



LAB WATER SOLUTIONS EXACTLY FOR YOUR NEEDS

VERSATILE · USER-FRIENDLY · STATE-OF-THE-ART



IMPROVE YOUR LAB PRODUCTIVITY

HALIOS FEATURES AT A GLANCE



Innovative User Interface

Large and Intuitive Touch Screen Complete Traceability **Smart Monitoring**



External Tabletop Dispenser

Ergonomic Design Optimized Lab Space Maximum Fexibility



Compact Production Unit

Reliable Operation Superior Ultrapure Water Minimum Operating Costs



Modern 10l Storage Tank

*only for HALIOS 6 | 12

Protection of Pure Water Clever Design **Quality Recirculation**

BE ONE STEP AHEAD WITH HALIOS

OVERVIEW: HERE'S WHAT YOU NEED TO KNOW



ater requirements differ widely in all segments of laboratory work. We at NEPTEC have developed the new **HALIOS ultrapure system series** — a modulardesigned system which provides flexibility to adapt to your specific needs. Each system meets and exceeds the Type I standard. HALIOS systems make your work as efficient as possible and maximise your lab productivity.



ype I from pre-treated water comprises of an innovative graphical user interface, external tabletop dispenser and a compact production unit. The standard HALIOS is the most cost-effective system since it delivers ultrapure water for a wide range of critical applications. It can also be upgraded with a UV lamp, an ultrafilter and a TOC monitor which prevents microbiological growth, permits TOC values <2 ppb and removes reliably pyrogens and nucleases.



ype I and II from tap water comprises similarly of a graphical user interface, external tabletop dispenser and a compact production unit. HALIOS 6 produces 6 litres of pure water per hour while HALIOS 12 produces 12 L/h. It also offers a storage tank which can be placed at the bottom of the production unit and can store up to 10 litres of water. It has modern design features and a circulation which prevent stagnation and bacterial contamination.







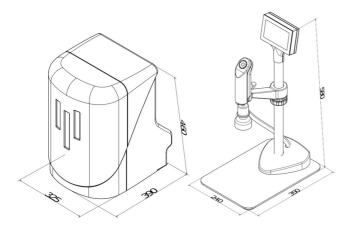
HALIOS TYPE I SPECIFICATIONS

TECHNICAL APPENDIX: HALIOS

Feed water requirements:

| Feed water quality | Pretreated water using EDI, DI, RO or distilled water |
|----------------------------|---|
| Conductivity at 25 °C | < 100 µS/cm |
| Total Organic Carbon (TOC) | < 50 ppb |
| Inlet pressure * | Max 6 bar |
| Temperature | 2 - 35 °C |

^{*} For pressure between 0 and 0.2 bar the system will operate, but product flow rate may be lower



Ultrapure, Type I Water Specifications1:

| Resisitivity (conductivity) at 25 °C $^{\rm 2}$ | 18.2 MΩ•cm (0.055 µS/cm) |
|---|--|
| Total Organic Carbon (TOC) ³ | ≤ 2 ppb (µg/L) ≤ 10 ppb (without UV) |
| 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 | < 0.004 ng/mL |
| DNases ⁵ | < 0.024 pg/µL |
| Flow rate | up to 2 L/min |

- 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
- 5 With ultrafilter

Technical data:

| Ambient temperature | 2 - 35°C |
|---------------------|-------------------|
| Supply voltage | 85-260V / 50-60Hz |
| Connected load | 120W |
| Connection size | 3/4" |

ORDERING INFORMATION: HALIOS

Water System

| Catalogue number | Description |
|------------------|-------------------------------|
| 10000100 | Ultrapure water system HALIOS |



