

Astacus²

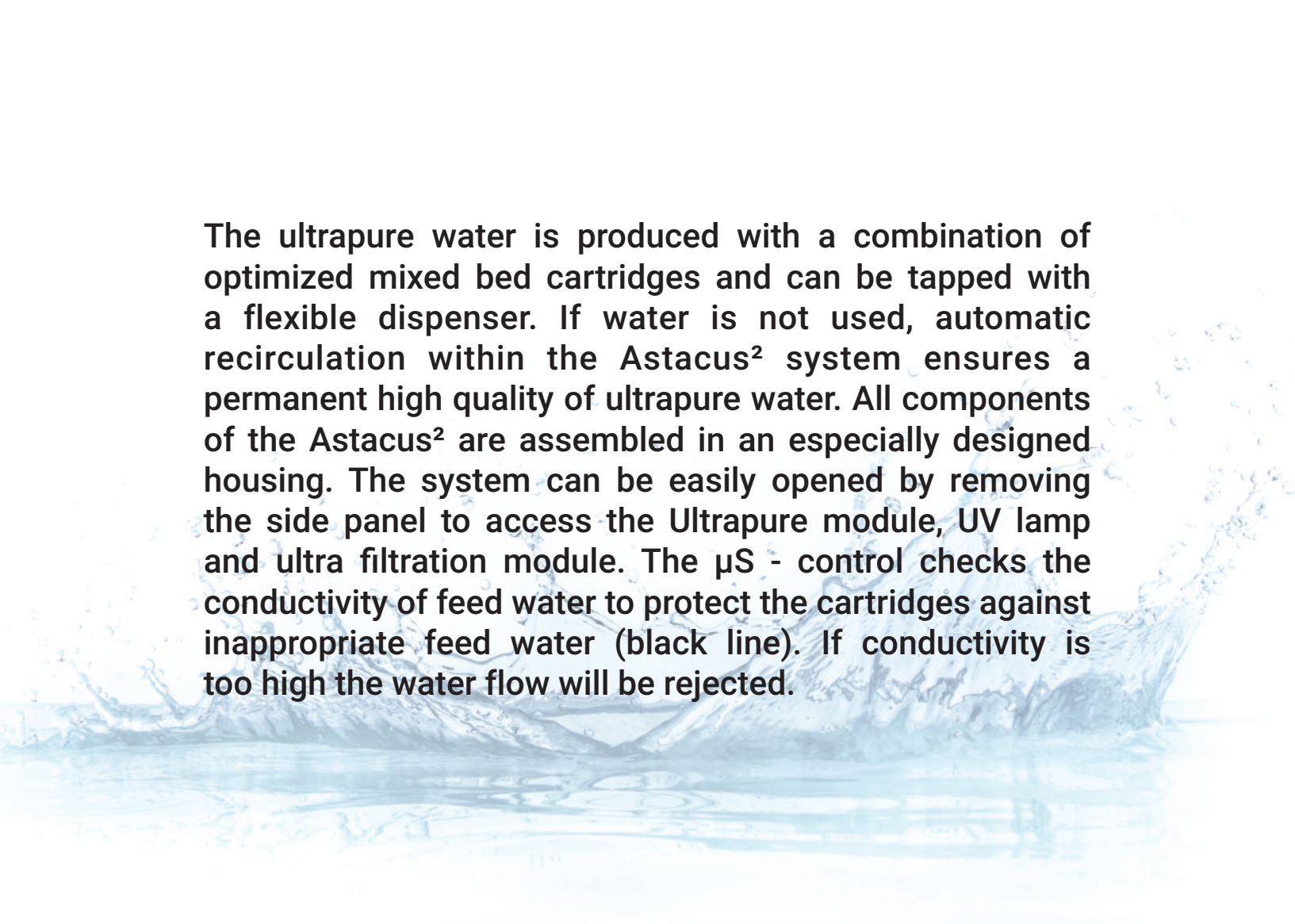
Produces Ultrapure Water



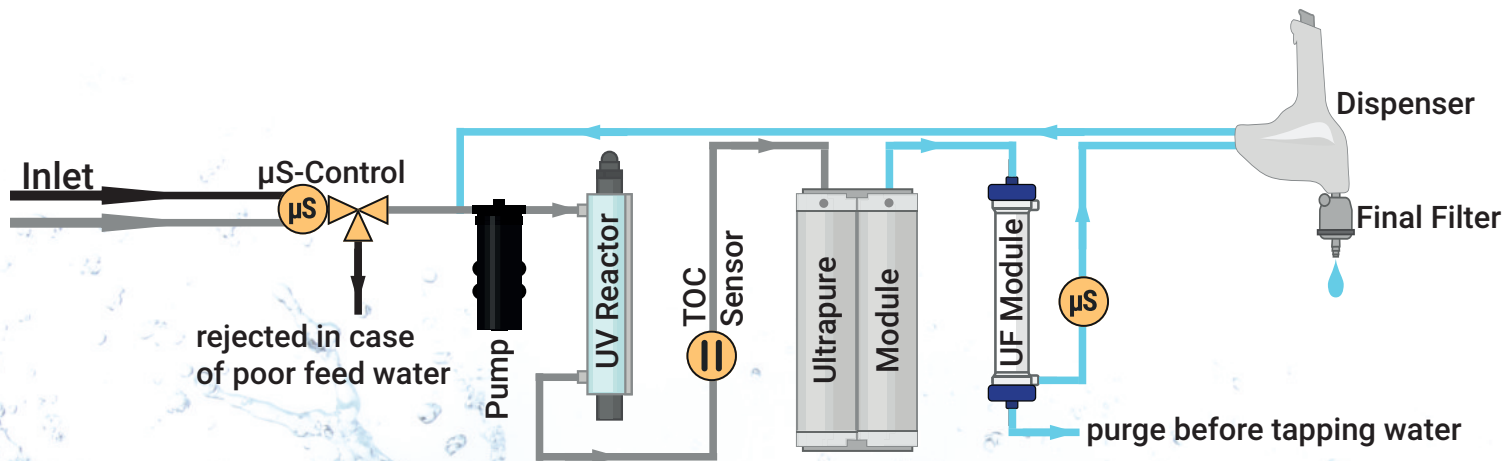




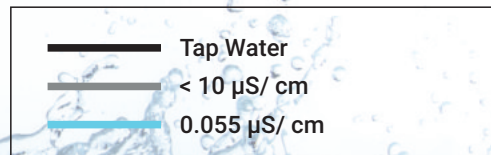
The Astacus² system is designed for the production of ultrapure water (0.055 $\mu\text{S}/\text{cm}$) out of permeate from a reverse osmosis or deionised water.

A dynamic splash of water, likely from a faucet, creating a series of droplets and ripples against a light blue background. The water is captured in mid-air, with some droplets appearing as bright white highlights.

The ultrapure 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 ultrapure 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



ultrapure water quality	0.055 $\mu\text{S}/\text{cm}$; Type I
resistivity	18.2 $\text{M}\Omega\cdot\text{cm}$
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 $\mu\text{S}/\text{cm}$
inlet pressure	0 to 1.5 bar
total organic content (TOC)	< 50 ppb
temperature	5 to 25 $^{\circ}\text{C}$

Configurations

