

Ultrapure water system HALIOS 6

HALIOS lab water systems make your work as pleasant and comfortable as possible and maximize at the same time your lab productivity

The HALIOS 6 lab water series is modular designed and can be connected directly to tap water. With an integrated 10l tank and a production rate of 6l/h it provides a high flexibility to adapt to your specific needs. Each system meets and exceeds ASTM type 1 and 2 standards. An integrated pre-treatment cartridge guarantees a long durability of the RO membrane and the following purification cartridges as well as a constant ideal ultrapure water quality for reproducible results of analysis. Interact only with your external tabletop dispenser. The compact production unit can be easily integrated in the lab environment.



Features

- ✓ Reliable ultrapure water quality - ASTM type 1⁺ and 2
- ✓ External dispenser
 - detachable and ergonomically shaped
 - rotatable and vertically adjustable
- ✓ Pre-treatment cartridge for a direct connection to tap water
- ✓ Simple and economical change of the consumables
- ✓ Large and intuitive touchscreen
- ✓ Leak water detector
- ✓ Pressure reducer
- ✓ Data capture via USB
- ✓ Accurate, adjustable volume dispensing
- ✓ Dry-run protection
- ✓ 10l tank with complete recirculation ensures the highest microbial purity

System configuration

- Wide-range power supply 80-264V / 50-60Hz
- Housing with an easily accessible service cover
- Compact production unit fits easily into various free spaces in the lab
- Exchange of consumables within seconds due to quick-connect couplings
- Integrated pressure reducer for different inlet pressures
- Flow meter for an accurate volume dispensing
- Pressure sensor for monitoring of the working pressure and as a dry-running protection
- Two low-noise and durable pressure and recirculation pumps for the complete internal recirculation of all wetted parts up to the final dispensing valve
- Integrated pre-treatment cartridge protects from impurities in the feedwater and protect the RO membrane as well as guarantees reproducible results of analysis, a high capacity and low operating costs
- RO membrane removes up to 99% of all impurities in the feed water
- Ultrapure water cartridge for the final removal of organics and remaining ions
- Up to three measuring cells for the exact measurement of the conductivity and temperature after each purification cartridge
- Flush valve for the effective cleaning of all wetted parts as well as an adjustable quality flush during stand-by
- Dispenser with microfiltration for the sterile ultrapure water withdrawal at the point of use
- 10l pure water tank with conical bottom and pure water (type 2) outlet



Optional

- UV-unit (185 | 254nm) for the ultimate microbiological purity and TOC reduction
- Flushed and integrated ultrafiltration module for the retention of pyrogens, endotoxins, proteins and nucleases (DNases and RNases)
- Real-time TOC monitor for the continuous TOC measurement of the organic compound acc. to USP
- Up to 4 external dispensers can be connected to one production unit

User interface

- Large and intuitive touchscreen
- Stored dispensing reports with all information ensure an absolute traceability of the water withdrawals
- Individual adjustment for displaying the conductivity ($M\Omega\text{cm}$ or $\mu\text{S}/\text{cm}$)
- Multilevel conductivity and temperature monitoring for pure and ultrapure water, temperature compensated with stepless limit adjustments
- High-precision measuring with integrated reference resistors as well as deactivatable temperature compensation acc. to USP
- Leakage monitor with error message and automatic shut-off of the feed water supply
- Continuous surveillance of all relevant parameters and values incl. early reminders when a change of consumables is pending
- GLP-compliant data storage via USB



Tabletop dispenser

- Ergonomic design for a one-handed operation
- All dosing functions can be easily executed with the rotary encoder at the dispensing handle
- The external dispenser can be placed independent of the production unit
- For an even greater range the HALIOS handle can be detached and reattached with a simple hand movement



Feed water requirements

Feed water quality	Potable tap water
Conductivity at 25°C	< 2000µS/cm
Total organic carbon (TOC)	< 1ppm
Inlet pressure*	1 – 6bar
Temperature	5 – 35°C

Additional pretreatment units are available if the feed water is out of specs

Ultrapure water specifications (ASTM type 1)¹:

Resistivity (Conduct.) at 25°C ²	18.2MΩcm (0.055µS/cm)
Total Organic Carbon ³ (TOC)	≤ 2ppb (µg/l) ≤ 10ppb (w/o option – UV lamp)
Particle content ⁴	< 1/ml
Bacteria	< 0,01 CFU/ml ⁴ < 0,005 CFU/ml ⁵
Pyrogens (endotoxins) ⁵	< 0,001 EU/ml
RNases ⁵	< 0,004ng/ml
DNases ⁵	< 0,024pg/µl
Flow rate	Up to 2l/min

