

All LaboStar™ DI types
 General analysis, standard buffer, AAS, GC, IC, ICP, cell and tissue culture, pyrogen sensitive applications

All LaboStar™ UV types
 Micro- und molecularbiology, PCR, HPLC, TOC analysis

Ultrapure water systems LaboStar™

Highest water quality – economically produced.
 Ready to go – for all needs

The extremely compact ultrapure water system is a cost-effective means of producing analytical grade water, and can be used on a laboratory bench or mounted to the wall. The water produced by the DI version has a conductivity of 0.055 $\mu\text{S}/\text{cm}$ (equivalent to 18.2 $\text{M}\Omega\text{-cm}$) and a TOC value of < 10 ppb. Water produced by the UV version has a TOC value of 1–5 ppb. This water quality exceeds all relevant standards including ASTM Type I, CLSI Type I and ISO 3696 Type I. The LaboStar™ is fed with either deionized water, distilled water or permeate from a reverse osmosis unit.

The selection of treatment materials in LaboStar™ 1 and 3-DI's polisher module 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 charged sterile filter at the dispenser removes endotoxins. This



LaboStar™ on a laboratory bench.



LaboStar™ wall mounted.

Type LaboStar™ ...		1-DI/2-DI	1-UV/2-UV	3-DI/4-DI	3-UV/4-UV
Ultrapure water specifications					
Output* up to	<i>l/min</i>	1.5	1.5	1.5	1.5
Conductivity at 25° C	$\mu\text{S}/\text{cm}$	0.055	0.055	0.055	0.055
Resistivity at 25° C	$\text{M}\Omega\text{-cm}$	18.2	18.2	18.2	18.2
TOC	<i>ppb</i>	5–10	1–5	5–10	1–5
Bacteria	<i>cfu/ml</i>	< 1	< 1	< 1	< 1
Endotoxins with use of SG filter	<i>EU/ml</i>	< 0.001	< 0.001	< 0.001	< 0.001
Particles > 0.2 μm	<i>per ml</i>	< 1	< 1	< 1	< 1
Feed water specification					
Feed water pressure	<i>bar</i>	0–6	0–6	–	–
Feed conductivity	$\mu\text{S}/\text{cm}$	< 20	< 20	< 20	< 20
TOC	<i>ppb</i>	< 50	< 50	< 50	< 50
Silica	<i>ppm</i>	2	2	2	2
Temperature	$^{\circ}\text{C}$	5–35	5–35	5–35	5–35
Power supply	<i>V/Hz</i>	100-240 / 50-60			
Dimensions: H/W/D	<i>mm</i>	535/290/320	535/290/320	535/290/400	535/290/400
Shipping weight	<i>kg</i>	20/21	22/23	21/22	23/24
Catalogue Number desktop unit		2201/2206	2202/2207	2211/2216	2212/2217
Catalogue Number wall unit		2201-W/2206-W	2202-W/2207-W	2211-W/2216-W	2212-W/2217-W



* Gravity feed: 1.2 l/min

makes it possible to produce pure water with an endotoxin content of <math>< 0.001</math> EU/ml without the need for any further investment in an ultrafilter.

The LaboStar™ advantages in brief:

- Ultra pure water circulation right into the dispenser head
- Easy to dispense water using the practical dispenser
- Whisper operation mode
- Rapid and simple disinfection
- Conductivity monitoring of ultrapure water
- Pressure reducer included (only type 1 and 2)
- Simple module exchange via quick-release connections
- Protective jacket at the end of the sterile filter

tank which can be directly filled with feed water.

The following advantages especially for type 3 and 4

- 7 liter tank volume
- Suitable for mobile use
- Ultrapure water is ready for use within minutes of filling the tank

- System can be used at different locations.

The LaboStar™ units are delivered with the first set of modules and filters and are ready for use.

Options

Item	Cat. No.
Wall bracket (only for LaboStar™ 3 + 4)	2190

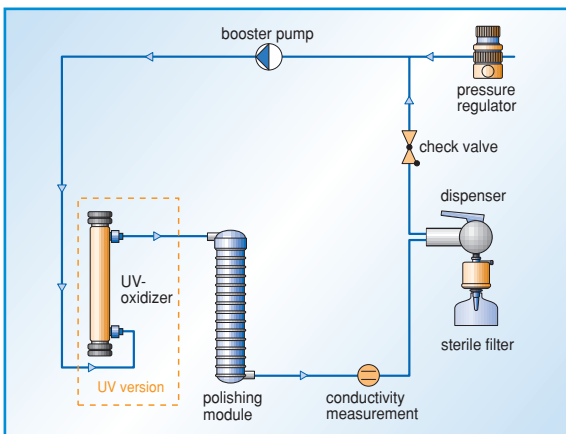
Consumables

Item	Change frequency	Cat. No.
DI-Modul*	6 – 12 monthly	2160
UV replacement bulb**	6 monthly	2068
Polishing module		
– HP1 for low inorganic application	6 – 12 monthly	2172
– HP2 for low organic application	6 – 12 monthly	2173
Sterile filter (pack of 3)		
– 0.2 µm	6 monthly	2064-3
– 0.2 µm with endotoxin retention	6 monthly	2097
Disinfection kit (pack of 3)	–	2055

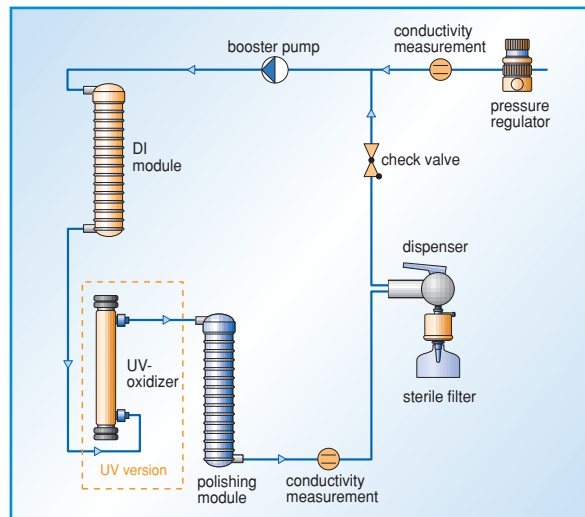
The LaboStar™ 3 and 4 are the mobile bench devices with an integrated

*All change frequency information are to be understood as average and can vary. * for LaboStar™ 2 DI and 4 DI / ** for UV versions*

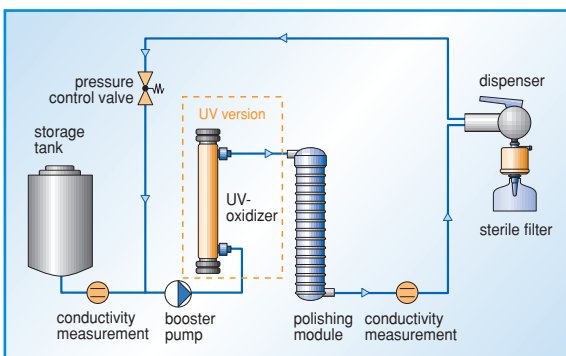
Flowsheet LaboStar™ 1-DI/UV



Flowsheet LaboStar™ 2-DI/UV



Flowsheet LaboStar™ 3-DI/UV



Flowsheet LaboStar™ 4-DI/UV

