

AQUAPHOR

PROFESSIONAL

Product Line Overview

2021



AQUAPHOR

AQUAPHOR filters are sold in over 65 countries around the world, including the USA, Europe, China, Africa and South America.

AQUAPHOR is the leading high-technology water purification company. It is a vertically integrated production, research and development, distribution and marketing company.

AQUAPHOR water purifiers are manufactured both under our own brands and the brands of global retailers.



135

Patents globally

7

Production facilities
in Estonia, Russia, Israel

92 000 m²

of high-quality
production space

-  China
-  Estonia
-  France
-  Germany
-  Great Britain
-  Israel
-  Kazakhstan
-  Latvia
-  Lithuania
-  Poland
-  Republic of Belarus
-  Romania
-  Russia
-  Serbia
-  Ukraine
-  USA

AQUAPHOR Group of Companies

The AQUAPHOR holding is the world's largest manufacturer of selective fiber materials for water treatment and purification systems based on these patented materials. AQUAPHOR manufacturing, research and development facilities are 92 000 m² in total including 51 000 m² of modern manufacturing in Estonia.

From 2006 AQUAPHOR products and production facilities are certified by TUV and SGS.



Softeners. S-series

AQUAPHOR softeners are an advanced alternative to the classic whole-home water softeners. AQUAPHOR softeners are exceptionally efficient, with low salt consumption and small amount of water needed for regeneration.



Whole-house
Water Supply



Laundry
& Cleaning



Beauty
& SPA

Advantages

Fully automatic, compact and silent softeners feature exceptionally low salt usage, highly effective iron removal (up to 15 mg/L), prefiltration down to 20 microns. AQUAPHOR softeners contain patented high-efficiency Dual Core Valves and other engineering solutions to ensure long-term trouble-free service.

- **Salt savings up to 60%**
Thanks to a unique tank design and extra-fine ion-exchange resin granules salt efficiency is maximized.
- **2-in-1: water softening & iron removal**
The patented system design provides larger contact surface, eliminates channeling, while small ion-exchange granules regenerate faster and more efficiently. As a result — removal of high concentration of Fe (up to 15 mg/L concentration in water) and hardness.
- **Exceptionally small water usage for regeneration**
The innovative, patented Dual Core Valves of the AQUAPHOR softener assures long-term trouble-free performance concurrently wasting minimal amount of water.
- **10-year warranty for the for the main parts**
High-strength thick wall is made of homogeneous glass-filled composite and will serve over 10 years, while classic columns typically serve less than 5 years.
- **Maintenance spendings cut**
In addition to low salt consumption of the system, ion-exchange media lasts times longer than in the classic water columns.
- **Efficient operation even at very low tap pressure**
- **Fully recyclable body and tank**
- **NSF certified**



Specification	S550	S800	S1000
Maximum Compensated Hardness, mg/L	840	1200	1540
Maximum Ferrous Iron Reduction, ppm		10	12
High capacity HC mode, min/L	23/25	25/38	28/42
Capacity in HE mode, kg salt/gram hardness	0.6/49	1.0/66	1.1/67
Dimensions (length x height x width), mm	322 x 554 x 430	404 x 706 x 485	404 x 795 x 485
Fine Mesh Resin, L	15	23	28

Viking Series

AQUAPHOR Viking comprises high quality AISI 316 stainless steel housing, withstanding the temperatures up to 90°C. It is resistant to pressure surges and guarantees trouble-free operation. Protects other filters downstream to purify drinking water.



Whole-house
Water Supply



Laundry
& Cleaning



Beauty
& SPA

Advantages

AQUAPHOR Viking series ensures drinking water filtration as well as pre-filtration, depending on the cartridge type. Viking can be used with hot and cold water to remove suspended and dissolved compounds, heavy metals, chlorine and other contaminants.

- Clean water at home**
All water at home is great for bathing and housekeeping.
Viking protects all household appliances and lowers overall maintenance costs.
- Elegance of shape**
The housing fits any bathroom interior if there is not enough space to hide it.
Viking comes in three sizes, including Midi and Mini options.
- Simple to install and use**
Designed for easier installation and maintenance with the quick-release fittings.
You will not need any tools to replace filters on your own.