Pure water specifications in the tank (ASTM type 2)

Resistivity (Conduct.) at 25°C	> 10MΩcm (<0,1µS/cm)
TOC	≤ 30ppb (µg/l)
Performance	6l/h

¹ The actual values may vary depending on the nature and concentration of the contaminants in the feed water

² Conductivity/resistivity can also be displayed non-temperature compensated as required by USP

³ In the appropriate operating conditions

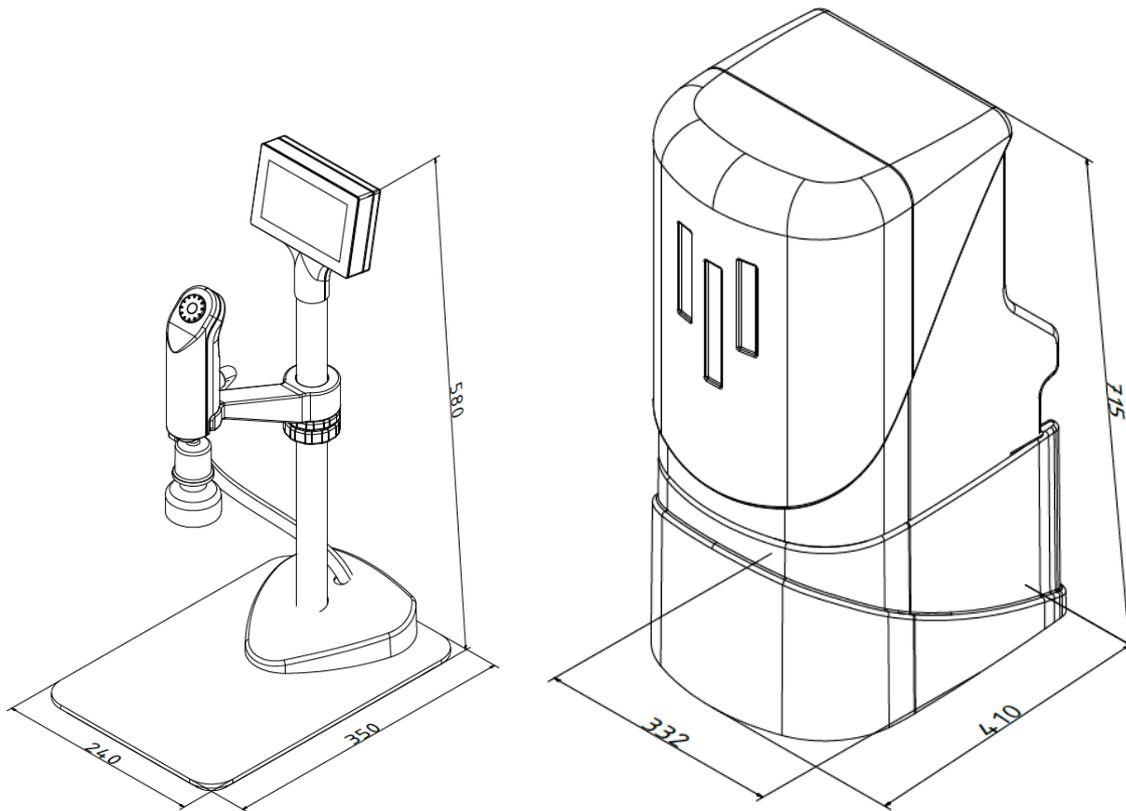
⁴ With sterile filter capsule at the POU

⁵ With option – ultrafiltration module

Technical data

Ambient temperature	+2 - 35°C
Supply voltage	90-240V / 50-60Hz
Connected load	120W
Connection size	R ¾“

Dimensions



Ordering information

Lab water system

Catalogue Number

1000111

Description

Ultrapure water system HALIOS 6

Accessories / options

1000101

Option – UV lamp 185 | 254nm

1000102

Option – Ultrafiltration module

1000103

Option – TOC monitor

1000104

Additional remote dispenser HALIOS

1000105

Wall mount for production Unit HALIOS

1000302

Qualification documents HALIOS 6 | 12

1000340

Option – XXL dispenser HALIOS (height + 15cm)

1000341

Option – 4m connection between dispenser and production unit (1m as standard)

Consumables

10000113	Pretreatment cartridge HALIOS RO-GUARD
10000114	RO membrane 6l/h
10000107	Polishing cartridge HALIOS UPW 182
10000110	Replacement ultrafilter
10000108	Replacement UV-lamp 185 245nm
10000109	Sterile filter capsule 0.2µm
10000116	Sterile vent filter 0.2µm