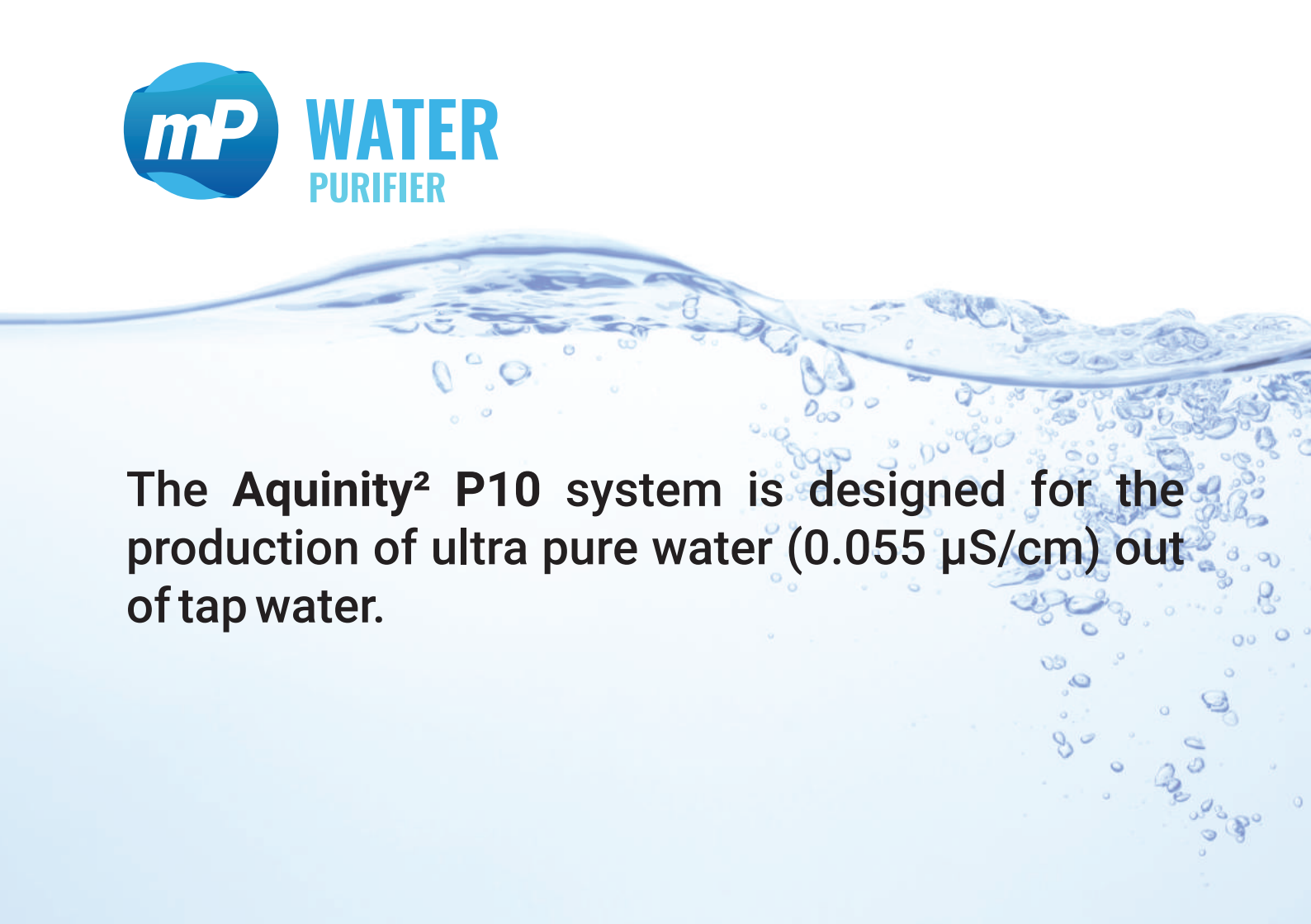
Aquinity² P10

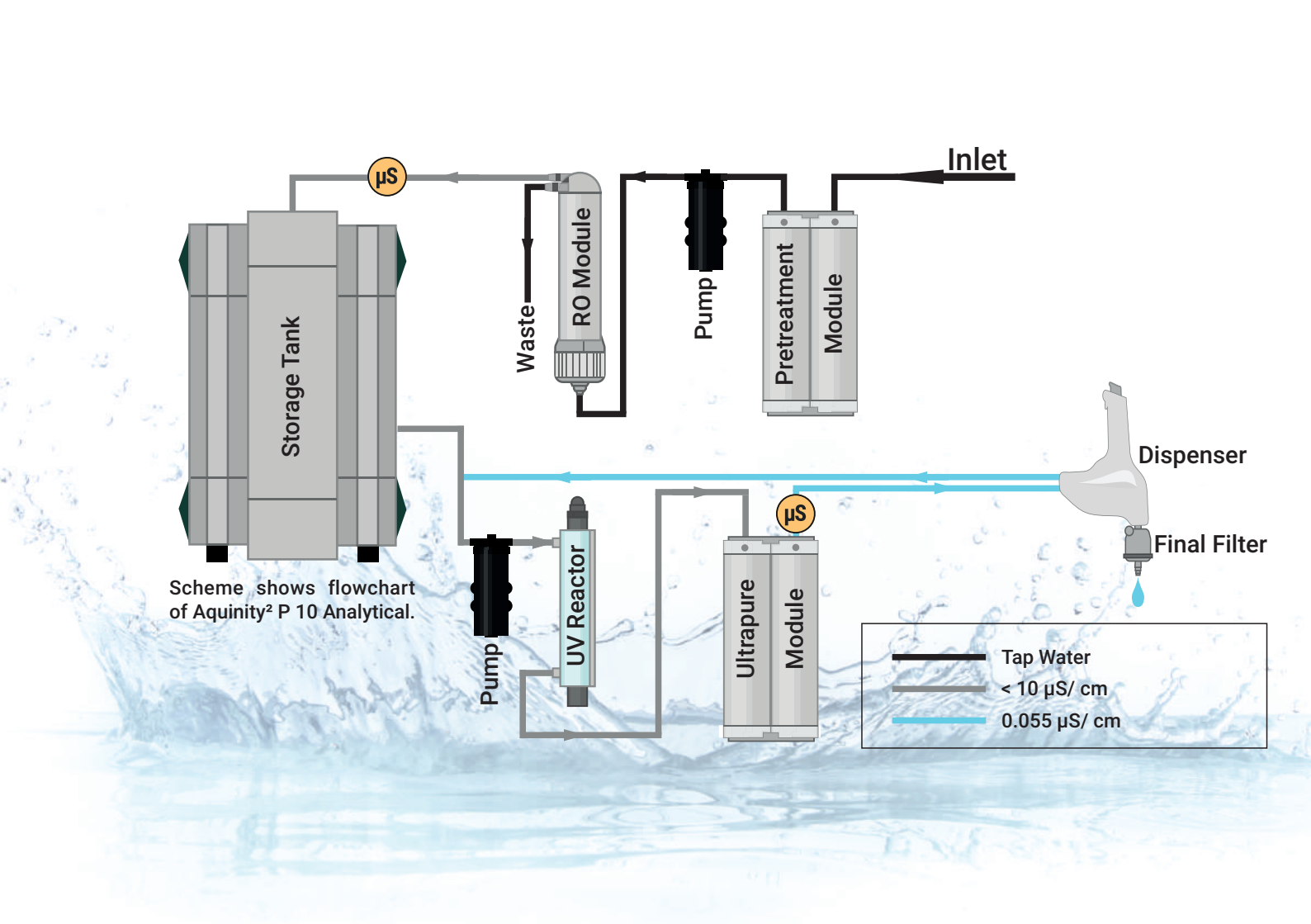
Produces Ultra Pure Water

mP WATER PURIFIER



The **Aquinity² P10** system is designed for the production of ultra pure water (0.055 µS/cm) out of tap water.

The Aquinity² P10 system is equipped with a reverse osmosis (RO) to produce deionised water into the integrated 10 liter storage tank with a production rate of 8 L/h. In the next step the ultra pure water is produced with a combination of optimized mixed bed cartridge and can be tapped with a flexible dispenser. If water is not used, automatic recirculation within the Aquinity² system ensures a permanent high quality of ultra pure water. All components of the Aquinity² are assembled in an especially designed housing. The system can be easily opened by removing the side panel to access the Ultrapure module and UV lamp.



Scheme shows flowchart of Aquinity² P 10 Analytical.

