

DOMINIQUE DUTSCHER SAS

Arium® Water Purification Systems

Simplifying Progress

SARTORIUS

Arium® Laboratory-Grade Water Purification Systems With Added Value

DOMINIQUE DUTSCHER SAS



For more information, please visit
www.sartorius.com/en/products/water-purification/lab-water-systems

Our Arium® laboratory-grade water purification systems inspire with their application-oriented operating designs. They enable you to perform your workflows faster and more reliably, make your daily lab work easier and ensure long-term economical operation. All instruments offer the ultimate flexibility, since they can be perfectly integrated into your laboratory environment and adapted to your requirements.

A choice of more than 70 Arium® versions is available to meet all your requirements on water quality and to cover any application. The Arium® Bagtanks and the innovative iJust function specially matched to these versions enable significantly more cost-effective water usage and efficient operation of these water purification systems than do conventional units. All Arium® systems are already certified when delivered. Plus, we offer equipment qualification and maintenance as supplementary services to considerably extend their uses even further.



DOMINIQUE DUTSCHER SAS

Innovative Arium® Bagtank System for Time Savings and User Reliability

Originally developed for the pharmaceutical industry, our single-use bag integrated as a tank system in the Arium® Bagtank systems protects intermediately stored pure water reliably from secondary contamination.

Unlike conventional tank systems, Arium® Bagtank technology eliminates time-consuming cleaning procedures with hazardous chemicals. Bags can be easily exchanged in less than 5 minutes using practical quick-connect coupling.

Optional available rollers for the Arium® Bagtank let you move it fast and conveniently to wherever you need to use it.



DOMINIQUE DUTSCHER SAS

For more information, please visit
www.sartorius.com/en/products/water-purification/lab-water-systems

Application-Orientated to Meet the Highest Demands

Reliable Processes Thanks to the Highest Water Quality

Low detection limits and sensitive analysis devices require laboratory-grade water with consistently high quality. You can always rely on the Arium® laboratory-grade water purification systems to provide you with reliable results for your critical and analytical applications. They meet the highest quality requirements and thus ensure the best reproducible results.

Optimized Water Usage with iJust

The clever iJust feature automatically optimizes your purified water quality and water usage. Its intelligent software controls a valve on the concentrate drain based on the data measured for $CaCO_3$ and CO_2.

The advantages:
- Ensures more economical water usage
- Provides high-quality purified water at all times
- Extends the life of downstream water purification systems

Easy Operation Using Touch-Activated Functions

You name it, from adjusting basic settings to dispensing water, all functions of the Arium® can be controlled by touch screen. Navigate intuitively through the logical user interface – even while wearing gloves. Virtual real-time updates of measured data, flow charts and warning messages are displayed at all times.

Water dispensing can be carried out manually using the slider, the foot switch or via the Favorites function. The latter, in particular, simplifies daily dispensing of recurrent volumes.

Less Waiting Means More Cost Savings

Consumables, i.e., the filter cartridges, can be quickly and easily changed out. This minimizes maintenance and downtime.



DOMINIQUE DUTSCHER SAS

More Flexibility

The different modules of Arium® systems offer the perfect solution for every task in the laboratory. The display is positioned at eye level. You can set up the dispensing location exactly where you need it. Depending on your given space requirements, the system can be integrated as desired at any location within the laboratory.

Wall-mounted Unit

The wall-mounted unit saves valuable space on your lab benchtop. The display and dispensing unit are positioned at the bottom to ensure user-friendly, ergonomic operation.



Benchtop Unit

Space-saving, compact design; water is dispensed directly at the display level.



Built-in Unit

This version saves space on and above your lab bench. You can choose to mount both the display and water dispensing units on a wall or on a multifuntional stand.



DOMINIQUE DUTSCHER SAS



Arium® Smart Station Water. Exactly Where You Need It.

The Arium® Smart Station is a flexible remote dispenser which supports you to optimize your available lab space.

- Connect up to 3 Smart Stations to your ultrapure water system for maximum flexibility
- Monitor all important parameter with the intuitive touch-activated color display including direct access functions
- Make use of the accurate volume dispense for precise buffer and sample preparation
- Ensure splash-free operation by adjusting the flow rate down to drop-by-drop

Multifunctional Design

This stand combines a design that allows unlimited access to all display and dispensing functions including flexible and stepless height adjustment up to 70 cm to fill different size containers and beakers. Adapted to your needs, the Smart Station has two installation options: wallmounted or bench top.

