arium® mini – Compact Ultrapure Water Systems for 10 Liters per Day
Ultrapure water is the basis for successful analyses. Yet analytical methods are becoming more and more sensitive and thus more susceptible to interference. Consistently high water quality is decisive in ensuring the reproducibility of your results and in preventing time-consuming repeat analyses.

You can always rely on the arium® mini series of laboratory water systems to consistently deliver the highest water quality.

Regardless of the type of feed water you have, use arium® mini or arium® mini plus with our unique bagtank technology or connect arium® mini essential directly to your deionized water supply line as needed.

<table>
<thead>
<tr>
<th>Type of System</th>
<th>Feed Water*</th>
</tr>
</thead>
<tbody>
<tr>
<td>arium® mini</td>
<td>Pretreated water from a supply container</td>
</tr>
<tr>
<td>arium® mini essential</td>
<td>Directly connects to a pretreated water supply line (RO</td>
</tr>
<tr>
<td>arium® mini plus</td>
<td>Directly connects to tap water</td>
</tr>
</tbody>
</table>

* For details, see the inlet water specifications.
Your arium® mini Benefits

- Reliable
  Delivers consistently high water quality for reliable and reproducible results; optionally available with UV lamp

- Intuitive
  Easy to operate using the touch-activated color display; with direct access to all important dispensing options

- Innovative
  Depending on the model type, with unique bagtank technology to save you from the hassle of time-consuming tank cleaning

- Compact
  Space-saving footprint with a width of only 28 cm to easily fit in any lab environment

Ultrapure water is the basis for successful analyses. Yet analytical methods are becoming more and more sensitive and thus more susceptible to interference. Consistently high water quality is decisive in ensuring the reproducibility of your results and in preventing time-consuming repeat analyses.

You can always rely on the arium® mini series of laboratory water systems to consistently deliver the highest water quality.

Regardless of the type of feed water you have, use arium® mini or arium® mini plus with our unique bagtank technology or connect arium® mini essential directly to your deionized water supply line as needed.

<table>
<thead>
<tr>
<th>Type of System Feed Water*</th>
</tr>
</thead>
<tbody>
<tr>
<td>arium® mini Pretreated water from a supply container</td>
</tr>
<tr>
<td>arium® mini essential Directly connects to a pretreated water supply line  (RO</td>
</tr>
<tr>
<td>arium® mini plus Directly connects to tap water</td>
</tr>
</tbody>
</table>

* For details, see the inlet water specifications.
Focused on Your Requirements – Convenient Operation and the Highest Quality Standards

Conveniently operate arium® mini using the touch-activated color display with self-explanatory icons – even while wearing laboratory gloves. This will not only speed up your workflows, but will also make them more accurate and reliable as a result of active error prevention – your daily lab work will become easier and more efficient.

To ensure the best ultrapure water quality and the reliability of your process, we have also implemented the highest quality standards into all functional areas. For example, you can set a limit for the purified water quality. If this limit is exceeded, further dispensing of water will be prevented or accompanied by a warning, depending on your menu configuration settings selected.

Integrated Illumination for Easy Visual Support
- Flashing light during water dispensing
- Pulse signal emitted to accompany error messages
- Dimmed light in standby mode

arium® Scientific Pack for the Highest Ultrapure Water Quality
- The highest cartridge capacity thanks to efficient purification materials
- Optimal flow over the semiconductor-grade mixed-bed resin
- Designed for quality standard ASTM Type 1

arium® SterilePlus for Effective Microbe Removal
- Validated according to HIMA and ASTM F-838-05
- Meets quality standards in accordance with the USP
- Reliably removes microorganisms using a 0.2 µm membrane
Intelligent Technology – Systematic Purification to Obtain Ultrapure Water

With intelligent technology, the arium® mini ensures continuous protection against secondary contamination and therefore the highest water quality at all times. The closed bagtank system automatically regulates pressure equalization so that no CO2 can penetrate. This additionally prevents contamination by ionic impurities and maintains consistently low conductivity. As an added benefit, you will profit from the especially high cartridge capacity because there is less demand placed on the ion exchangers. Moreover, you can prevent the formation of a permanent biofilm, and therefore eliminate additional TOC loading. Depending on your requirements, you will just need to replace the bag every six months to start off fresh.

Integrated Bagtank Technology in arium® mini and mini plus – A Revolution in Laboratory Water Purification

As a pioneer and market leader in the manufacture of single-use products for biopharmaceutical production, we have written the next chapter in our success story by implementing our innovative bagtank technology in laboratory water systems. Originally developed for the pharmaceutical industry, our single-use bag integrated as a tank system on the side of arium® mini protects intermediately stored pure water reliably from secondary contamination. The 5-liter bag, consisting of our specially manufactured proprietary S71 film material, is multilayer and compliant with ISO and USP standards for biocompatibility. With the quality and composition of the arium® Bag, you can optimally store your pretreated pure water for later production of Type 1 ultrapure water.

Moreover, you will enjoy the benefits of active protection against leakage provided by the integrated Aqua Stop system.