Technical Specifications

mP WATER PURIFIER

ultra pure water quality	0.055 µS/cm; Type I
resistivity	18.2 MΩ·cm
total organic carbon (TOC)	< 10 ppb Reagent | < 3 ppb Analytical
dispensing flow rate	1.5 L/min
productivity rate	8 L/h*
bacteria	< 1 cfu/mL**
particulate	> 0.2 µm less than 1 particulate/mL
RNAse	< 1 pg/mL**
DNAse	< 5 pg/mL**
dimensions, weight, power	504 x 340 x 535 mm, 16-20 kg, 110-230 V

* not possible to tap pure water ** with microbiological final filter

Feed Water Requirements

type of feed water	tap water
feed water conductivity	< 1400 µS/cm
inlet pressure	1.5 to 6 bar
free chlorine	< 0.1 mg/L
Silt Density Index (SDI)	< 3
pH	3 to 9
temperature	5 to 25 °C

Configurations

Aquinity²P10 is available in two configurations (Reagent & Analytical) to fit the specific requirements of ultra pure water quality for different applications.

model	UV reactor	Cat. No.
Reagent	-	114-0070
Analytical	+	114-0071

Options

µS-control

The µS-control checks the conductivity of feed water to protect the cartridges against inappropriate feed water. If conductivity is too high the water flow will be rejected.

TOC monitoring (TI version)

The TOC monitoring during production and intermittent measurements during non-use periods allows to check the organic content in water continously between 1 and 999 ppb.

volumetric dispensing

Our dispenser allows the volumetric controlled dispensing of water with an increment of 0.1 L and a tap volume from 0.1 to 99 L. The system prevents overflow of containers and allows to dispense water without supervising.

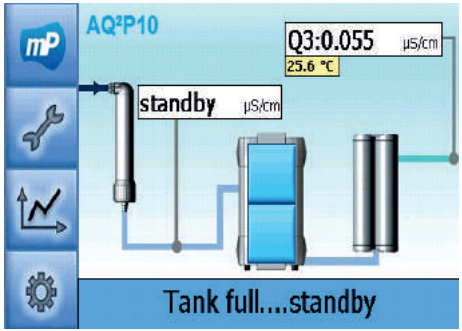
bench integrated (BI version)

To save valuable benchtop space the Aquinity² can be ordered as BI configuration. The system will be installed underneath the work bench and only the display and dispenser are mounted on the wall.

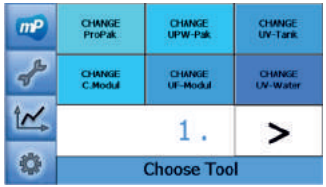
mP WATER PURIFIER

User Interface & Software

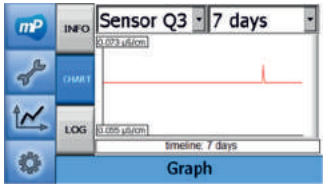
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



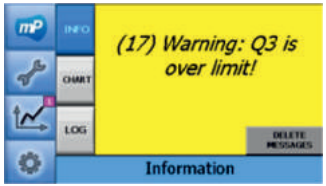
Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.



Helping tools to maintain system



Trackable values up to 1 year



Warning of customer in case of over limit and service case

Consumables

Description	Cat. No.
Ultrapure Module MemPak LS (Life Science)	190-0087
Ultrapure Module MemPak AL (Analytical)	190-0088
UV lamp	921-0508
Pretreatment Module ProPak R10	290-0065
Final Filter, capsule 0.2 µm	190-0013*
Disinfection Tablets	290-0227

* 190-0082 Final Filter to reduce Edotoxin, DNA + RNAse

mP WATER PURIFIER

Aquinity² P35/70

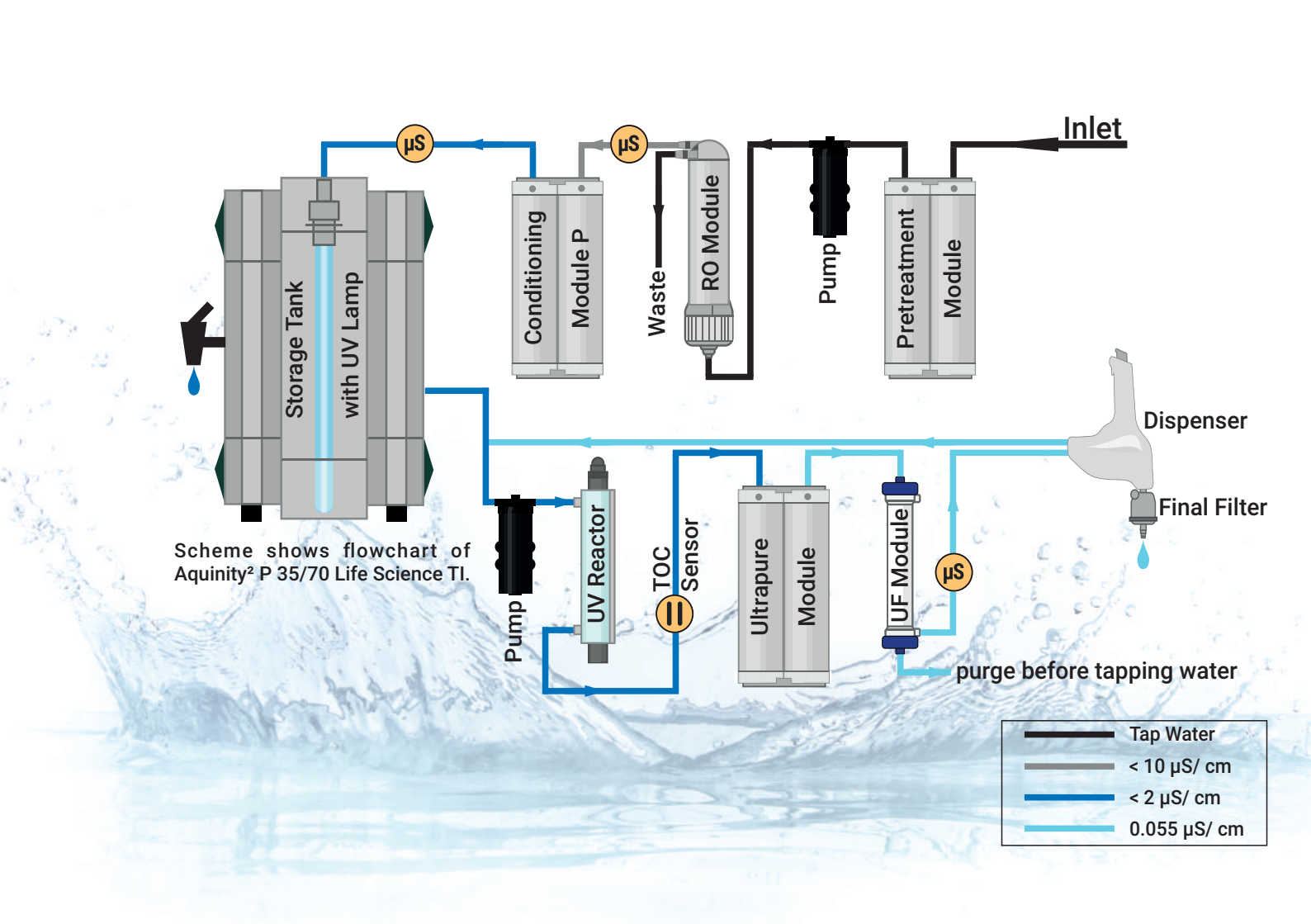
Produces Pure Water & Ultra Pure Water

mP WATER PURIFIER

WATER PURIFIER

The **Aquinity² P35/70** system is designed for the production of pure water (< 2 µS/cm) and ultra pure water (0.055 µS/cm) out of tap water.

The Aquinity² P35/70 system is equipped with a reverse osmosis (RO) and conditioning module to produce deionised water (DI water) into the external storage reservoir (35 L or 70 L) with a production rate of 10 L/h and an access to tap DI water directly. Out of the storage tank the ultra pure water is produced with mixed bed cartridges and then can be tapped with a flexible dispenser. During non-use automatic recirculation within the Aquinity² system ensures a permanent high quality of ultra pure water. All components of the Aquinity² are assembled in an especially designed housing. The system can be easily opened by removing the side panel to access the Ultrapure module and UV lamp.