The ergonomic design can be optimized for either rightor left-hand operation



Choose Your Smart Station

The Smart Station is designed to dispense pure and ultrapure water from your system or Bagtank.





DOMINIQUE DUTSCHER SAS

Exactly the Right System – Always

A selection of more than 70 different varieties offers tailor-made solutions without any compromises for all applications.

DOMINIQUE DUTSCHER SAS

Features
iJust Optimized purified water quality and water usage; extends the life of downstream ultrapure water systems
Arium® Bagtank System Reliable protection against secondary contamination; easy change-out of the Arium® Bag saves time; protects users as it eliminates the need for hazardous cleaning chemicals
Display with Touch-activated Functions Clearly organized user interface featuring intuitive navigation; continuous display of measured data and warning messages
High-quality Features Integrated feed water conductivity measurement standard on all units; integrated pressure controller, integrated space for depositing utensils, and many more convenient features
Maximum System Flexibility A variety of hardware configurations; operating and dispensing unit can be flexibly positioned; easy and space-saving integration
High-Quality Water Meets and exceeds ASTM Type 1; excellent retention rates for RNases, DNases and endotoxins, and reduces TOCs; ideal for demanding biological and analytical applications, such as cell cultivation and chromatography
SOP Monitoring Graphic and acoustic signals for displaying maintenance prompts, alarm messages when limits are exceeded or data falls below minimum limits as well as maintenance interval prompts
“Favorites” function Quick access to pre-programmed volume dispensing
EDI technology[1] Consistently high Type 2 water quality; desalted electrochemically

[1] Available for Arium Advance EDI and Arium Comfort II

For more information, please visit
www.sartorius.com/en/products/water-purification/lab-water-systems







Arium® Comfort Series Combined pure and ultrapure water systems	**Arium® Pro Series** Ultrapure water systems; any application-specific configuration can be selected	**Arium® Advance Series** Pure water systems
☑		☑
☑		☑
☑	☑	☑
☑	☑	☑
☑	☑	☑
☑	☑	
☑	☑	☑
☑	☑	
☑		☑

DOMINIQUE DUTSCHER SAS

Arium® Comfort Series

The Arium® Comfort lab water systems combine pretreatment and final treatment technologies into one device. Featuring a compact design, they provide ultrapure and pure water of the highest quality. The pure water produced is kept in a closed Arium® Bagtank. This guarantees optimal storage of the purified water and protects against secondary contamination. The replaceable bag eliminates time-consuming tank cleaning intervals.

The optional UV lamp (185 | 254 nm) built into the ultrapure water loop reduces the TOC content to a minimum. The current TOC value is continuously checked by an optionally integrated TOC monitor and displayed for convenient verification.

DOMINIQUE DUTSCHER SAS

Arium® Comfort II

The Arium® Comfort II delivers up to 2 L/min of ASTM Type 1 ultrapure water, as well as 5 L/h or 10 L/h of Type 2 pure water. The additional EDI technology downstream from the RO modules optimizes the system and offers highly efficient ion retention with a quality ranging from 0.2 to 0.07 µS/cm.

Arium® Comfort I

The Arium® Comfort I provides up to 2 L/min of ASTM Type 1 ultrapure water, as well as 8 L/h or 16 L/h of Type 3 pure water. Feed water is treated with a pretreatment cartridge and downstream RO modules; continuous permeate back-flushing effectively prevents deposits and fouling.

Water Quality	Arium® comfort II	Arium® comfort I
Conductivity for Type 1[1]: 0.055 µS/cm (≅18.2 MΩ * cm)	☑	☑
Typical conductivity for Type 2: 0.2–0.07 µS/cm (≅5–15 MΩ * cm)	☑	
Typical conductivity for Type 3: <20 µS/cm (≅> 0.05 MΩ * cm)		☑
TOC content for Type 1[3]: ≤ 2 ppb	☑	☑
Bacteria[2]: < 0.001 CFU/mL	☑	☑
Particles[2]: No particles > 0.22 µm	☑	☑
Endotoxins[4]: < 0.001 EU/mL	☑	☑
RNase concentration[4]: < 1 pg/mL	☑	☑
DNase concentration[4]: < 5 pg/mL	☑	☑