Well-Thought-Out Functions for Reliable Performance

– Integrated pump to increase the water pressure
– Filling arium® mini with pretreated water: 2 minutes
– Filling arium® mini plus with RO permeate: 8 liters per hour

5-Liter Bag for Minimum Maintenance

– Easy bag exchange in less than 5 minutes
– No need to use chemicals for cleaning
– Practical and leak-tight connection using a quick-connect coupling

Innovative Technology to Prevent Secondary Contamination

– Optimum water quality by prevention of permanent biofilm
– Closed system guarantees purity
– Stable quality thanks to special multilayer S71 bag material

arium® UV Lamp for Critical Analyses (185 | 254 nm)

– Optimal temperature gradient due to horizontal installation
– Degradation of total organic carbons (TOCs) by irradiation (<5 ppb)
– Inactivates microorganisms by damaging their DNA

arium® Pretreatment Cartridge for Effective Purification

– Effective adsorption using high-quality activated carbon
– Special catalyst removes oxidants
– Impurities retained by reverse osmosis

Intuitive Menu Navigation for Total Ease of Operation

– Icon-guided interface with touch-activated display
– Displays current measured values and messages
– Favorites function for repeated dispensing of identical volumes

Volume-controlled dispensing in 50 mL increments

Last volume dispensed is saved by the Favorites function

Current filling volume displayed for the bag (arium® mini & mini plus)
Intelligent Technology – Systematic Purification to Obtain Ultrapure Water

With intelligent technology, the arium® mini ensures continuous protection against secondary contamination and therefore the highest water quality at all times.

The closed bagtank system automatically regulates pressure equalization so that no CO₂ can penetrate. This additionally prevents contamination by ionic impurities and maintains consistently low conductivity. As an added benefit, you will profit from the especially high cartridge capacity because there is less demand placed on the ion exchangers.

Moreover, you can prevent the formation of a permanent biofilm, and therefore eliminate additional TOC loading. Depending on your requirements, you will just need to replace the bag every six months to start off fresh.

Integrated Bagtank Technology in arium® mini and mini plus – A Revolution in Laboratory Water Purification

As a pioneer and market leader in the manufacture of single-use products for biopharmaceutical production, we have written the next chapter in our success story by implementing our innovative bagtank technology in laboratory water systems.

Originally developed for the pharmaceutical industry, our single-use bag integrated as a tank system on the side of arium® mini protects intermediately stored pure water reliably from secondary contamination.

The 5-liter bag, consisting of our specially manufactured proprietary S71 film material, is multilayer and compliant with ISO and USP standards for biocompatibility. With the quality and composition of the arium® Bag, you can optimally store your pretreated pure water for later production of Type 1 ultrapure water.

Moreover, you will enjoy the benefits of active protection against leakage provided by the integrated Aqua Stop system.

Well-Thought-Out Functions for Reliable Performance

- Icon-guided interface with touch-activated display
- Displays current measured values and messages
- Favorites function for repeated dispensing of identical volumes

Touch-activated color display with easy-to-clean surface

Last volume dispensed is saved by the Favorites function

Volume-controlled dispensing in 50 mL increments

Manual dispensing

Purified water quality and temperature displayed

Menu | Home function for settings and cleaning and care programs

Current filling volume displayed for the bag (arium® mini & mini plus)

SL-1542-e180302_85037-553-28.indd   5-7
22.03.18   12:25
Intelligent Technology – Systematic Purification to Obtain Ultrapure Water

Intelligent technology, the arium® mini ensures continuous protection against secondary contamination and therefore the highest water quality at all times. The closed bagtank system automatically regulates pressure equalization so that no CO2 can penetrate. This additionally prevents contamination by ionic impurities and maintains consistently low conductivity. As an added benefit, you will profit from the especially high cartridge capacity because there is less demand placed on the ion exchangers. Moreover, you can prevent the formation of a permanent biofilm, and therefore eliminate additional TOC loading. Depending on your requirements, you will just need to replace the bag every six months to start off fresh.

Integrated Bagtank Technology in arium® mini and mini plus – A Revolution in Laboratory Water Purification

As a pioneer and market leader in the manufacture of single-use products for biopharmaceutical production, we have written the next chapter in our success story by implementing our innovative bagtank technology in laboratory water systems. Originally developed for the pharmaceutical industry, our single-use bag integrated as a tank system on the side of arium® mini protects intermediately stored pure water reliably from secondary contamination.

The 5-liter bag, consisting of our specially manufactured proprietary S71 film material, is multilayer and compliant with ISO and USP standards for biocompatibility. With the quality and composition of the arium® Bag, you can optimally store your pretreated pure water for later production of Type 1 ultrapure water.

Moreover, you will enjoy the benefits of active protection against leakage provided by the integrated Aqua Stop system.