Inlet
µS
µS
Storage Tank
with UV Lamp
Conditioning
Module P
Waste
RO Module
Pump
Pretreatment
Module
Dispenser
Final Filter
Scheme shows flowchart of
Aquinity² P 35/70 Life Science TI.
Pump
UV Reactor
TOC
Sensor
Ultrapure
Module
UF Module
µS
purge before tapping water
Tap Water
< 10 µS/ cm
< 2 µS/ cm
0.055 µS/ cm

Technical Specifications

mP WATER PURIFIER

pure water + ultra pure water	< 2 µS/cm; Type II + 0.055 µS/cm; Type I
resistivity	< 0.5 MΩ·cm; Type II + 18.2 MΩ·cm; Type I
total organic carbon (TOC)	< 10 ppb Reagent | < 5 ppb Life Science | < 3 ppb Analytical
dispensing flow rate	1.5 L/min** (2.0 L/min Life Science)
productivity rate	10 L/h, optionally 20 L/h
bacteria	< 1 cfu/mL*
particulate	> 0.2 µm less than 1 particulate/mL
pyrogen (endotoxins)	< 0.001 EU/mL
RNAse | DNAse	< 1 pg/mL** | < 5 pg/mL**
dimensions, weight, power	504 x 680 x 535 mm, 16-20 kg, 110-230 V

* with endfilter 0.2 µm ** with microbiological final filter

Feed Water Requirements

type of feed water	tap water
feed water conductivity	< 1400 µS/cm
inlet pressure	1.5 to 6 bar
free chlorine	< 0.1 mg/L
Silt Density Index (SDI)	< 3
pH	3 to 9
temperature	5 to 25 °C

Configurations

Aquinity² P35/70 is available in different configurations to fit the specific requirements of pure and ultra pure water quality for different applications.

Aquinity² (10 L/h)	UV reactor	UF module	TOC monitoring	Cat. No. (35 L reservoir)	Cat. No. (70 L reservoir)	Aquinity² 20 (20 L/h)
Reagent	-	-	-	114-0050	114-0060	-
Analytical	+	-	-	114-0051	114-0061	-
Life Science	+	+	-	114-0052	114-0062	-
Analytical TI	+	-	+	114-0056	114-0066	114-0074
Life Science TI	+	+	+	114-0057	114-0067	114-0075

Options

µS-control

The µS-control checks the conductivity of feed water to protect the cartridges against inappropriate feed water. If conductivity is too high the water flow will be rejected.

TOC monitoring (TI version)

The TOC monitoring during production and intermittent measurements during non-use periods allows to check the organic content in water continously between 1 and 999 ppb.

volumetric dispensing

Our dispenser allows the volumetric controlled dispensing of water with an increment of 0.1 L and a tap volume from 0.1 to 99 L. The system prevents overflow of containers and allows to dispense water without supervising.

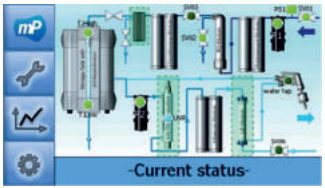
bench integrated (BI version)

To save valuable benchtop space the Aquinity² can be ordered as BI configuration. The system will be installed underneath the work bench and only the display and dispenser are mounted on the wall.

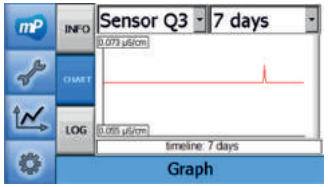
mP WATER PURIFIER

User Interface & Software

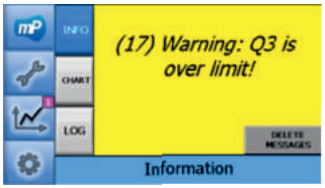
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



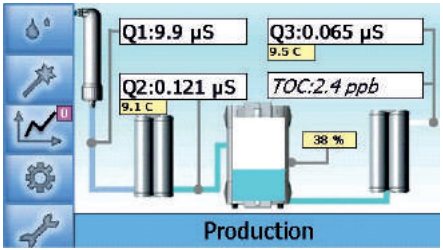
Helping tools to maintain system



Trackable values up to 1 year



Warning of customer in case of over limit and service case



Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.

WATER
PURIFIER

Consumables

Description	Cat. No.
Conditioning Module P	190-0086
Ultrapure Module MemPak LS (Life Science)	190-0087
Ultrapure Module MemPak AL (Analytical)	190-0088
UV lamp	921-0138
Submersible UV lamp for reservoir	921-0483
Pretreatment Module ProPak R10	290-0065
Ultrafiltration Module	190-0052
Final Filter, capsule 0.2 µm	190-0013*
Disinfection Tablets	290-0227

* 190-0082 Final Filter to reduce Endotoxin, DNA + RNAse

Aquinity² E35/70

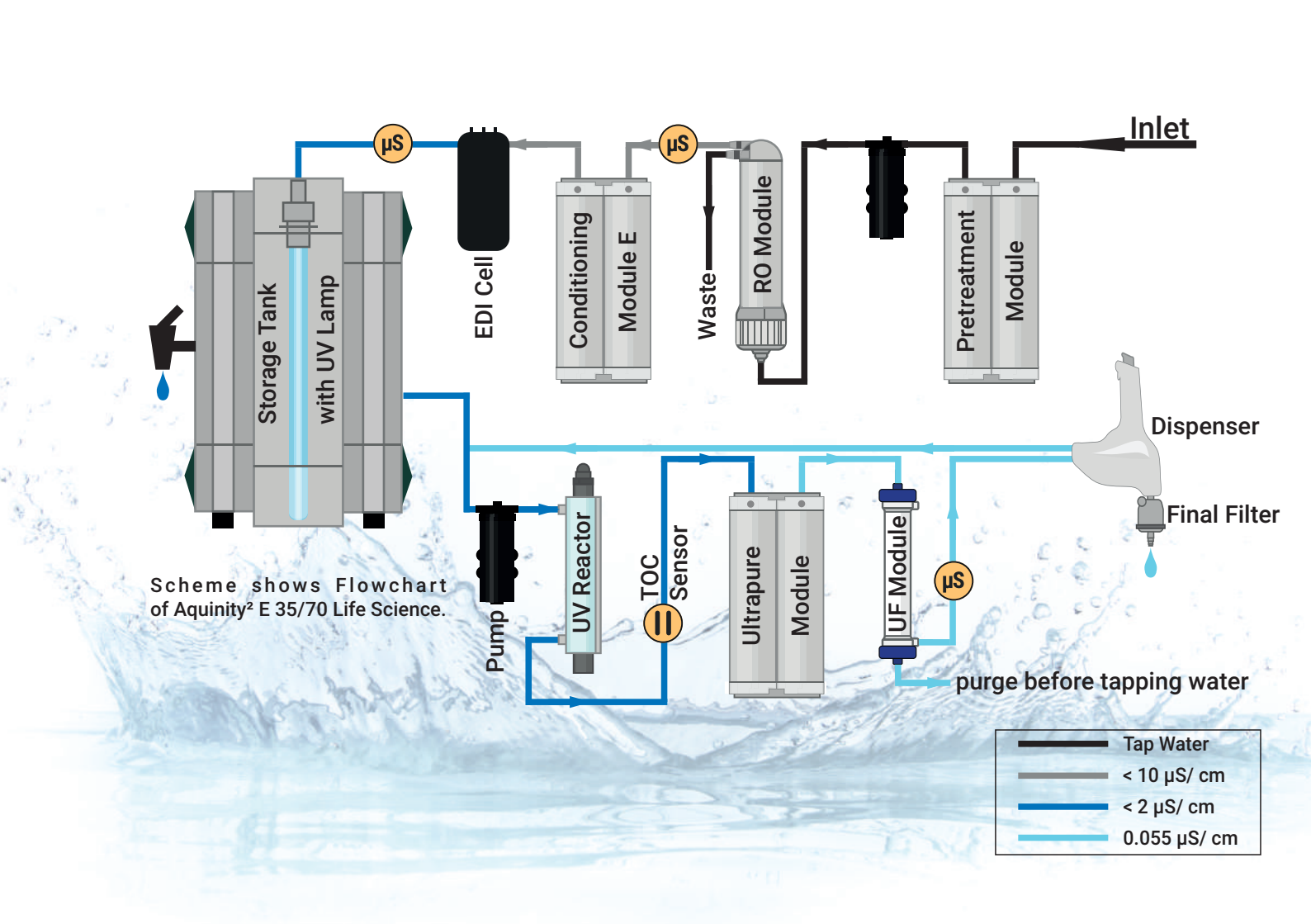
Produces Pure Water & Ultra Pure Water

mP WATER PURIFIER

WATER
PURIFIER

The **Aquinity² E35/70** system is designed for the production of pure water (< 0.2 µS/cm) and ultra pure water (0.055 µS/cm) out of tap water.

