familiar type II water dispensing and a new ATM mode

Type II water specifications

| Parameter	Value
Conductivity	0.1 – 1.0 µS/cm
Resistance	1-10 MΩ·cm
Retention rate for bacteria and particles	99 %
RO assembly permeate flow at 25°C	16 ± 20% L/hr

Optional Hand Dispenser Kit
To dispense Type II water from Aquanex, users will need the Optional Hand Dispenser Kit. PN 50138221
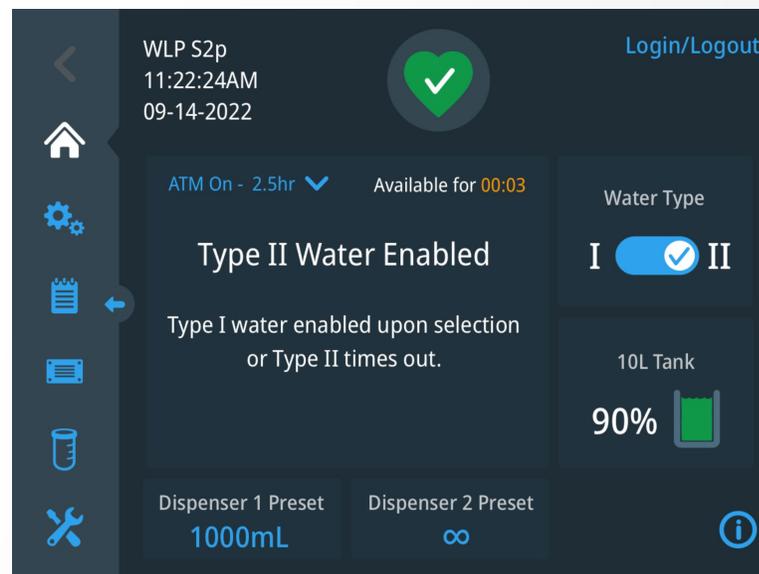
ATM Mode
During a Type II dispense, users can opt to utilize our new Advanced TOC Reduction Mode. This mode circulates the water continuously through the UV lamp to produce reduced TOC Type II water for analytical applications.

Aquanex is designed to meet your application needs

Ultrapure and pure water usage is ubiquitous across analytical and life sciences.

Analytical Sciences	Chromatography	Spectroscopy	Total Organic Carbon Analysis
Life Sciences	Genomics Cell/Tissue Culture	Proteomics Immunology	Pharmacology Drug Discovery
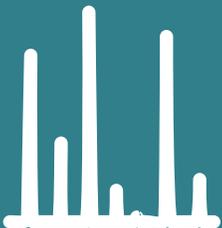
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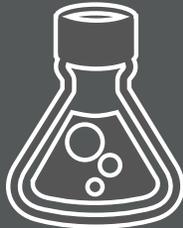
Aquanex is effortless purity redefined

Delivering convenience, flexibility, and reliable water purity

- **Self-service design** will help reduce the need for service calls – easy-access consumables, step-by-step on-screen instructions, and longer life consumables

- **Intuitive user interface** with large, easy-to-read display and easy export data/event logs

- **Flexible Smart Touch Type I** dispenser with highly accurate volumetric dispensing and 1-touch manual dispense

- **Quick change DI cartridge** design with simplified docking system to install and sensors to provide automatic cartridge recognition and logging

Appendix

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Aquanex Technical Specifications

	10L Main Unit	30L Main Unit	Smart Dispenser	30L Tank
Height	622 mm / 25 in	622 mm / 25 in	882 mm / 35 in	606 mm / 24 in
Height with CO2 Adsorber	727 mm / 29 in	-	-	778 mm / 31 in
Width	610 mm / 24 in	610 mm / 24 in	271 mm / 11 in	388 mm / 16 in
Depth	406 mm / 16 in	406 mm / 16 in	380 mm / 15 in	384 mm / 15 in
Touchscreen Size	5.7 in	5.7 in	1.54 in	-
Tank Capacity	10 L	-	-	30L
Dry Weight	32 kg / 70 lbs	31 kg / 68 lbs	9 kg / 20 lbs	6 kg / 14 lbs
Wet Weight	57 kg / 125 lbs	46 kg / 101 lbs	-	38 kg / 83 lbs
Sound Emissions	< 60 dB	< 60 dB	-	-
Horizontal Clearance	250 mm / 10 in		360 mm / 14 in	300 mm / 12 in
Vertical Clearance	250 mm / 10 in		1065 mm / 42 in	400 mm / 16 in

Thank you