evoQUA
WATER TECHNOLOGIES

LaboStar® PRO
Ultra Pure Water System

HIGHEST WATER QUALITY

The LaboStar® PRO system is a cost effective means of producing analytical grade water. This extremely compact ultra pure water system can be used on a laboratory bench. The water produced by the system has a conductivity of 0.055 µS/cm (equivalent to 18.2 MΩ-cm) and a TOC value of < 10 ppb. The water produced by the ultraviolet (UV) version has a TOC value of 1 – 5 ppb. The water produced exceeds current quality standards.

The LaboStar® system is fed with either deionized water, distilled water or permeate from a reverse osmosis unit. The selection of treatment materials in LaboStar 2 and 4 systems, along with the DI polishing modules, guarantees that the product water meets the highest quality standards. A conductivity meter in the recirculation section continually monitors the purity of the product water.

A 0.2 µm positively charged sterile filter at the dispenser removes bacteria and endotoxins*. It makes possible to produce pure water with an endotoxin value of < 0.001 EU/ml without the need for any further investment in an expensive ultra filter. An uncharged 0.2 µm sterile filter is also available.

The LaboStar 4 system is a mobile bench device with an integrated tank which can be directly manually filled with feed water. LaboStar systems are delivered with the first set of modules and filters and are ready for use.

BENEFITS

- Ultra pure water circulation right into the dispenser head
- Easy to dispense water using the practical dispenser
- Whisper operation mode
- Rapid and simple disinfection
- Quality monitoring after each purification stage
- Pressure reducer included
- Simple module exchange via quick-release connections
- Protective jacket at the end of the sterile filter

LABOSTAR PRO UV 4/DI 4 BENEFITS

- 7 liter built-in tank
- Suitable for mobile use at different locations
- Ultra pure water is ready for use within minutes after filling the tank
- Easy plug and play installation (Scope of supply includes consumables)
- Made in Germany

*Can only be achieved with a freshly inserted sterile filter with endotoxin retention capacity (charged), and only for a limited amount of water. A system with an additional UF filter is recommended for larger water requirements. The service life is strongly dependent on the ambient conditions and must be determined on site.

SPECIFICATIONS

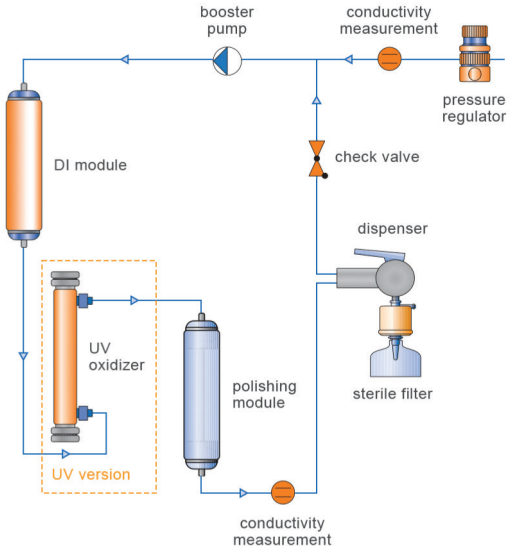
Ultra Pure Water Specifications	LaboStar PRO DI 2	LaboStar PRO DI 4	LaboStar PRO UV 2	LaboStar PRO UV 4
Delivery flow rate (l/min)	1.5*	1.5*	1.5*	1.5*
Conductivity (µS/cm)	0.055	0.055	0.055	0.055
Resistivity (MΩ-cm)	18.2	18.2	18.2	18.2
TOC (ppb)	5 - 10	5 - 10	1 - 5	1 - 5
Bacteria (cfu/ml)	< 0.1*2	< 0.1*2	< 0.1*2	< 0.1*2
Endotoxins (EU/ml)	< 0.001*3	< 0.001*3	< 0.001*3	< 0.001*3
Particles > 0.2 µm (per ml)	< 1	< 1	< 1	< 1
Feed Water Specifications				
Feed water pressure (bar)	0.1 – 6	-	0.1 – 6	-
Initial conductivity (µS/cm)	< 20	< 20	< 20	< 20
Silt density index (SDI)	< 12*4	< 12*4	< 12*4	< 12*4
TOC (ppb)	< 50	< 50	< 50	< 50
Free Chlorine (mg/l)	< 0.1	< 0.1	< 0.1	< 0.1
Total iron (mg/l)	< 0.1	< 0.1	< 0.1	< 0.1
CO_2 (mg/l)	< 15*4	< 15*4	< 15*4	< 15*4
Water temperature (°C)	5 - 30	5 - 30	5 - 30	5 - 30
Ambient temperature (°C)	5 - 35	5 - 35	5 - 35	5 - 35
Power requirements				
Power consumption (W)	270	270	270	270
Power supply (V/Hz)	100–240 V/50 – 60 Hz	100–240 V/50 – 60 Hz	100–240 V/50 – 60 Hz	100–240 V/50 – 60 Hz
Dimensions (H × W × D) (mm)	535 × 400 × 410	535 × 400 × 410	535 × 400 × 410	535 × 400 × 520
Shipping weight (kg)	21	22	21	24
Item number	W3T324339	W3T409684	W3T324340	W3T324491

* depends on primary pressure, min. 1.0 LPM > 0.1 bar inlet pressure
*2 with use of sterile filter W3T199279 or W3T199209 (see accessories), with Bubble point test: pressure > 3.45 bar (with water) resp. 1.10 bar (with 50% IPA)
*3 with charged sterile filter (the water was free of any detectable RNase or DNase)
*4 with a pre-filter

CONSUMABLES & ACCESSORIES

Item No.	Description	Change Frequency*
W3T197618	Pretreatment module VMD for inorganic applications (systems without UV)	6 - 12 months
W3T197621	Pretreatment module DTO (systems with UV)	6 - 12 months
W2T558521	UV replacement bulb for systems with/ without TM	12 months
W3T197694	Polishing module MFIIID for applications in the low TOC range	6 - 12 months
W3T199853	Polishing module ILT for inorganic applications	6 - 12 months
W3T199279	Sterile filter 0.2 µm with endotoxin retention (pack of 3)	6 months
W3T199209	Sterile filter 0.2 µm without endotoxin retention (pack of 3)	6 months
W3T199768	Disinfection kit (pack of 3)	-

*Change intervals possibly shorter, depending on feed water and consumption.



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