The Aquinity² E35/70 system is equipped with reverse osmosis and EDI cell to produce deionised water (DI water) into the external storage reservoir (35 L or 70 L) with a production rate of 10 L/h and an access to tap DI water directly. Out of the storage tank the ultra pure water is produced by passing further mixed bed cartridges and then can be tapped with a flexible dispenser. During non-use automatic recirculation within the Aquinity² system ensures a permanent high quality of ultra pure water. All components of the Aquinity² are assembled in an especially designed housing. The system can be easily opened by removing the side panel to access the Ultrapure module and UV lamp.



Scheme shows Flowchart of Aquinity² E 35/70 Life Science.

Technical Specifications

mP WATER PURIFIER

pure water + ultra pure water	< 0.2 µS/cm; Type II + 0.055 µS/cm; Type I
resistivity	< 5 MΩ·cm; Type II + 18.2 MΩ·cm; Type I
TOC	< 10 ppb Reagent | < 5 ppb Life Science | < 3 ppb Analytical
dispensing flow rate	1.5 L/min
productivity rate	10 L/h, optionally 20 L/h
bacteria	< 1 cfu/mL*
particulate	> 0.2 µm less than 1 particulate/mL
pyrogen (endotoxins)	< 0.001 EU/mL
RNAse | DNAse	< 1 pg/mL** | < 5 pg/mL**
Dimensions, Weight, Power	504 x 680 x 535 mm, 16-20 kg, 110 - 230 V

* with endfilter 0.2 µm ** with microbiological final filter

Feed Water Requirements

type of feed water	tap water
feed water conductivity	< 1400 µS/cm
inlet pressure	1.5 to 6 bar
free chlorine	< 0.1 mg/L
carbon dioxide	< 30 mg/L
silica	< 10 mg/L
Silt Density Index (SDI)	< 3
iron / manganese / sulfate	< 0.01 mg/L / < 0.01 mg/mL / < 2 mg/mL
pH	3 to 9
temperature	5 to 25 °C

Configurations

Aquinity² E35/70 is available in different configurations to fit the specific requirements of pure and ultra pure water quality for different applications.

Aquinity² (10 L/h)	UV reactor	UF module	TOC monitoring	Cat. No. (35 L reservoir)	Cat. No. (70 L reservoir)	Aquinity² 20 (20 L/h)
Reagent	-	-	-	114-0053	114-0063	-
Analytical	+	-	-	114-0054	114-0064	-
Life Science	+	+	-	114-0055	114-0065	-
Analytical TI	+	-	+	114-0058	114-0068	114-0076
Life Science TI	+	+	+	114-0059	114-0069	114-0078

Options

µS-control

The µS-control checks the conductivity of feed water to protect the cartridges against inappropriate feed water. If conductivity is too high the water flow will be rejected.

TOC monitoring (TI version)

The TOC monitoring during production and intermittent measurements during non-use periods allows to check the organic content in water continously between 1 and 999 ppb.

volumetric dispensing

Our dispenser allows the volumetric controlled dispensing of water with an increment of 0.1 L and a tap volume from 0.1 to 99 L. The system prevents overflow of containers and allows to dispense water without supervising.

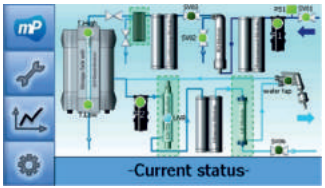
bench integrated (BI version)

To save valuable benchtop space the Astacus² can be ordered as BI configuration. The system will be installed underneath the work bench and only the display and dispenser are mounted on the wall.

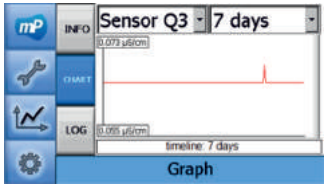
mP WATER PURIFIER

User Interface & Software

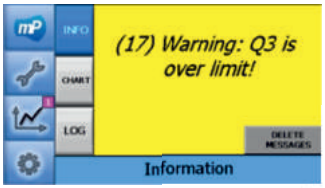
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



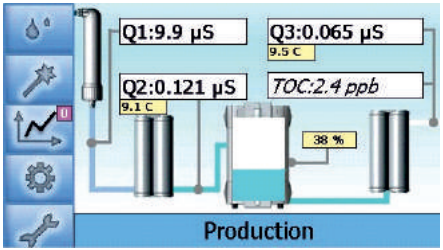
Helping tools to maintain system



Trackable values up to 1 year



Warning of customer in case of over limit and service case



Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.

WATER
PURIFIER

Consumables

Description	Cat. No.
Conditioning Module E	290-0218
Ultrapure Module „MemPak LS (Life Science)	190-0087
Ultrapure Module „MemPak AL (Analytical)	190-0088
UV lamp	921-0138
submersible UV lamp for reservoir	921-0483
Pretreatment Module ProPak R10	290-0065
Ultrafiltration Module	190-0052
Final Filter, capsule 0.2 µm	190-0013*
Disinfection Tablets	290-0227

* 190-0082 Final Filter to reduce Endotoxin, DNA + RNAse

Astacus²

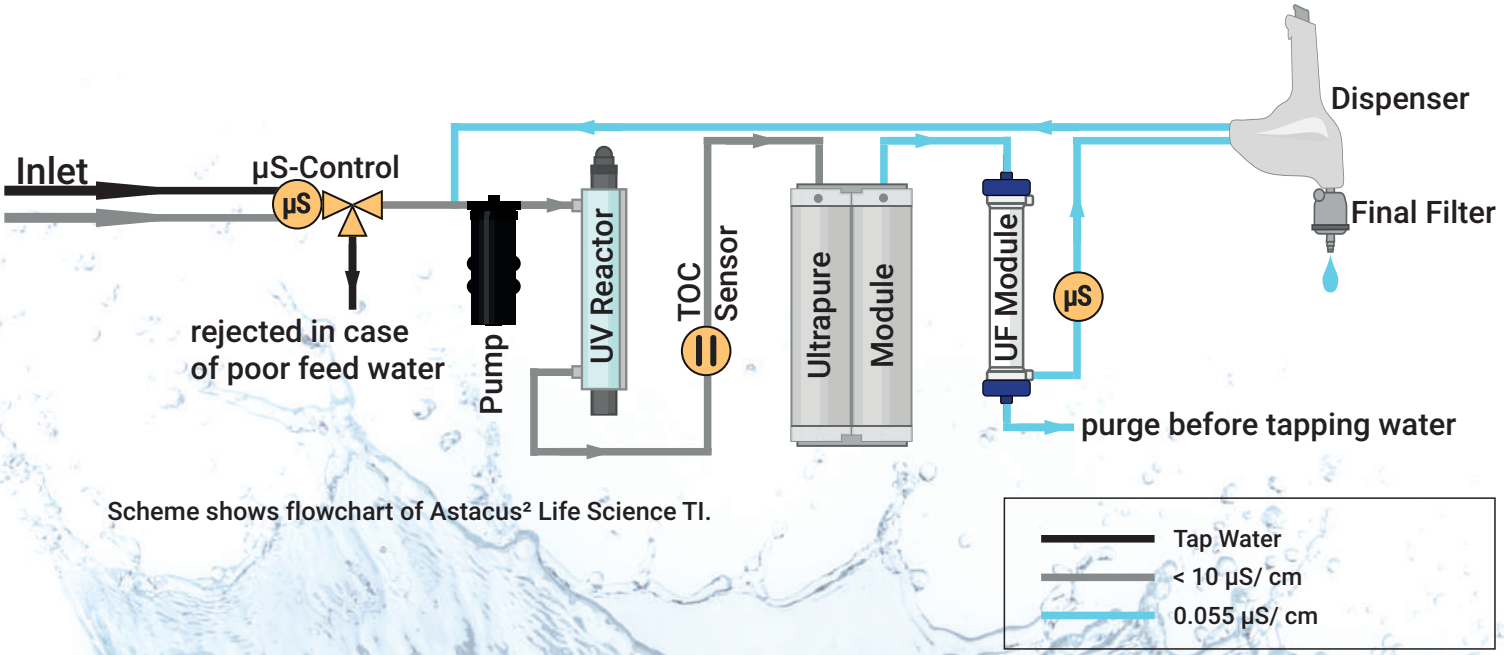
Produces Ultra Pure Water

WATER
PURIFIER

WATER PURIFIER

The **Astacus²** system is designed for the production of ultra pure water (0.055 µS/cm) out of permeate from a reverse osmosis or deionised water.

The ultra pure water is produced with a combination of optimized mixed bed cartridges and can be tapped with a flexible dispenser. If water is not used, automatic recirculation within the Astacus² system ensures a permanent high quality of ultra pure water. All components of the Astacus² are assembled in an especially designed housing. The system can be easily opened by removing the side panel to access the Ultrapure module, UV lamp and ultra filtration module. The µS - control checks the conductivity of feed water to protect the cartridges against inappropriate feed water (black line). If conductivity is too high the water flow will be rejected.