Viking PRO is a prefiltration housing made of high-strength glass fiber filled plastic to be used for cold water treatment. Great for HoReCa and office use.



NEW
CARTRIDGE B520 PRO
for cold water
Patented high-capacity
corrugated multilayer
filtration cartridge
Capacity — 150 000 L



NEW

CARTRIDGE B520 PRO for cold water

Patented high-capacity corrugated multilayer filtration cartridge

Capacity — 150 000 L






	Viking	Viking PRO	Viking Midi	Viking Mini
Dimensions, mm	180 x 595	225 x 606	180 x 425	180 x 225
Cartridges for cold water	B520 PRO		B515 PRO	B505-13
Recommended flow rate, L/min	25		15	10
Filter cartridge capacity, L	150 000		90 000	30 000
Cartridges for hot water	B520-14	—	B515-14	B505-14
Recommended flow rate, L/min	25		15	10
Filter cartridge capacity, L/min	50 000		35 000	15 000
Cartridges for drink water	B150 Plus		B150 Midi	—
Recommended flow rate, L/min	10		7	
Filter cartridge capacity, L	40 000		25 000	

Gross Series

AQUAPHOR Gross series come in high-strength glass fiber filled polymer housing. With a variety of filter cartridges, Gross ensures pre-filtration and protects the drinking water filters downstream.



Whole-house
Water Supply



Laundry
& Cleaning



Beauty
& SPA

Advantages

Gross housing is a durable and reliable solution that can be equipped with sediment filters to protect home appliances from solid particles. Carbon Block + AQUALEN™ filter cartridges for Gross series will reduce chlorine, heavy metals and other dissolved impurities.

- **Long-lasting housing**
The filter housing is made of high quality plastic, and can withstand high pressure. Can be applied where high performance is required.
- **Protects household appliances & downstream filters**
- **Wide range of filters cartridges**
- **BigBlue standard replacement filters 10" and 20"**



Specifications and Performance

MODEL	SIZE	NOMINAL PARTICLE RATING	DP AND FLOW RATE	CHLORINE TASTE AND ODOR REDUCTION	VOC REDUCION	LEAD REDUCION
B510-12	100 mm x 254 mm	5 microns	0,2 bar and 7,5 Lpm	24 000 L	NA	NA
B520-12	100 mm x 508 mm	5 microns	0,2 bar and 15 Lpm	48 000 L	NA	NA

Replacement Filters

B510-12 GROSS 10"	B520-12GROSS 20"
 <p>Gross 10 replacement filter for cold water purification for the entire home. Its unique structure and design allow the module to remove sediments, chlorine, heavy metals and other impurities from the water.</p>	 <p>Gross 20 replacement filter for cold water purification for the entire home. Its unique structure and design allow the module to remove sediments, chlorine, heavy metals and other impurities from the water.</p>



APRO-1000-WH System

Whole-home & commercial water purifier.
Eco-friendly and multipurpose whole-home RO station.
Affordable and practical water purifier for houses, small municipal entities or local businesses. Fully automatic all-in-one solution that replaces salt-emitting water softeners and cuts maintenance costs.



Whole-house
Water Supply



Municipal
Entities



Small
Business

Advantages

Whole-house reverse osmosis water purifier provides soft, pure water, safe from harmful chemicals content. A sustainable RO substitute to classic softeners. Softening columns are cheaper to buy, but more expensive to use. With APRO-1000-WH the entire house, cafe, kindergarten or laundry is protected against any traces of water hardness, chemical pollutants, hormones, medicinal residues and microplastic.

