

## Ultrapure water systems: Labaqua series

DESCRIPTION

Labaqua ultrapure systems are multi-purpose water purification systems. The Labaqua systems produce ultrapure and pure water directly from tap water.

Ultrapure (Grade 1) water is dispensed through the point-of-use filter on the front panel. Pure (Grade 2) water is dispensed directly from the storage tank.

Labaqua ultrapure water can be used for the most demanding applications, including, but not limited to: Inorganic trace analysis, Liquid chromatography, Cell culture, Molecular biology.

With resistivity of 18.2 Mega — Ohm  $\times$  cm (0.055  $\mu$ S/cm), ultrapure water produced by a Labaqua system exceeds requirements of all relevant standards (ISO 3696 Grade 1, ASTM Type I, CLSI Type I). Purified water is collected in a storage tank. An integrated recirculation system ensures consistent quality of water and reduces total organic carbon (TOC) to very low levels: <5ppb.

Pure water produced by the Labaqua systems complies with ISO 3696 Grade 2 water requirements and can be used for labware washing, wet chemistry methods, flame spectrophotometers, etc.

All cartridges and filters are easily accessible, and no tools are required to replace them. The Labaqua system can be installed on a laboratory bench or mounted on a wall.

### FEATURES:

- **Volumetric dispense** — enables the user to set accurate dispensing volume for each dispense cycle. The dispense volume can be set either from the keyboard or by using the “teaching” mode.
- **Water quality** — embedded recirculation loop ensures stable premium water quality and enables practical elimination of Total Organic Carbon (TOC).
- **Low running costs** — performance of the deionization and polishing modules is constantly monitored. Monitoring algorithm enables cutting running costs, as replacement of the modules is requested only when service life is close to the end.
- **Total organic carbon (TOC) monitor** — organic contaminants may not affect the conductivity of water, so conductivity sensors cannot be used for TOC monitoring. Therefore, a special TOC monitoring module is needed to measure TOC level.
- **Color graphic LCD display** — system component status is reflected on the display in an intuitive colour pattern (Green/Yellow/Red).
- **System flowchart** — shows all component status and water quality parameters at a glance.



### The Labaqua systems include:

- Boost pump
- Pre-filter set
- Reverse osmosis module
- Deionization module
- Final stage polishing module
- 30 L storage tank with an integrated Grade 2 dispensing valve
- Recirculation system

### Model specific modules:

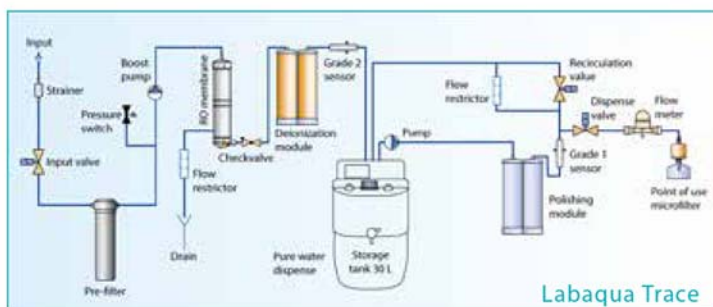
- **Labaqua Trace** — Point-of-use microfilter
- **Labaqua HPLC** — Point-of-use microfilter, TOC monitor
- **Labaqua Bio** — Point-of-use ultrafilter, UV sterilization module, TOC monitor