Scheme shows flowchart of Astacus² Life Science TI.

Technical Specifications

mP WATER PURIFIER

ultra pure water quality	0.055 µS/cm; Type I
resistivity	18.2 MΩ·cm
total organic carbon (TOC)	< 10 ppb Reagent | < 5 ppb Life Science | < 3 ppb Analytical
productivity rate	2 L/min, 1.5 L/min*
bacteria	< 1 cfu/mL*
particulate	> 0.2 µm less than 1 particulate/mL
pyrogen (endotoxins)	< 0.001 EU/mL*
RNAse	< 1 pg/mL*
DNAse	< 5 pg/mL*
dimensions, weight, power	297 x 340 x 535 mm, 16 - 20 kg, 110 - 230 V

* with Life Science model

Feed Water Requirements

type of feed water	reverse osmosis (RO) water or deionized (DI) water
feed water conductivity	< 10 µS/cm
inlet pressure	0 to 1.5 bar
total organic content (TOC)	< 50 ppb
temperature	5 to 25 °C

Configurations

Astacus² is available in different configurations (Reagent, Analytical & Life Science) to fit the specific requirements of ultra pure water quality for different applications. An optional TOC integrated sensor allows the user to monitor the TOC content permanently online.

Model	UV reactor	UF module	TOC monitoring	Cat. No.
Reagent	-	-	-	110-0089
Analytical	+	-	-	110-0090
Life Science	+	+	-	110-0091
Analytical TI	+	-	+	110-0092
Life Science TI	+	+	+	110-0093

Options

µS-control

The µS-control checks the conductivity of feed water to protect the cartridges against inappropriate feed water. If conductivity is too high the water flow will be rejected.

TOC monitoring (TI version)

The TOC monitoring during production and intermittent measurements during non-use periods allows to check the organic content in water continously between 1 and 999 ppb.

volumetric dispensing

Our dispenser allows the volumetric controlled dispensing of water with an increment of 0.1 L and a tap volume from 0.1 to 99 L. The system prevents overflow of containers and allows to dispense water without supervising.

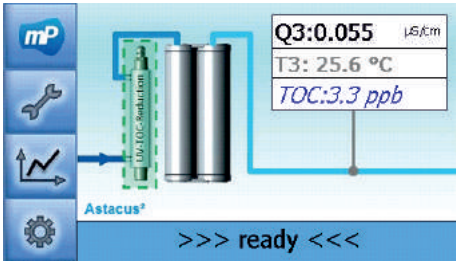
bench integrated (BI version)

To save valuable benchtop space the Astacus² can be ordered as BI configuration. The system will be installed underneath the work bench and only the display and dispenser are mounted on the wall.

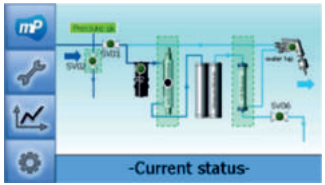
mP WATER PURIFIER

User Interface & Software

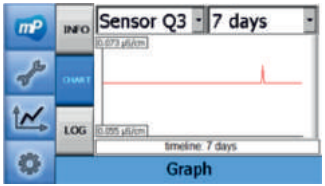
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



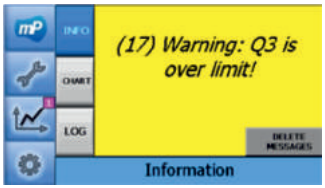
Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.



Helping tools to maintain system



Trackable values up to 1 year



Warning of customer in case of over limit and service case

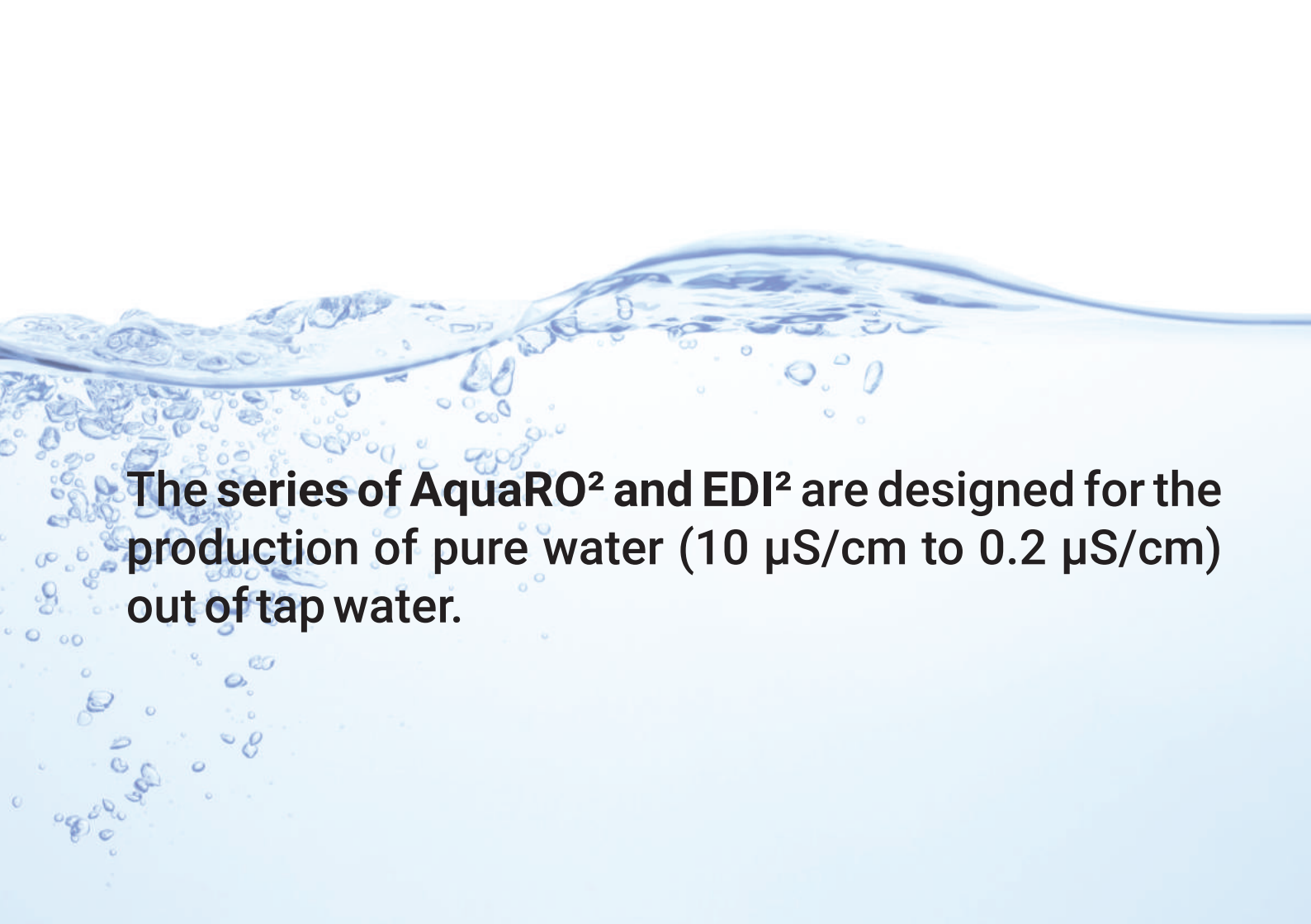
Description	Cat. No.
Ultrapure Module MemPak LS (Life Science)	190-0087
Ultrapure Module MemPak AL (Analytical)	190-0088
UV lamp	921-0138
Ultrafiltration Module	190-0052
Final Filter, capsule 0.2 µm	190-0013
Disinfection Tablets	290-0227