- **Used with any water**
Purifies practically any tap or artesian well water up to 30 meq/L hardness and/or 10 mg/L iron.
- **Smart permeate recovery up to 95%**
Patented, computer-controlled high-frequency drainage system. High-speed recirculating water flow keeps the membrane clean, and provides exceptionally high permeate recovery, while the wastewater drainage is dramatically reduced.
- **Drastic energy use reduction up to 50%***
Extremely low energy consumption is achieved due to the synergy of the combination of a small high-efficiency booster pump (up to 16 bar) and a secondary high-flow yet low-energy recirculation pump.
- **Reduced consumption of antiscalants**
Computer-controlled high-frequency drainage, the system works either without any antiscalant or with the reduced consumption of antiscalants.
- **Optional rainwater purification**
- **Optional permeate water RO mineralization stage**
- **High-capacity pre-filtration cartridges**

*in a typical application



Patented high
performance
pre-filtration
cartridge



MODEL	APRO 1000 WH	APRO 1000* WH
Operational pressure, bar	7-10	
Membrane Quantity* size, inch	4 × 4040	
Max inlet TDS, ppm	2 000	
Reduction of salt content, %	up to 95	
System recovery, %	up to 99	
Accumulation tank	external, 100 liters	internal, 80 liters

APRO-MCR 100

Low-energy and nimble water purifier for real-life requirements in HoReCa business and the like. APRO-MCR 100 provides drinking water with up to 50% energy savings. A feasible deal to keep operating costs at a reasonable level.



Whole-house
Water Supply



Municipal
Entities



Small
Business

Advantages

Flexible solution that delivers just needed volume of high-quality and soft water sufficient for the needs of entrepreneurs in many sectors including beauty salons, boutique hotels, local farmers who wash the greens before shipping to stores in the neighborhood.

- **Smart permeate recovery up to 95%**

Innovative membrane anti-clogging solution features high-speed recirculating water flow to keep the membrane clean. An exceptionally high permeate recovery, while the wastewater drainage is dramatically reduced.

- **Energy use reduction up to 50%***

Two heavy duty miniaturized pumps provide fast recirculating flow with up to 50% energy savings.

- **Less antiscalants consumption**

Computer-controlled high-frequency drainage, the system works either without any antiscalant or with the reduced consumption of antiscalants.

- **Space saving design**

- **Remote access**

*in a typical application

MODEL	APRO-MCR 100
Input pressure, bar	1-4
Membrane Quantity*size, inch	2 × 3 012
Max inlet TDS, ppm	1 500
Reduction of salt content, %	up to 85
System recovery, %	50
Power supply	24VDC (AC/DC adapter is installed)
Accumulation tank	external

APRO SST 150–750 Systems

Ultra low-energy systems suit small & medium businesses in the food industry, professional kitchens, service and public entities. They are ready to supply as much clean filtered water as the size of business requires right now.

Stainless steel housing in the SST line suits areas of high humidity or sites with stringent cleanliness and hygiene requirements.



- Low energy consuming booster pump saves up to 50%electricity
- Permeate recovery up to 99%
- Extended membrane life
- Easy maintenance
- Space saving design
- Low cost operation



Whole-house
Water Supply




Municipal
Entities



Small
Business



Small & Medium
Business

					
MODEL	APRO SST 150	APRO SST 300	APRO SST 250	APRO SST 500	APRO SST 750
Operational pressure, bar	7-10				
Permeate Flow, LPH	150	300	250	500	750
Membrane Quantity	1	2	1	2	3
Membrane Size, inch	4 × 21		4 × 40		
Max inlet TDS, ppm	2 000				
Reduction of salt content, %	up to 95				
System recovery, %	75 - 99				
Power supply	single-phase 230V, 50Hz				
Dimensions, mm	510 × 390 × 725	595 × 390 × 845	555 × 390 × 1 210	630 × 390 × 1 270	765 × 390 × 1 270
Net weight, kg	38,5	49,5	47,5	58,5	72
Size (inlet, outlet, concentrate)	¾"/½"/½" NPTF				

APRO 150–750 systems are also available in versions for High Pressure (HP) and High Salinity (HS)

APRO-HP series Compact high-pressure RO units that feature supreme salt rejection.

MODEL	APRO 250 HP	APRO 500 HP	APRO 750 HP
Operational pressure, bar	12-16		
Membrane Quantity	1	2	3
Membrane Size, inch	4 × 40		
Max inlet TDS, ppm	4 000		
Reduction of salt content, %	up to 98		
System recovery, %	75 - 95		
Power supply	three-phase 400V, 50Hz		

APRO-HS series RO units for sea water purification. Serves civil and business needs.