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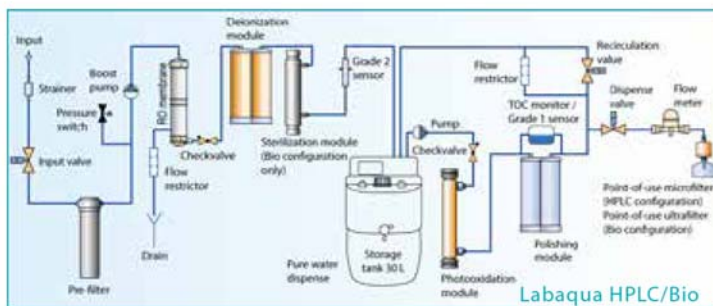
Purified water specifications	Labaqua Trace	Labaqua HPLC	Labaqua Bio
Ultrapure (Grade 1) water resistivity		18.2 MΩ × cm	
Ultrapure (Grade 1) water conductivity		0.055 μS/cm	
Pure (Grade 2) water resistivity		>10 MΩ × cm	
Pure (Grade 2) water conductivity		<0.1 μS/cm	
TOC	<30 ppb		<5 ppb
RNase	—	—	<0.01 ng/ml
DNase	—	—	<4 pg/ml
Bacteria		<1 CFU/ml	<0.01 CFU/ml
Endotoxins		<0.15 EU/ml	<0.001 EU/ml
Particles >0.22 μm		<1/ml	
Deionization module life (standard module)		1 m <sup>3</sup>	
Dimensions (W×D×H)		320 × 560 × 620 mm	
Storage tank		30 l	
Feed water pressure		0.8–4 bar	
Feed water conductivity		<1,300 μS/cm	
Weight	24 kg	25 kg	26 kg
Nominal operating voltage		230 V, 50/60 Hz	
Power consumption		130 W	

	Application	Labaqua Trace	Labaqua HPLC	Labaqua Bio
General laboratory applications	Glassware rinsing	+	+	+
	Laboratory washers	+	+	+
	Autoclaves	+	+	+
	Electrochemistry	+	+	+
	Wet chemistry	+	+	+
	Spectrophotometry	+	+	+
	Buffer and media preparation	+	+	+
	Reagent preparation	+	+	+
Inorganic analysis methods	Flame atomic absorption spectrophotometry	+	+	+
	Graphite atomizer atomic absorption spectrophotometry	+	+	+
	Plasma mass-spectrometry (ICPMS)	+	+	+
	Plasma spectrophotometry (ICPOES)	+	+	+
	Ion chromatography	+	+	+
Organic analysis methods	Liquid chromatography (HPLC/ UHPLC)		+	+
	Gas chromatography		+	+
	Total organic carbon measurements		+	+
Molecular Biology	Flow cytometry			+
	Cell and tissue culture			+
	Molecular biology			+

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Labagua Trace



Labagua HPLC/Bio



### ORDERING INFORMATION

**Labagua Trace** include 30 l tank, power cord

**Labagua HPLC** include 30 l tank, power cord

**Labagua Bio** include 30 l tank, power cord

Water purification system sets including different storage tanks are available

#### Optional accessories:

External pre-filter set (polyphosphate/carbon/1 µm) with manometer

External pre-filter set (carbon/1µm) with manometer

Storage tank "Comfort" with base, tap and multipoint level switch, 60 l

Storage tank "Comfort" with base, tap and multipoint level switch, 100 l

Universal remote dispenser set with 3 m supply hose and water distribution module

External input pressure reducer

#### Replacement parts

Internal prefilter set

Deionization module

Polishing module

RO membrane

Point-of-use microfilter – 0.22 µm non sterile

Point-of-use microfilter – 0.22 µm sterile

Point-of-use ultrafilter

UV bulb 254 nm

UV bulb 185 nm

0.22 µm air vent filter for the storage tank

Air filter for storage tank

Filter set for BS-070104-LK (Polyphosphate, Carbon/PP, PP 1µm )

Filter set for BS-070104-KK (Carbon/PP, PP 1µm )

Cat. number

BS-070105-A02

BS-070104-A02

BS-070106-A02

please inquire

BS-070104-LK

BS-070104-KK

BS-070102-SK

BS-070102-FK

BS-070104-JK

10175

BS-070104-AK

BS-070104-IK

BS-070104-BK

BS-070104-NK

BS-070104-EK

BS-070104-FK

BS-070104-GK

BS-070104-RK

BS-070104-DK

BS-070102-AK

BS-070104-PK

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