WATER
PURIFIER

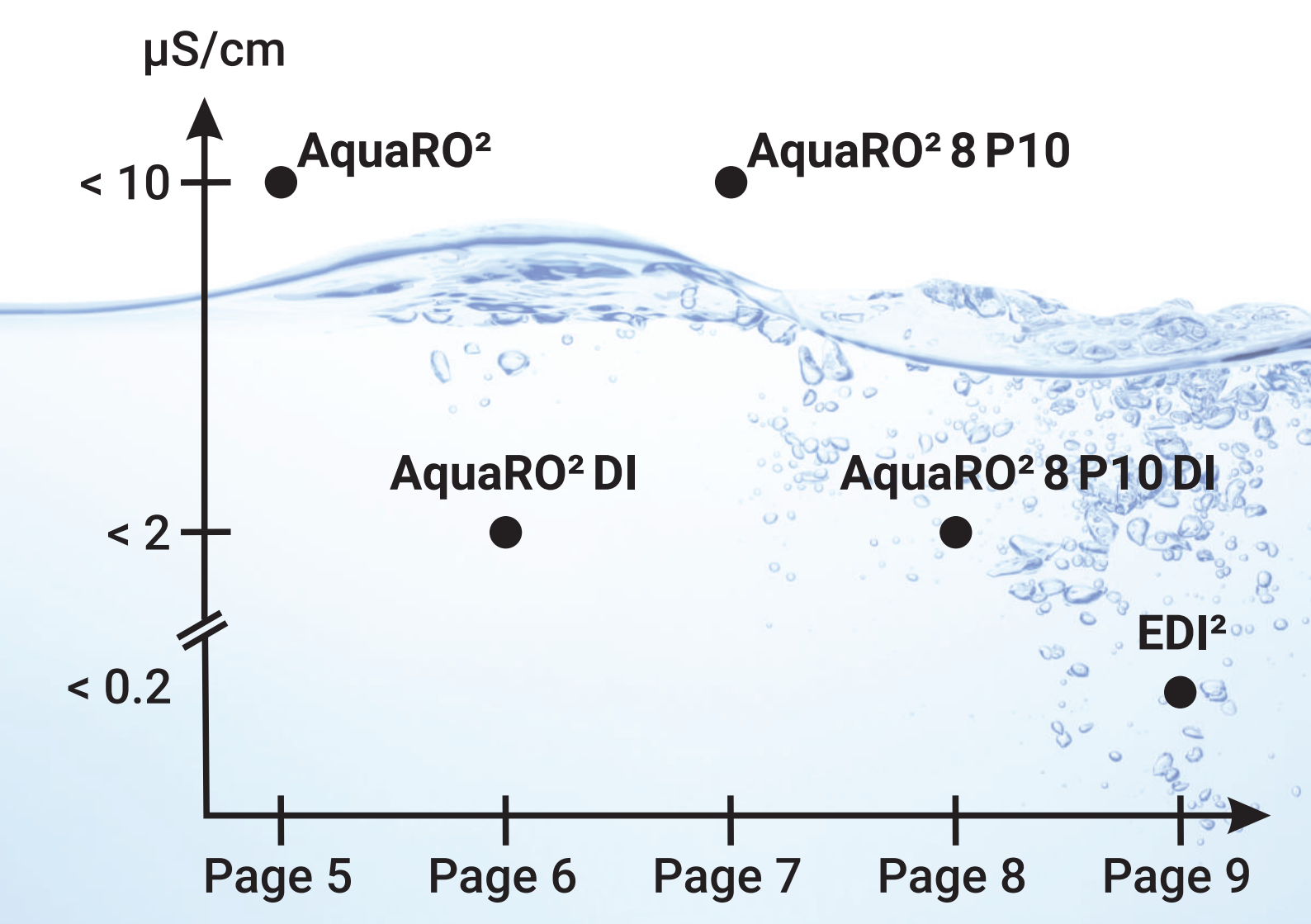
Series of AquaRO² & EDI²

Produces Pure Water in 3 different levels of water quality

mP WATER PURIFIER



The series of AquaRO² and EDI² are designed for the production of pure water (10 µS/cm to 0.2 µS/cm) out of tap water.

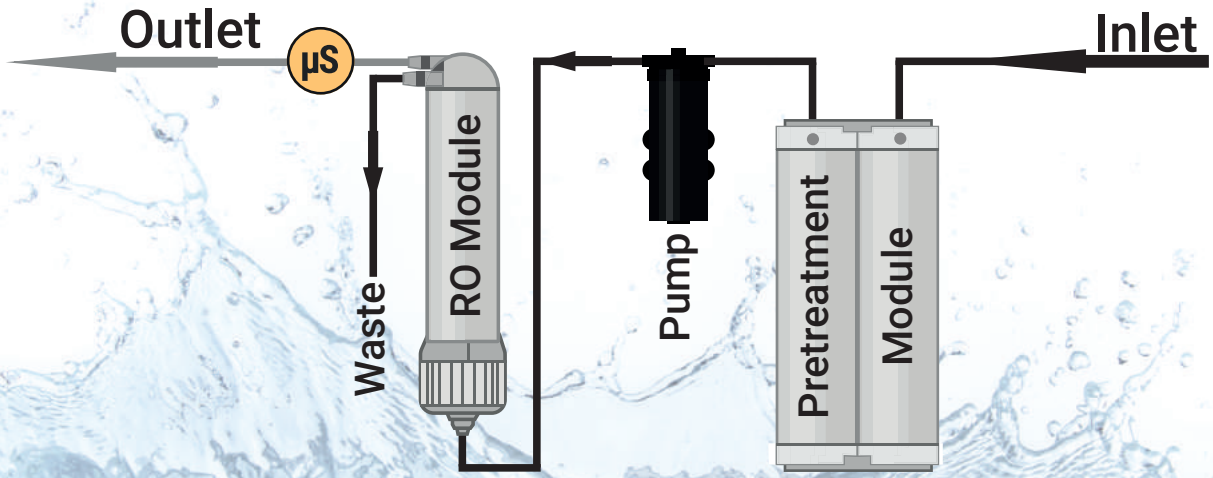

µS/cm
< 10
< 2
< 0.2
AquaRO²
AquaRO² 8 P10
AquaRO² DI
AquaRO² 8 P10 DI
EDI²
Page 5
Page 6
Page 7
Page 8
Page 9

The series of AquaRO², AquaRO²DI and EDI² are based on a reverse osmosis (RO) unit to produce deionised water. The EDI² series further processes the osmosis water by using an EDI cell to get type II water.

The advantages of both series is the flexibility in terms of configuration. A production rate of 8 to 40 L/h in three different degrees of pure water (10 µS/cm to 0.2 µS/cm) is available. Optionally the systems can be equipped with a dispenser and integrated UV reactor. The customer can optinally choose a 35 L or 70 L tank.

All components of the AquaRO² and EDI² series are assembled in an especially designed housing. The systems can be easily opened by removing the side panel to access the spare parts.

Flowchart of AquaRO²

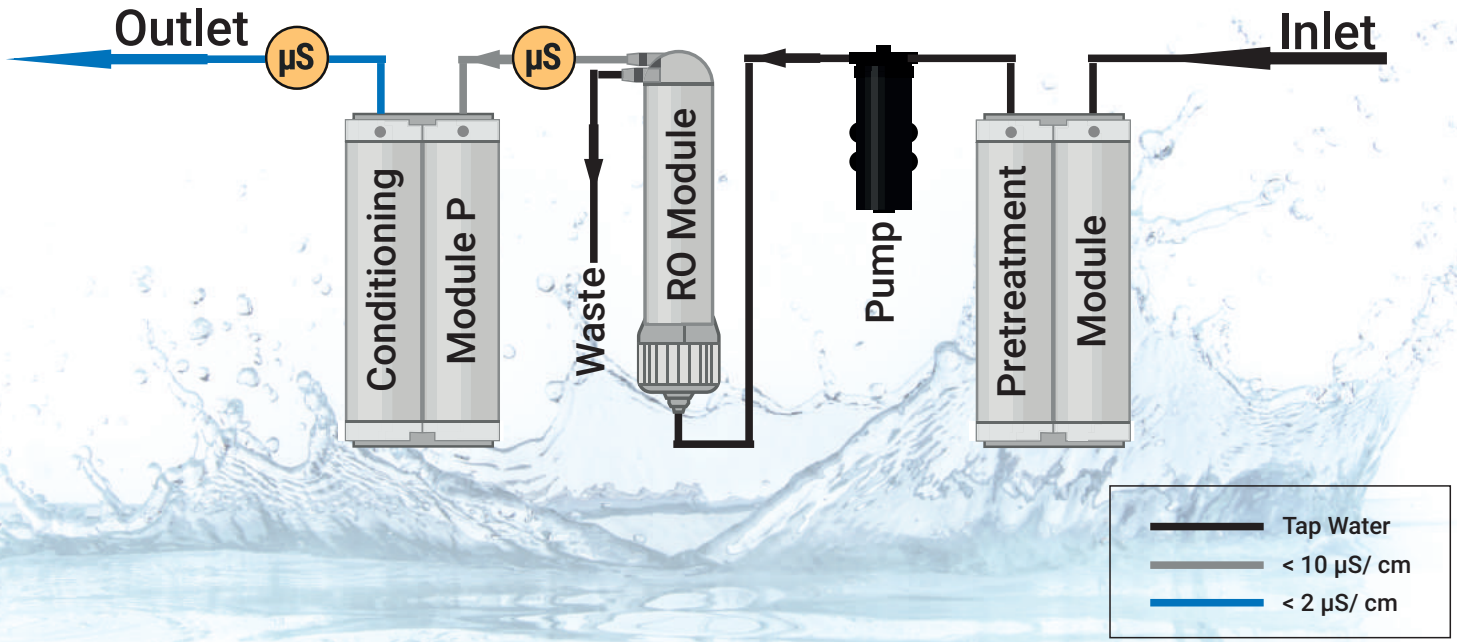


Scheme shows Flowchart of setup AquaRO²,
which forms simultaneous the basis for AquaRO² & EDI² series.