Astacus² is available in different configurations (Reagent, Analytical & Life Science) to fit the specific requirements of ultrapure 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 continuously between 1 and 999 ppb.



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.

volumetric dispensing

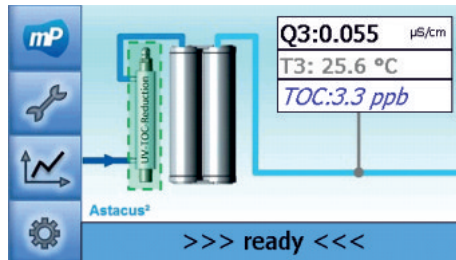
Our dispenser allows the volumetric controlled dispensing of water with an increment of 0.1 L and a tap volume from 0.1 to 99 L. The system prevents overflow of containers and allows to dispense water without supervising.



WATER
PURIFIER

User Interface & Software

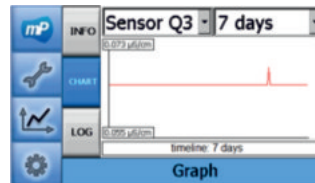
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



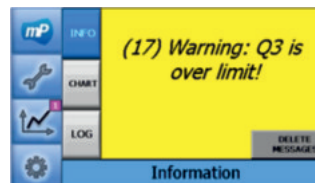
Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.



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	921-0138
Ultrafiltration Module	190-0052
Final Filter, capsule 0.2 µm	190-0013
Disinfection Tablets	290-0227



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