[1] Compensated to 25 °C
[2] When using an Arium® Sterile Plus final filter
[3] Specified for system equiped with UV lamp and feedwater < 50 ppb TOC
[4] With Arium® Cell Plus final filter

For more information, please visit
www.sartorius.com/en/products/water-purification/lab-water-systems

Features

Reliable
TOC content ≤ 2 ppb for reproducible results; continuously updated TOC readings can be conveniently viewed on the display

Efficient
Optimized water usage ensured by intelligent iJust feature

Easy
Glass display with touch-activated functions and intuitive menu navigation

Time-saving
The Arium® Bagtank system provides reliable protection against secondary contamination and eliminates the need for regular tank cleaning

Space-saving
Compact design saves valuable work space

Fast
"Favorites" function for direct access to pre-programmed volume dispensing



DOMINIQUE DUTSCHER SAS

Arium® Pro Series

The Arium® Pro ultrapure water systems provide the ultimate flexibility and an excellent cost-benefit ratio because their -device configurations are specially tailored to your applications.

All systems meet and exceed the ASTM Type 1 water quality standards and ensure the best reproducible results. Up to 2 L/min of ultrapure water with a conductivity of 0.055 µS/cm (≅ 18.2 MΩ * cm) can be dispensed in consistently high quality.



DOMINIQUE DUTSCHER SAS

Features

Reliable
TOC content ≤ 2 ppb for reproducible results; current TOC readings can be read directly on the display

Complete range
Five systems specially customized to meet your specific applications

Flexible
Adapts to any laboratory environment thanks to flexible positioning of the system, control unit and dispensing unit

Easy
Glass display with touch-activated functions and intuitive menu navigation

Fast
"Favorites" function for direct access to pre-programmed volume dispensing

DOMINIQUE DUTSCHER SAS



For more information, please visit
www.sartorius.com/en/products/water-purification/lab-water-systems

Arium Pro Series

Arium® Pro

The Arium® Pro is a particularly cost-effective system. It focuses on the most important functions and produces ultrapure water in uncompromising quality.

Water Quality
- Conductivity[1]: 0.055 µS/cm (≅18.2 MΩ * cm)
- TOC content[3]: < 5 ppb
- Bacteria[2]: < 0.001 CFU/mL
- Particles[2]: No particles > 0.22 µm

Arium® Pro DI

The Arium® Pro DI delivers ultrapure water for standard applications of any kind. The Elemental Kit comprising a set of cartridges reliably removes organic and inorganic components; the TOC content of ultrapure water produced is < 5 ppb.

Water Quality
- Conductivity[1]: 0.055 µS/cm (≅18.2 MΩ * cm)
- TOC content[3]: < 5 ppb
- Bacteria[2]: < 0.001 CFU/mL
- Particles[2]: No particles > 0.22 µm

Arium® Pro UV

In Arium® Pro UV, the Analytical Kit cartridges reliably retain organic and inorganic components. The system's integrated UV lamp (185 | 254 nm) permits TOC values of ≤ 2 ppb.

The current TOC value is continuously checked by the optionally integrated TOC monitor and shown on the display.

Water Quality
- Conductivity[1]: 0.055 µS/cm (≅18.2 MΩ * cm)
- TOC content[3]: ≤ 2 ppb
- Bacteria[2]: < 0.001 CFU/mL
- Particles[2]: No particles > 0.22 µm

Arium® Pro UF

In Arium® Pro UF, the Biological Kit cartridges reliably remove organic and inorganic components. The system's integrated ultrafilter module ensures that the purified water does not contain any endotoxins, RNA | DNA or DNases and RNases.

The Arium® Pro UF delivers ultrapure water of consistently high quality and offers ideal conditions to ensure the reliability of critical biological results.

Water Quality
- Conductivity[1]: 0.055 µS/cm (≅ 18.2 MΩ * cm)
- TOC content[3]: < 5 ppb
- Endotoxins: < 0.001 EU/mL
- RNases: < 0.004 ng/mL
- DNases: < 0.024 pg/µL
- Bacteria[2]: < 0.001 CFU/mL
- Particles[2]: No particles > 0.22 µm

Arium® Pro VF

This high-end Arium® Pro VF unit delivers constantly high ultrapure water quality. Its integrated UV lamp (185 | 254 nm) and hollow-fiber ultrafilter module not only reduce the TOC content to ≤ 2 ppb, but also remove endotoxins, microorganisms, RNA | DNA and DNases and RNases.