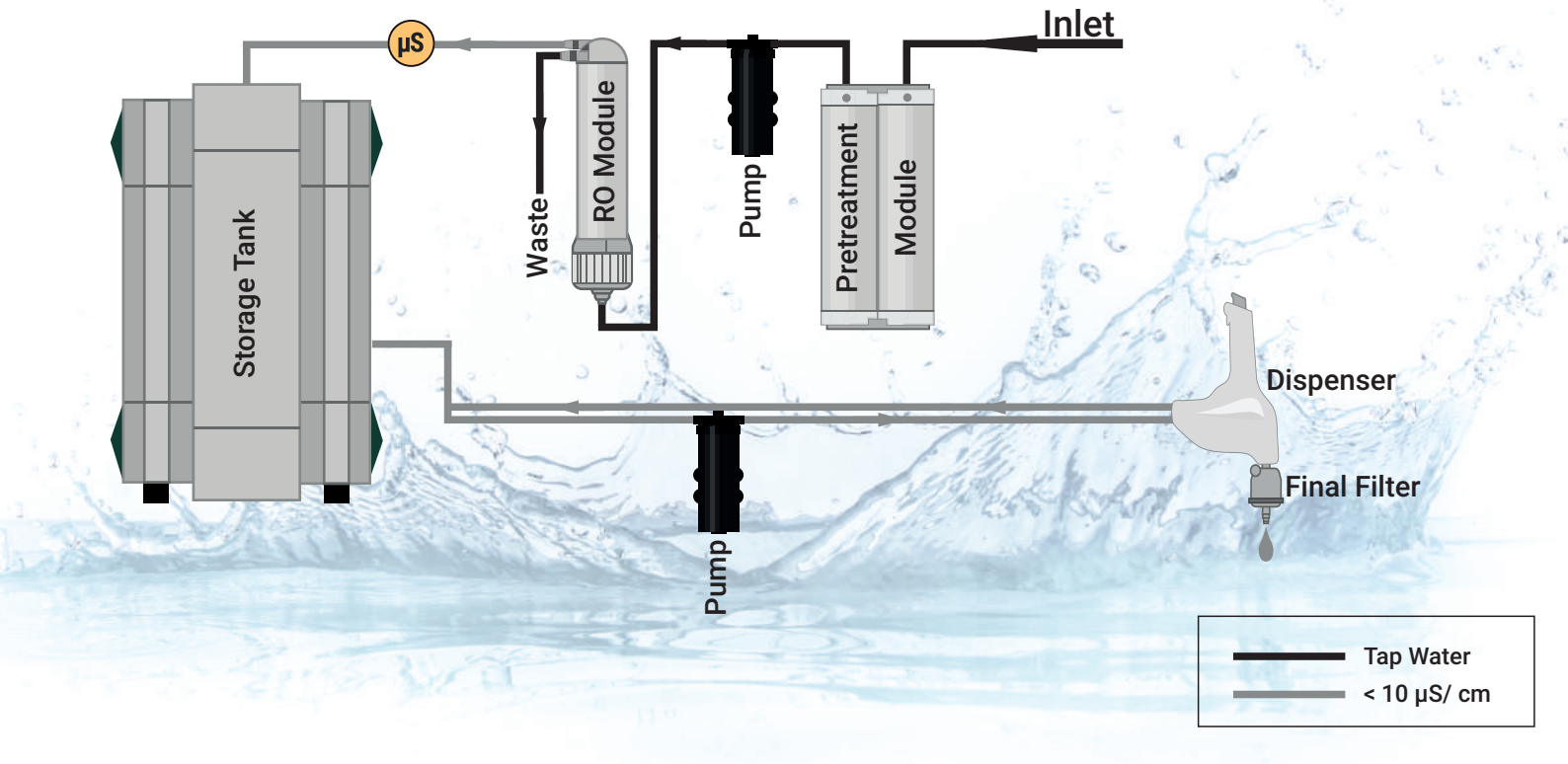
Tap Water
< 10 µS/ cm

mP WATER PURIFIER

Flowchart of AquaRO² DI



Flowchart of AquaRO² 8 P10



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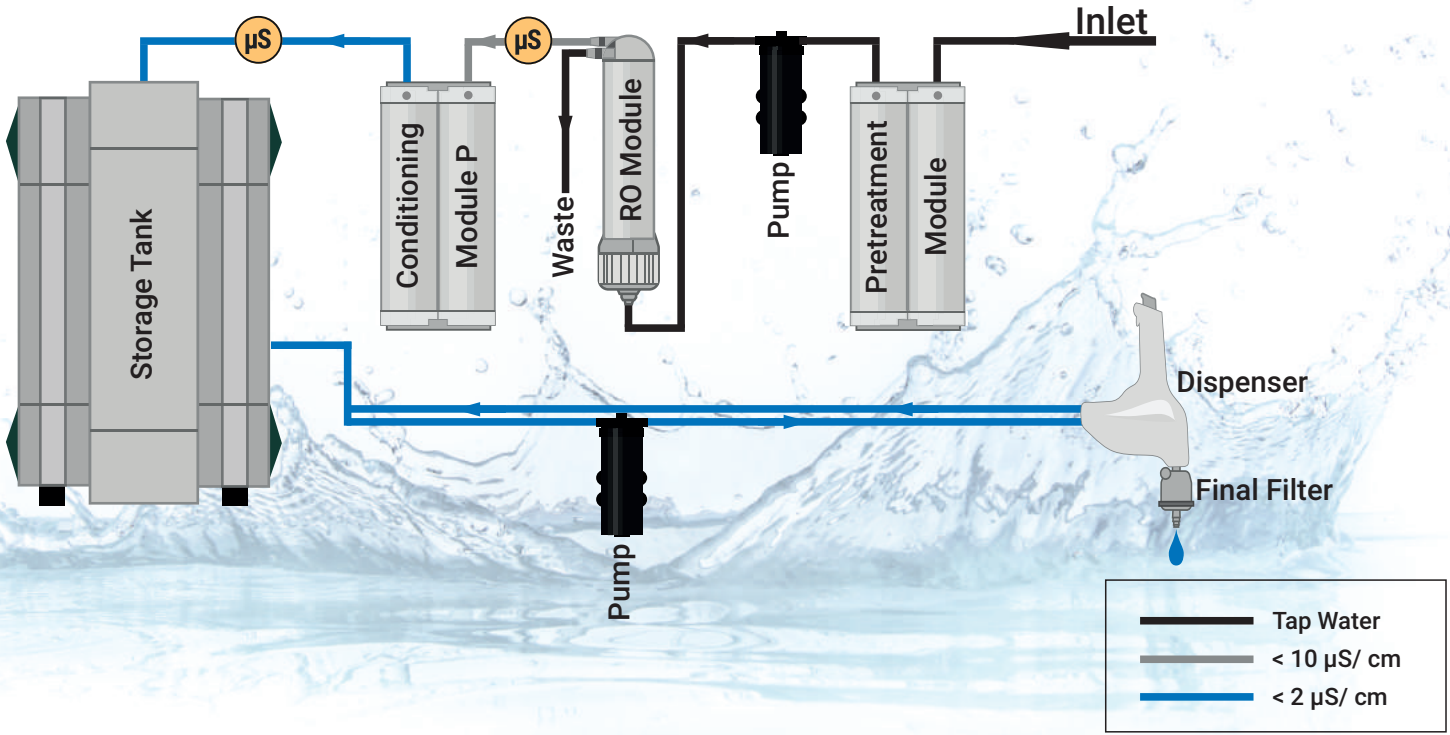
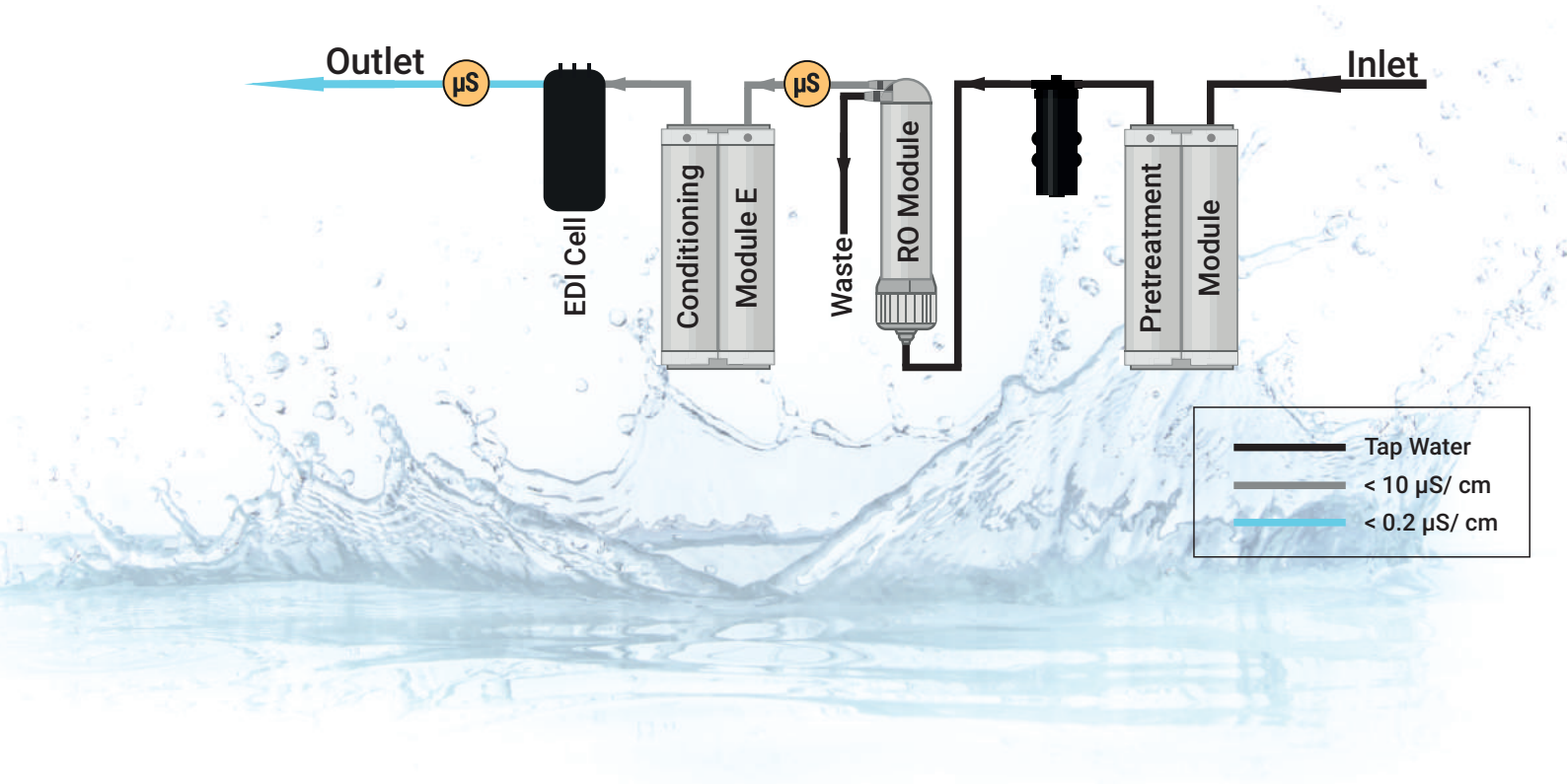
Flowchart of AquaRO² 8 P10 DI