MODEL	APRO 250 HS	APRO 500 HS	APRO 750 HS
Operational pressure, bar	16-30		
Membrane Quantity	1	2	3
Membrane Size, inch	4 × 40		
Max inlet TDS, ppm	8 000		
Reduction of salt content, %	up to 98		
System recovery, %	75 - 95		
Power supply	three-phase 400V, 50Hz		



APRO 3000 / 4000 / 6000

The game-changing stackable RO water purification solution for businesses that is simple to scale. With these units of varying production capacity a business is flexible to assemble the system which perfectly fits current needs and conditions and alter it as soon as it is needed.



Municipal



Agriculture
and Farms



Industrial
Processes

Innovative modular RO units with varying production rates can be easily rearranged or reinforced with other units to meet the changing requests of capacity and space. Remote control allows managing the system from any place. Booster pump and recirculation pumps save up to 50% electricity.

Advantages

- Permeate recovery up to 99%
- Extended membrane life
- Patented high frequency membrane cleaning cocentrates discharge
- Ultra low energy consumption
- System operates in fully automatic mode with remote control
- Robust construction and easy maintenance
- Quiet operation
- Space saving design
- Mass produced

			
MODEL	APRO 3000	APRO 4000	APRO 6000
Operational pressure, bar	7-10		
Permeate Flow, LPH	3 000	4 000	6 000
Membrane Quantity	3	4	6
Membrane Size, inch	8 × 40		
Max inlet TDS, ppm	2 000		
Reduction of salt content, %		up to 95	
System recovery, %	up to 98		
Power supply	three-phase 400V, 50Hz		
Dimensions, mm (L×W×H)	3 640 × 840 × 1 150	2 800 × 840 × 1 150	2 800 × 840 × 1 150
Net weight, kg	236	287	389
Size (inlet, outlet, concentrate)	2" / 1" / 1"		

MultisArray of Monoblocks

Innovative RO monoblocks of 6000 LPH allow to set inexpensive and multipurpose water purification units into high-capacity multisArray with up to 8 monoblocks united under one master control board.



Municipal

Medical and
PharmaceuticalAgriculture
and FarmsIndustrial
Processes

By managing the number of monoblocks in a multisArray a business stays lean in resources and keeps a minimal needed number of monoblocks working at any given time. More RO units of monoclocks can be added or detached as soon as it is required.

