



ULTRA CLEAR™ TWF EDI TOUCH PANEL SYSTEMS

ONE SYSTEM - TWO CHOICES HOW TO USE THE ULTRAPURE WATER:

The Ultra Clear™ TP TWF EDI systems have a fixed water dispenser and an optional flexible dispenser to bring the water to your work.

The systems provide you the best solution for all water quality demands and applications in your laboratory.

New look - new performance

- 7" multi-color glass display for fast and easy operation, with a generous overview
- Easy to navigate by touching functional system components
- New designed user interface
- Graphic display of all main functions
- SD cards and USB connection for data transfer

Direct purity - Tap Water Feed: Deionized and ultrapure water obtainable from a single system. Units with continuous electrodeionization

The Ultra Clear™ TWF EDI system is equipped with all the necessary components to produce reagent grade water directly from municipal tap water. The built-in reverse osmosis system has a recovery rate of > 30 % to conserve water.

The continuous electrodeionization (CEDI) stage purifies RO product water down to a quality range between 0.06 to 0.2 $\mu\text{S}/\text{cm}$. CEDI product water can be drawn directly from the integrated storage tank.

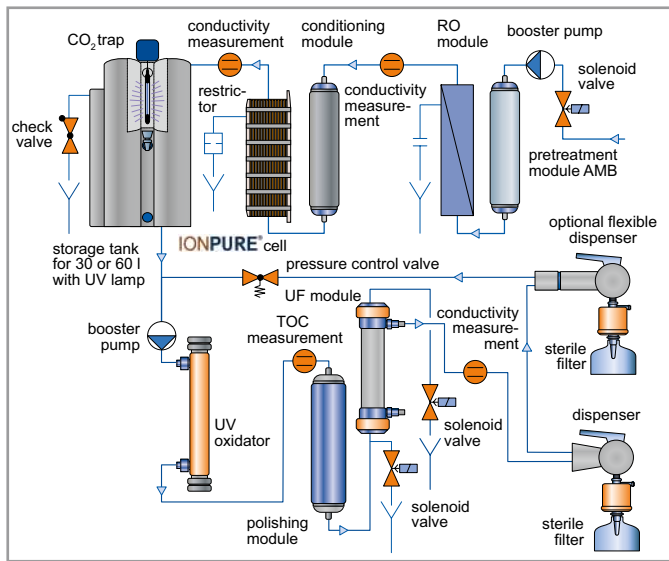
Each system is equipped with economical state-of-the-art purification technology. Water quality with a resistivity of 18.2 $\text{M}\Omega\text{cm}$ and a TOC level between 1 - 3 ppb far exceeds all reagent water quality standards including: ASTM Type 1, CLSI and ISO 3696 Type 1. All systems that include ultrafiltration (UF) produce the highest possible water quality. These units deliver RNase-, DNase- and DNA-free water.

TYPICAL APPLICATIONS

Ultra Clear™ TP TWF EDI UV TM and UV UF TM:

- HPLC
- IC
- GC and GC/MS
- TOC analysis
- ICP and ICP/MS
- DNA sequencing
- RNase- and DNase-free
- DNA-free
- PCR
- IVF
- 2-D-electrophoresis
- critical cell and tissue culture
- pyrogen sensitive applications





FLWSHEET OF ULTRA CLEAR TP TWF UV UF TM SySTEM

Systems with UF are also capable of producing purified water with endotoxin levels of < 0.001 EU/ml.

The flow rate of ultrapure water is up to 1.8 l/min. The high resolution display indicates the water conductivity in $\mu\text{S/cm}$ or resistivity in $\text{M}\Omega\text{-cm}$ with the corresponding water temperature.

Consumable change is very simple and fast due to quick and easy access to the replacement parts. A single UV bulb is used for the oxidization of organic compounds and TOC measurement.

The use of a single UV lamp results in much lower annual running cost compared to the competition.

The energy saving operation mode enables the user to program the running cycles according to the real needs.

A built-in automatic self-cleaning/sanitization mode extends the life of the ultrafiltration module.

All Ultra Clear™ TP systems are delivered with the first set of all cartridges and filters.

ULTRA CLEAR™ TP TWF EDI SERIES SYSTEM

		20 TWF EDI UV TM	20 TWF EDI UV UF TM
Type II water specifications			
Flow rate at 15 °C	l/h	20	20
Conductivity at 25° C	$\mu\text{S/cm}$	0.2	0.2
Ultrapure water specifications			
Output up to	l/min	1.8	1.8
Conductivity at 25° C	$\mu\text{S/cm}$	0.055	0.055
Resistivity at 25° C	$\text{M}\Omega\text{-cm}$	18.2	18.2
TOC	ppb	< 1 - 3	< 1 - 3
DNase, RNase, DNA		-	free
Bacteria	cfu/ml	< 1	< 1
Endotoxins	EU/ml	-	< 0.001
Particles > 0.2 μm	per ml	< 1	< 1
Feed water specification			
Pressure	bar	0.1 - 5	0.1 - 5
Conductivity	$\mu\text{S/cm}$	< 1400	< 1400
Colloid index SDI		< 3	< 3
Free Chlorine	mg/l	< 0.5	< 0.5
Fe	mg/l	< 0.1	< 0.1
SiO ₂ max.	mg/l	15	15
CO ₂ max.	mg/l	15	15
TOC	ppb	< 50	< 50
Temperature	°C	5 - 35	5 - 35
Shipping weight 30 l/ 60 l	kg	43/46	44/47
Power supply	V/Hz	100 - 240 / 50 or 60	
Dimensions H/W/D w. 30 l-tank	mm	530/560/320	
Dimensions H/W/D w. 60 l-tank	mm	530/900/320	
Cat. No. for 30 l tank		W3T360177	W3T360178
Cat. No. for 60 l tank		W3T360179	W3T360180



STERILE FILTER



OPTIONAL FLEXIBLE SIDE DISPENSER

CONSUMABLES

Item	Change frequency	Cat.No.
Pretreatment Module AMB	6 - 12 monthly	W3T197613
Conditioning Module	*	W3T199848
Polishing Module MF III D for applications in the low TOC range	6 - 12 monthly	W3T197694
Polishing Module ILT for inorganic applications	6 - 12 monthly	W3T199853
Sterile filter 0.2 µm, 1000 cm ²	6 monthly	W2T526542
Disinfection kit (pack of 3)	-	W3T199768
UV- Replacement bulb for systems with and without TM	12 monthly	W2T558521
RO Replacement Module	2 - 3 years	W3T197620
CO ₂ Trap CT1, Replacement Cartridge	yearly	W3T199197
UV-Submersible Replacement bulb UV-SL 1 30 and 60 l tanks	yearly	W2T558519
UF Membrane Preventor 5000	18 - 36 monthly	W3T197614
IONPURE® cell	4 - 5 years	W3T198007

Consumable change frequency information is average and can vary.

* Depends on inlet water hardness and used amount of water

ACCESSORIES

Item	Cat.No.
Flexible side dispenser (Ultra Clear)	W3T360439
Degassing unit 10 - 150 l/h to reduce CO ₂ in the inlet water which is increasing the cartridge life time	W3T314413
Data analysis tool Ultra Clear TP History	W3T370122

OPTIONS

Item	Cat.No.
Bracket ET 30 for 30 l tank including screws and plugs	W3T199991
Bracket ET 60 for 60 l tank including screws and plugs	W3T197563
Remote dispense station	W3T368947



ULTRA CLEAR™ TP TWF EDI WITH 60 L TANK



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