Flowchart of EDI²



Technical Specifications

mP WATER PURIFIER

Model	AquaRO²	AquaRO² DI	AquaRO² 8 P10 | P10 DI	EDI²
pure water quality	< 10 µS/cm	< 2 µS/cm; Type II	< 10 µS/cm | < 2 µS/cm	< 0.2 µS/cm; Type II
resistivity	> 0.1 MΩ·cm	0.5 MΩ·cm	> 0.1 MΩ·cm | > 0.5 MΩ·cm	5 MΩ·cm
total organic carbon (TOC)	< 50 ppb	< 40 ppb	< 40 ppb	< 20 ppb
productivity rate	8 L/h to 40 L/h	8 L/h to 20 L/h	8 L/h	10 l/h to 40 L/h
bacteria	< 50 cfu/mL	< 50 cfu/mL	< 50 cfu/mL	< 10 cfu/mL

dimensions, weight, power (except AquaRO² 40 and EDI² 40):
AquaRO² : 504 x 340 x 535 mm, 16 to 20 kg, 110 V - 230 V
EDI² : 504 x 340 x 535 mm, > 40 kg, 110 V - 230 V

Feed Water Requirements

Model	AquaRO²	EDI²
type of feed water	potable water / tap water	potable water / tap water
feed water conductivity	< 1400 µS/cm	< 1400 µS/cm
inlet pressure	1.5 to 6 bar	< 5 bar
free chlorine	< 0.1 mg/L	< 0.02
Silt Density Index (SDI)	< 3	< 3
pH	3 to 9	3 to 9
temperature	5 to 25 °C	5 to 25 °C
iron / manganese	n. a. / n. a.	< 0.01 mg/L / < 0.01 mg/L
sulfate	n. a.	< 2 mg/mL

Configurations

The series of AquaRO² and EDI² are available in different configurations with different levels of production rate of pure water. This allows to fit the specific requirements of ultra pure water quality for different applications.

model	Cat. No.
AquaRO² 10	200-0014
AquaRO² 20	200-0018
AquaRO² 40	200-0019

model	Cat. No.
AquaRO² 10 DI	200-0023
AquaRO² 20 DI	200-0024

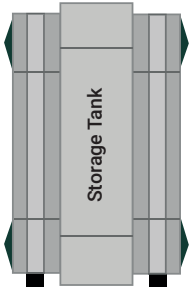
model	Cat. No.
AquaRO² 8 P 10	200-0016
AquaRO² 8 P10 DI	200-0017

model	Cat. No.
EDI² 10	250-0064
EDI² 20	250-0065
EDI² 40	250-0066

Options

Softener Unit

Compact system in cabinet including control box for the pretreatment.

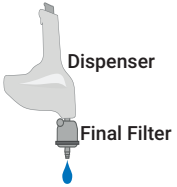


additional tank

The series of AquaRO² and EDI² can be equipped with a tank of 35 L or 70 L or individual size and if requested also with an integrated UV lamp.

upgrade with dispenser & UV reactor

Dispenser for controlled taping of water. For AquaRO² 40 and EDI² 40 the system can be additional equipped with an UV reactor to reduce organic contamination.



upgrade volumetric dispensing

Our dispenser allows the volumetric controlled dispensing of water with an increment of 0.1 L and a tap volume from 0.1 to 99 L. The system prevents overflow of containers and allows to dispense water without supervising.

TOC monitoring (only for EDI²)

The TOC monitoring during production and intermittent measurements during non-use periods allows to check the organics in water continously. The TOC value is measured with a detection limit of 1 ppb and can be shown in the display to monitor organic impurities.

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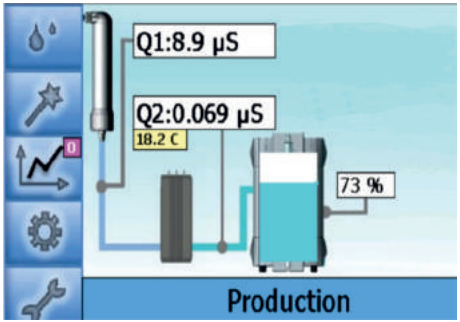
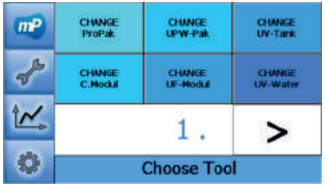
User Interface & Software

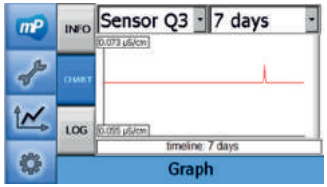
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



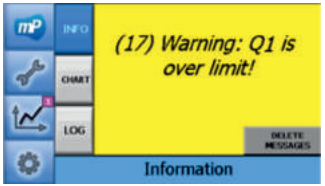
Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.



Helping tools to maintain system



Trackable values up to 1 year



Warning of customer in case of over limit and service case

Consumables

Description	Cat. No.
Pretreatment Module ProPak R10	290-0065
Conditioning Module for AquaRO² DI	190-0086
Conditioning Module for EDI²	290-0218
Reverse Osmosis (RO) Module	290-0226

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Made in Germany, more than 25 years...

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