Advantages

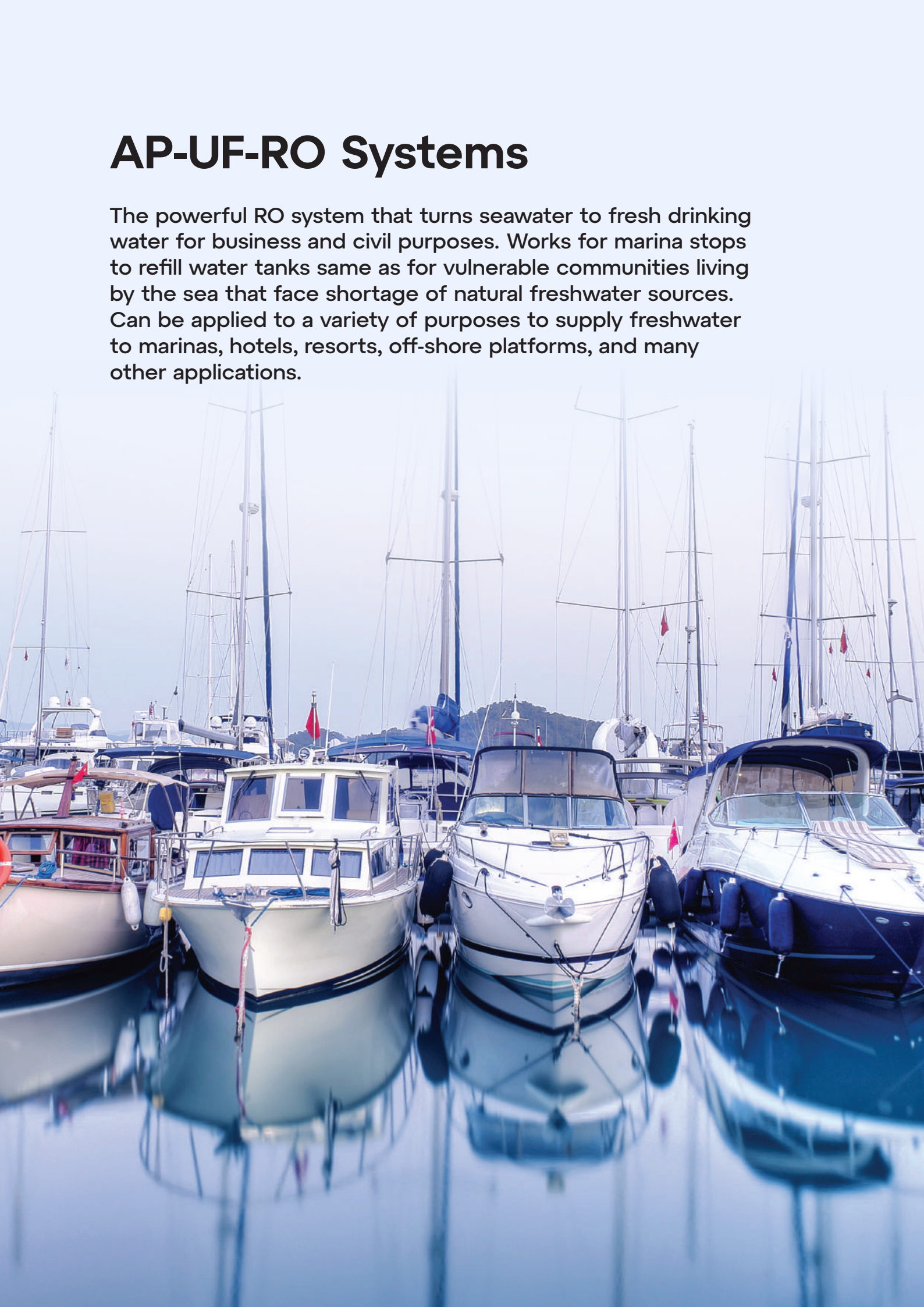
- Purified water recovery up to 98%
- Patented high frequency membrane cleaning concentrate discharge
- Low energy consuming Grundfos booster pumps and high flow, low energy recirculation pumps (save up to 50%+ of electricity)
- Self-sufficient monoblocks with “slave” controllers and smart master controller (cloud optimization)
- Permeate recovery up to 99%
- Optional built-in UF pre-filtration
- Extended membrane life
- Space saving design
- Low-cost operation
- Easy maintenance

Master Control Board



Master control board with touch screen color monitor supports management of up to 8 monoblocks and all kinds of the prefiltration and supply systems.

Monoblocks consist of standart AP:RO 6000 units



AP-UF-RO Systems

The powerful RO system that turns seawater to fresh drinking water for business and civil purposes. Works for marina stops to refill water tanks same as for vulnerable communities living by the sea that face shortage of natural freshwater sources. Can be applied to a variety of purposes to supply freshwater to marinas, hotels, resorts, off-shore platforms, and many other applications.



Drinking Water
for Seashore Housing



Alternative
to City Water



Freshwater
for Marinas

Advantages

Watermaker seawater desalination systems use reverse osmosis technology to treat virtually any seawater source into fresh, safe water which can be used for drinking, bathing, food preparation, deck and exterior wash-downs, and a variety of other uses.



AP-UF-RO SW (Sea Water)

MODEL	AP-UF-RO SW
Operational pressure, bar	35-50
Permeate Flow, LPH	5 000
Max inlet TDS, ppm	45 000
Reduction of salt content, %	up to 99
System recovery, %	up to 90
Power supply	three-phase 400V, 50Hz

Laboratory Water Purifier

This Laboratory Water Machine provides high purity water to fit most laboratory needs like cleaning the ware, being the basis for cell cultures, buffers and reagents. The system ensures the quality of water which is crucial to the accuracy of experiments.