Acessories / Options

10000110

| Catalogue number | Description |
|------------------|--|
| 10000101 | Option - UV lamp 185 254 nm |
| 10000102 | Option - Ultrafiltration module |
| 10000103 | Option - TOC monitor |
| 10000104 | Additional remote dispenser HALIOS |
| 10000105 | Wall mounting for production unit HALIOS |
| 10000301 | Qualification documents HALIOS |
| 10000340 | Option - XXL Dispenser (height: +15cm) |
| 10000341 | Option - 4m connection |
| Consumables | |
| Catalogue number | Description |
| 10000106 | Pure water cartridge HALIOS |
| 10000107 | Ultrapure water cartridge HALIOS |
| 10000108 | Replacement UV lamp 185 254 nm |
| 10000109 | Sterile filter capsule 0.2µm |

Replacement ultrafilter

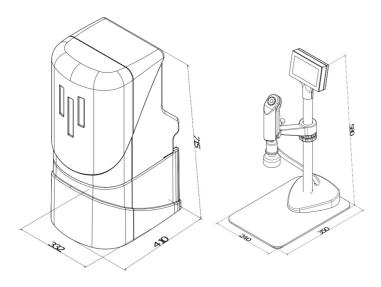
HALIOS TYPE I and II SPECIFICATIONS

TECHNICAL APPENDIX: HALIOS 6 | 12

Feed water requirements:

| Feed water quality | Potable tap water |
|----------------------------|-------------------|
| Conductivity at 25 °C | < 2000 μS/cm |
| Total Organic Carbon (TOC) | < 1 ppm |
| Inlet pressure | 1 - 6 bar |
| Temperature | 2 - 35 °C |

Pre-treatments units are available if the feed water is out of specs



Ultrapure, Type I Water Specifications1:

| Resisitivity (conductivity) at 25 °C ² | 18.2 MΩ•cm (0.055 μS/cm) |
|---|---|
| Total Organic Carbon (TOC) | \leq 2 ppb (µg/L) \leq 10 ppb (without UV) |
| 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 | < 0.004 ng/mL |
| DNases ⁵ | < 0.024 pg/µL |
| Flow rate | up to 2 L/min |

Pure, Type II Water Specifications:

| Resisitivity (conductivity) at 25 °C ² | >10 MΩ•cm (<0.1 µS/cm) |
|---|------------------------|
| Total Organic Carbon (TOC) | ≤ 30 ppb |
| Production flow rate | 6 L/h or 12 L/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 ⁵ With ultrafilter

Technical data:

| Ambient temperature | 2 - 35°C |
|---------------------|-------------------|
| Supply voltage | 85-260V / 50-60Hz |
| Connected load | 120W |
| Connection size | 3/4" |

ORDERING INFORMATION: HALIOS 6 | 12

Water System Catalogue number

Description

| 10000111 | Ultrapure water system HALIOS 6 |
|----------|----------------------------------|
| 10000112 | Ultrapure water system HALIOS 12 |



Acessories / Options

| Catalogue number | Description |
|------------------|--|
| 10000101 | Option - UV lamp 185 254 nm |
| 10000102 | Option - Ultrafiltration module |
| 10000103 | Option - TOC monitor |
| 10000104 | Additional remote dispenser HALIOS |
| 10000105 | Wall mounting for production unit HALIOS |
| 10000302 | Qualification documents HALIOS 6 12 |
| 10000340 | Option - XXL Dispenser (height: +15cm) |
| 10000341 | Option - 4m connection |

Consumables

| Consumables | |
|------------------|------------------------------------|
| Catalogue number | Description |
| 10000113 | HALIOS RO-GUARD pretreatment set |
| 10000114 | RO membrane 6 L/h |
| 10000115 | RO membrane 12 L/h |
| 10000107 | HALIOS UPW 182 polishing cartridge |
| 10000110 | Replacement ultrafilter |
| 10000108 | Replacement UV lamp 185 254 nm |
| 10000109 | Sterile filter capsule 0.2µm |
| 10000116 | Sterile vent filter 0.2µm |



CONNECT WITH US THROUGH LAB WATER



NEPTEC GmbH Heidenhäuschenstraße 14 65657 Elbtal, Germany

T: +49 6436 94891 00

E: info@neptec.de



ION EXCHANGERS



Follow us @NEPTEC_GmbH