Well-Thought-Out Functions for Reliable Performance

– Integrated pump to increase the water pressure
– Filling arium® mini with pretreated water: 2 minutes
– Filling arium® mini plus with RO permeate: 8 liters per hour

5-Liter Bag for Minimum Maintenance

– Easy bag exchange in less than 5 minutes
– No need to use chemicals for cleaning
– Practical and leak-tight connection using a quick-connect coupling

Innovative Technology to Prevent Secondary Contamination

– Optimum water quality by prevention of a permanennt biofilm
– Closed system guarantees purity
– Stable quality thanks to special multilayer S71 bag material

arium® UV Lamp for Critical Analyses (185|254 nm)

– Optimal temperature gradient due to horizontal installation
– Degradation of total organic carbons (TOCs) by irradiation (<5 ppb)
– Inactivates microorganisms by damaging their DNA

arium® Pretreatment Cartridge for Effective Purification

– Effective adsorption using high-quality activated carbon
– Special catalyst removes oxidants
– Impurities retained by reverse osmosis

Intuitive Menu Navigation for Total Ease of Operation

– Icon-guided interface with touch-activated display
– Displays current measured values and messages
– Favorites function for repeated dispensing of identical volumes

Current filling volume displayed for the bag (arium® mini & mini plus)

Touch-activated color display with easy-to-clean surface

Purified water quality and temperature displayed

Volume-controlled dispensing in 50 mL increments

Last volume dispensed is saved by the Favorites function

Manual dispensing

Intuitive Menu Navigation for Total Ease of Operation

– Icon-guided interface with touch-activated display
– Displays current measured values and messages
– Favorites function for repeated dispensing of identical volumes

arium® UV Lamp for Critical Analyses (185|254 nm)

– Optimal temperature gradient due to horizontal installation
– Degradation of total organic carbons (TOCs) by irradiation (<5 ppb)
– Inactivates microorganisms by damaging their DNA

arium® Pretreatment Cartridge for Effective Purification

– Effective adsorption using high-quality activated carbon
– Special catalyst removes oxidants
– Impurities retained by reverse osmosis
The Right arium® mini Version for Your Daily Applications

<table>
<thead>
<tr>
<th>Feed Water</th>
<th>arium® mini</th>
<th>arium® mini essential</th>
<th>arium® mini plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretreated water (RO</td>
<td>DI line)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretreated water (from supply container)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purified Water</th>
<th>arium® mini</th>
<th>arium® mini essential</th>
<th>arium® mini plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type 3 water</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Applications                     | arium® mini mini essential arium® mini plus arium® mini UV mini essential arium® mini plus UV |
|----------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Buffer and media preparation     |                                 |                                 |                                 |
| Histology                        |                                 |                                 |                                 |
| Preparation of reagents, blank samples, etc. |                                 |                                 |                                 |
| ELISA (enzyme-linked immunosorbent assay) |                                 |                                 |                                 |
| AAS | GF-AAS (atomic absorption spectrometry) |                                 |                                 |                                 |
| Photometry                       |                                 |                                 |                                 |
| SPE (solid phase extraction)     |                                 |                                 |                                 |
| IC (ion chromatography)           |                                 |                                 |                                 |
| ICP-MS (inductively coupled with plasma mass spectrometry) |                                 |                                 |                                 |
| GS-MS (gas chromatography coupled with mass spectrometry) |                                 |                                 |                                 |
| HPLC (high-performance liquid chromatography) |                                 |                                 |                                 |
| LC-MS (liquid chromatography coupled with mass spectrometry) |                                 |                                 |                                 |
Sartorius Services

We Ensure the Quality of Your Results
At Sartorius, quality products go hand in hand with professional service. With our wide service offering, we will help guarantee the safe, reliable and optimal performance of your arium™ mini. Just ask us and we will even cover the entire life cycle of your laboratory water system – from commissioning to equipment qualification to regular maintenance. Together with you, we will ensure the consistently high quality of your laboratory water purification.

Services at a Glance
- Installation and commissioning
  Your advantage: Your system will operate reliably at peak performance from day one
- Equipment qualification (IQ | OQ)
  Your advantage: You will meet all regulatory requirements (GMP | GLP)
- Regular preventative maintenance, including calibration, inspection and testing of your system and exchange of consumables
  Your advantages: Optimal operation of your system; reliable results; prevention of downtime or even equipment failure

Feed Water arium® mini arium® mini essential arium® mini plus
- Tap water
- Pretreated water (RO | DI line)
- Pretreated water (from supply container)

Purified Water arium® mini arium® mini essential arium® mini plus
- Type 1 water
- Type 3 water

Applications arium® mini | mini essential | mini plus
- arium® mini UV | mini essential UV | mini plus UV

Buffer and media preparation
- Histology
- Preparation of reagents, blank samples, etc.
- ELISA (enzyme-linked immunosorbent assay)
- AAS | GF-AAS (atomic absorption spectrometry)
- Photometry
- SPE (solid phase extraction)
- IC (ion chromatography)
- ICP-MS (inductively coupled plasma mass spectrometry)
- GS-MS (gas chromatography coupled with mass spectrometry)
- HPLC (high-performance liquid chromatography)
- LC-MS (liquid chromatography coupled with mass spectrometry)
- SL-1542-e180302_85037-553-28.indd   8-9
22.03.18   12:25