Medical & Pharmaceutical



Testing Laboratories

LWM (Laboratory Water Machine)-205:


- Patented Double pass RO
- Large capacity patented filter cartridges for any type of tap water
- 0,1 micron microfiltration hollow-fiber membrane
- Internal 5 L storage tank
- Highly efficient recirculation pump
- Fully automatic TDS measurements and control
- High permeate water recovery & high capacity patented pre-filtration
- LCD control panel

Crystal DI PRO (Demineralization):

- Designed for deionizing water up to 18 MΩ
- Online TDS control
- Mixed bed demineralization cartridge
- 0,1 micron microfiltration hollow-fiber membrane post filter
- Long capacity mixed bed cartridges

PWD (Pure Water Dispenser)-05:

- User-friendly dispenser with the advanced water quality control features.

			
MODEL	CRYSTAL DI PRO	LWM-205	LWM-205 + CRYSTAL DI PRO
Process	Mixed beds	Double pass RO system	Double pass RO system + mixed beds
Output of pure water	120l/h	50 l/h	50 l/h
Conductivity at 25 °C	0.1-18 MΩ	≤1 MΩ	≤18 MΩ
Minimal Inlet Pressure, bar	0.1	1	
Permeate recovery, %	100	up to 80	
Reactive Silica (SiO ₂)		<0.01ppm	
Heavy metals		<0.01ppm	
*Filtrate performance depends on the feed water quality			

APRO-100-DI, APRO-500-DI

Water deionization systems in cabinet housing that provide a complete solution from tap to ultrapure water direct from a potable water supply and are ideal for any cases when ultrapure water is required. Deionized water helps maintain product safety and integrity.



Medical and
Pharmaceutical



Testing
Laboratories



MicroChip
Production

Advantages

- A fully automated Aquaphor APRO-100-DI and APRO-500-DI RO systems with an advanced drainage system provides a steady ultrapure water supply
- A conductivity measuring unit ensures only high-quality water passes to the storage tank
- A two-step prefiltration system for mechanical impurities removal
- An indicator box measures membrane pressure and the product water pressure supply
- Water supply monitoring sensors
- Fully equipped electric board



MODEL	APRO-100-DI	APRO-500-DI
Permeate capacity, LPH	100	500
Permeate accumulation tank volume, liters	200	560
Supply pump flow	max 3 000 LPH	max 3 000 LPH
Supply pressure	max 4 bars	max 4 bars
Mixed bed ion-exchange resin volume, liters	18	50
cabinet dimensions, mm	600 × 800 × 1600	600 × 800 × 1600
Accumulation tank, mm	build in (100l)	1000 × 750 × 1500 (450l)
Power supply	230 V, 50 hz	230 V, 50 hz
Connection Sizing (inlet, outlet, drainage)	1" / ½" / ½" NPTF	1" / ½" / ½" NPTF

Containerized Water Purification Plant

The stand-alone drinking water production at any spot in the world, no matter what is the quality of the incoming water. The mobile solution delivers clean drinking water that meets the WHO Guidelines for Drinking-water Quality at a very low projected operating cost of fewer than €0.20 per cubic meter.



Drinking Water
for Communities



Alternative
to City Water

Advantages

- **Any source of water**

Fast production of clean drinking water from wells, open sources like lakes, rivers, ponds, and brackish water.

- **Instant deployment**

13 stages of water treatment technologies are packed in the size of a standard 20 ft container that can be mounted as far as 20 meters high, 100 meters away from any available water source and launched immediately.