This system is the ideal solution for all critical applications in your laboratory.

Water Quality
- Conductivity[1]: 0.055 µS/cm (≅ 18.2 MΩ * cm)
- TOC content[3]: ≤ 2 ppb
- Endotoxins: < 0.001 EU/mL
- RNases: < 0.004 ng/mL
- DNases: < 0.024 pg/µL
- Bacteria[2]: < 0.001 CFU/mL
- Particles[2]: No particles > 0.22 µm

[1] Measured value output adjustable to 25 °C, compensated or uncompensated
[2] When using an Arium® Sterile Plus final filter
[3] Feedwater < 50 ppb TOC
[4] At a pressure of 2 bar, depending on the connected accessory or final filter
[5] Under constant operating conditions

DOMINIQUE DUTSCHER SAS


SARTORIUS
DOMINIQUE DUTSCHER SAS

Arium® Advance Series

The Arium® Advance EDI and Arium® Advance RO systems achieve the highest retention rates of ions with an optimal water yield and reliably remove oxidants, heavy metal ions and particles from the feed water.

The built-in iJust function also optimizes purified water quality and water usage. Pure water is stored in the innovative, closed Arium® Bagtank system, which protects this water from secondary contamination.

DOMINIQUE DUTSCHER SAS

Arium® Advance EDI

The Arium® Advance EDI provides Type 2 pure water in consistently high quality. At a flow rate of 5 L/h or 10 L/h, the system uses the latest EDI technology to ensure reliable and safe removal of impurities in the feed water and reduces the ion content to a minimum.

Arium® Advance RO

The Arium® Advance RO provides Type 3 reverse osmosis water. With a flow rate of 8 L/h, 16 L/h or 24 L/h and automatic RO membrane backflushing, the Arium® Advance RO is the perfect choice for your general laboratory applications.

Water Quality	Arium® Advance EDI	Advance RO
Typical conductivity for Type 2[1]: 0.2–0.07 µS/cm (≅5–15 MΩ * cm)	☑	
Typical conductivity for Type 3[1]: < 20 µS/cm (≅> 0.05 MΩ * cm)		☑
Bacteria[2]: < 0.001 CFU/mL	☑	☑
Particles[2]: No particles > 0.22 µm	☑	☑

1 Compensated to 25 °C
2 When using an Arium® Sterile Plus final filter

For more information, please visit
www.sartorius.com/en/products/water-purification/lab-water-systems

Features

Efficient
Optimized water usage ensured by the intelligent iJust feature

Easy
Glass display with touch-activated functions and intuitive menu navigation

Time-saving
The Arium® Bagtank system provides reliable protection against secondary contamination and eliminates the need for regular tank cleaning

Consistently high quality Type 2 water:
State-of-the-art EDI technology



DOMINIQUE DUTSCHER SAS

Water Applications

Lab Water System Quality

Water Quality	Advanced RO	Advanced EDI	Pro	Pro DI	Pro UV	Pro UF	Pro VF	Comfort I	Comfort I UV	Comfort II	Comfort II UV
Type 1 Water			■	■	■	■	■	■	■	■	■
Type 2 Water		■								■	■
Type 3 Water	■							■	■		

Lab Water System by Daily Water Consumption	Advanced RO	Advanced EDI	Pro	Pro DI	Pro UV	Pro UF	Pro VF	Comfort I	Comfort I UV	Comfort II	Comfort II UV
Type 1 ultrapure water 10 – 40 liter/day								■	■	■	■
Type 1 ultrapure water 40– 100 liter/day			■	■	■	■	■				
Type 2 pure water < 120 liter/day (5 l/h)		■								■	■
Type 2 pure water < 150 liter/day (10 l/h)		■								■	■
Type 3 pure water < 140 liter/day (8 l/h)	■							■	■		
Type 3 pure water < 200 liter/day (16 l/h)	■							■	■		
Type 3 pure water < 270 liter/day (24 l/h)*	■										

Lab Water Application Overview | System Requirements by Application

Feed Application	Advanced RO	Advanced EDI	Pro	Pro DI	Pro UV	Pro UF	Pro VF	Comfort I	Comfort I UV	Comfort II	Comfort II UV
Feed ultrapure water systems	■	■									
Feed distilled systems		■									
Water for Laboratory devices (Autoclaves |Washing Machine etc.)	■	■						■	■	■	■