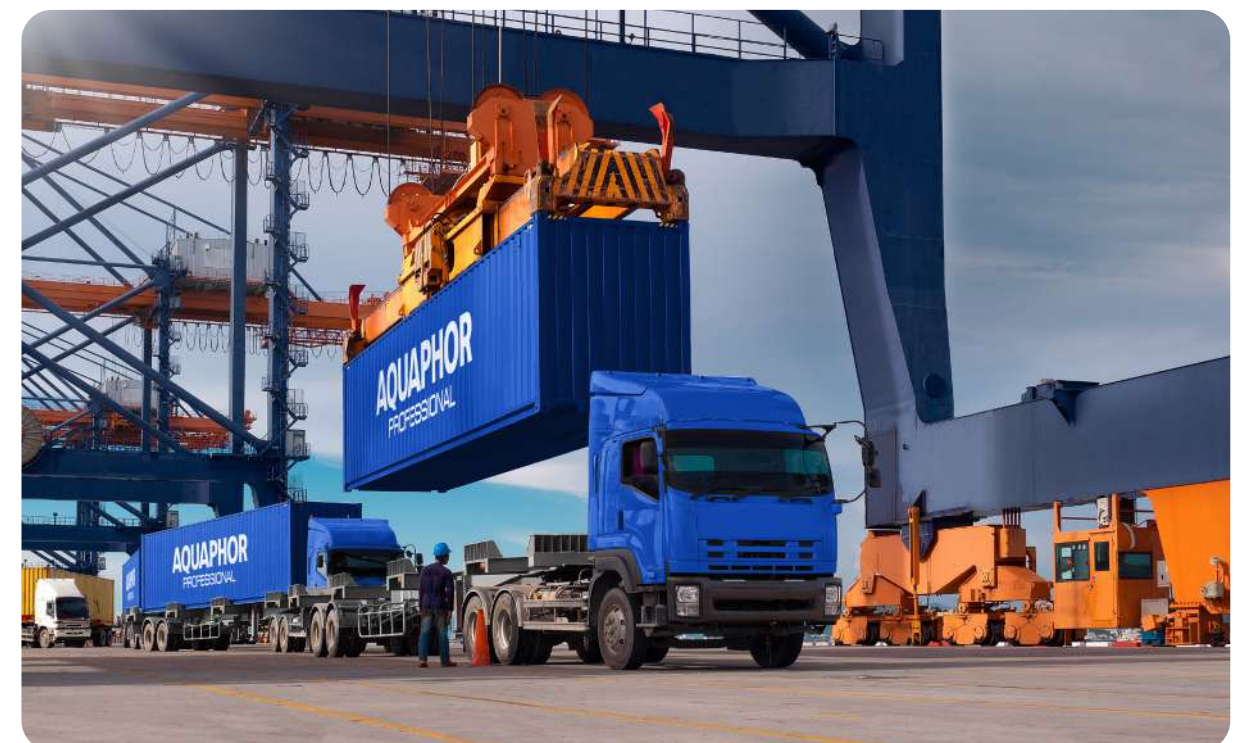
- **Over 10 years of operation**

Robust and tamper-proof self-sufficient construction of the container protects the high-end equipment against the weather and other threats.

- **Requires minimal maintenance**

- **User-friendly plug-and-play installation**

- **Remote control through encrypted internet traffic**



Rainwater Collection

The system represents an additional or alternative whole-home water source. Featuring a multisource function, it automatically switches to a reserve source of inlet water when rainwater is not sufficient.



Whole-house
Water Supply

Advantages

This compact and low-energy system is fully automated when there is a need to switch between the sources of water — municipal or harvested rainwater. It also features the stagnation protection technology against bacteria growth and automatically starts recirculation when the system is in standby mode.

- Low energy consuming booster pump
- Permeate recovery up to 99%
- Extended membrane life
- Easy maintenance
- Space saving design
- Low cost operation
- Reduced antiscalant consumption
- Automatic



NEW

CARTRIDGE B520 PRO
for cold water

Patented high-capacity
corrugated multilayer
filtration cartridge



MODEL	APRO 500RW
Operational pressure, bar	7-10
Permeate Flow, LPH	500
Membrane quantity	2
Membrane size, inch	4 × 40
Max inlet TDS, ppm	2 000
Reduction of salt content, %	up to 95
System recovery, %	75-98
Storage tank	external, 100 liters
Power supply	single-phase 230V, 50Hz
Size (inlet, outlet, concentrate)	¾"/½"/½" NPTF

AQUAPHOR

PROFESSIONAL

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