General Laboratory Application	Advanced RO	Advanced EDI	Pro	Pro DI	Pro UV	Pro UF	Pro VF	Comfort I	Comfort I UV	Comfort II	Comfort II UV
Buffer, media and pH solutions	■	■	■	■	■	■	■	■	■	■	■
Histology		■	■	■	■	■	■	■	■	■	■
ELISA (Enzyme-Linked Immunosorbent Assay)		■	■	■	■	■	■	■	■	■	■
AAS (Atomic Absorption Spectroscopy)		■	■	■	■	■	■	■	■	■	■
Solutions for chemical analysis and synthesis		■	■	■	■	■	■	■	■	■	■
GF-AAS (Graphite Furnace Atomic Absorption Spectrometry)			■	■	■	■	■	■	■	■	■
Preparation of reagents			■	■	■	■	■	■	■	■	■
Photometry			■	■	■	■	■	■	■	■	■

All displayed applicable systems starting with the minimal requested water quality criteria

DOMINIQUE DUTSCHER SAS

Molocular Biology | Lifescience Application	Advanced RO	Advanced EDI	Pro	Pro DI	Pro UV	Pro UF	Pro VF	Comfort I[1]	Comfort I UV	Comfort II[1]	Comfort II UV
Electrophoresis						■	■	■		■	
Northern Blot						■	■	■		■	
Southern Blot						■	■	■		■	
Western Blot						■	■	■		■	
Endotoxin analysis						■	■	■		■	
Immunocytochemistry						■	■	■		■	
Production of monoclonal antibodies						■	■	■		■	
PCR (Polymerase Chain Reaction)						■	■	■		■	
DNA Sequenzing						■	■	■		■	
Nutrient media for cell culture (Mammalia & plant)						■	■	■		■	
Chromatography)						■	■	■		■	

Analytical Application	Advanced RO	Advanced EDI	Pro	Pro DI	Pro UV	Pro UF	Pro VF	Comfort I	Comfort I UV	Comfort II	Comfort II UV
SPE (Solid phase extraction)					■		■		■		■
Trace metal analysis					■		■		■		■
IC (Ion chromatography)					■		■		■		■
ICP-MS (Inductively Coupled Plasma Mass Spectrometry)					■		■		■		■
GC-MS (Gas Chromatography–Mass Spectrometry)					■		■		■		■
HPLC (High-Performance Liquid Chromatography)					■		■		■		■
TOC analysis					■		■		■		■

All displayed applicable systems starting with the minimal requested water quality criteria
1. Only when equipped with Cell Plus final filter

DOMINIQUE DUTSCHER SAS

Service for Ultrapure Water Systems

For many applications in the biopharmaceutical industry, at universities and in clinical settings, the availability of pure and ultrapure water of the highest quality is of great importance. Growing demands and more sensitive analytical equipment are raising the bar higher and higher for pure and ultrapure water. Whether you need laboratory-grade water of Type 1, Type 2 or Type 3, Sartorius has the right system for your specific application and the water quality you require.

We invest in the continuous and thorough training of our application and service specialists so that they understand the full range of your applications and can give you well-founded technical advice in accordance with all legal requirements.

Services Provided

- Installation and startup as well as equipment qualification (IQ | OQ)
- Device configuration based on feed water analysis to achieve the ultimate in ultrapure water quality
- Regular preventive maintenance, including equipment inspection and replacement of consumables
- Extended warranty services

Your Benefits

- Installation and startup by factory-trained service staff so that you can unleash the full potential of your instruments
- Regular preventive maintenance ensures the reliability of the results and your lab water instrumentation
- Detailed service and calibration records verify compliance with all requirements for documentation

Germany
Sartorius Lab Instruments GmbH & Co. KG
Otto-Brenner-Strasse 20
37079 Goettingen
Phone +49 551 308 0

USA
Sartorius Corporation
565 Johnson Avenue
Bohemia, NY 11716
Phone +1 631 254 4249
Toll-free +1 800 635 2906

For further information, visit
www.sartorius.com

DOMINIQUE DUTSCHER SAS

Specifications subject to change without notice.
Copyright Sartorius Lab Instruments GmbH & Co. KG.
Status: 12 | 2021