

# Astacus<sup>2</sup>

*Produces Ultra pure Water*



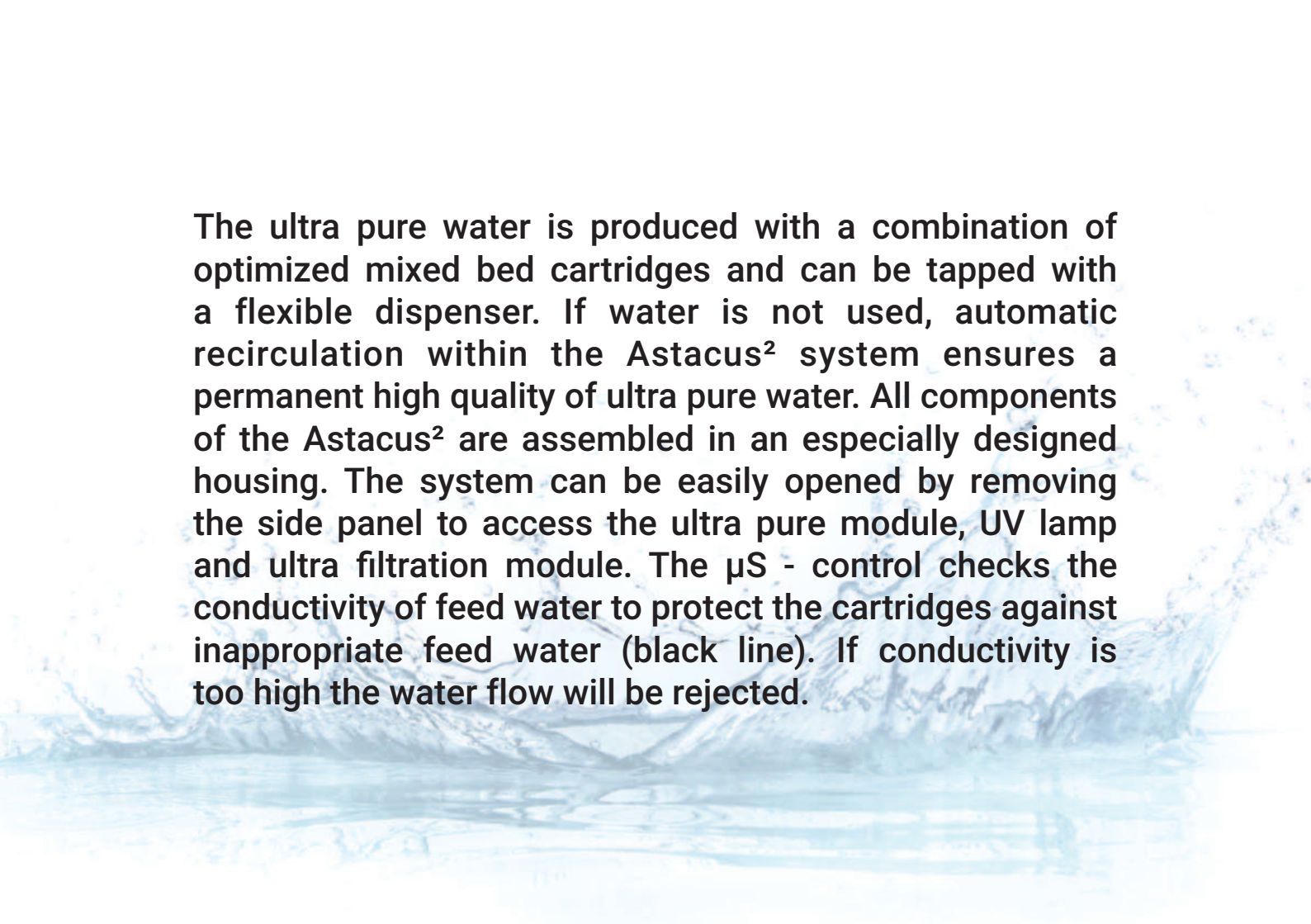
**WATER  
PURIFIER**



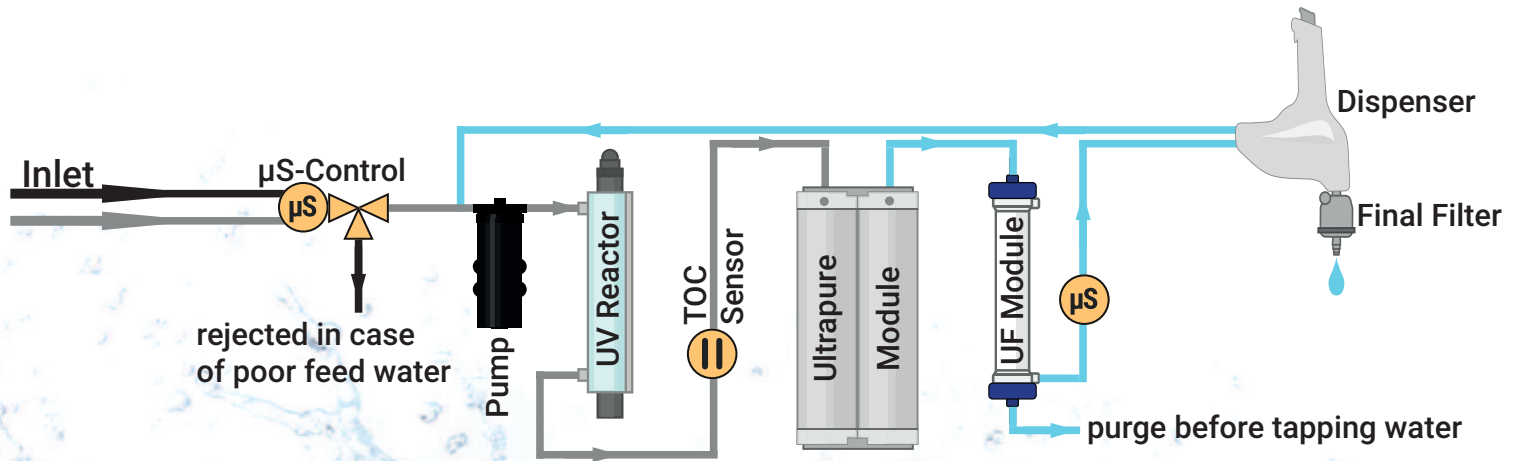


**WATER**  
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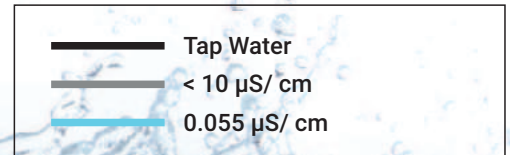
The **Astacus<sup>2</sup>** system is designed for the production of ultra pure water ( $0.055 \mu\text{S}/\text{cm}$ ) out of permeate from a reverse osmosis or deionised water.

A background image showing a dynamic splash of water, with droplets and ripples, in shades of light blue and white, creating a sense of freshness and purity.

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 Astacus<sup>2</sup> system ensures a permanent high quality of ultra pure water. All components of the Astacus<sup>2</sup> are assembled in an especially designed housing. The system can be easily opened by removing the side panel to access the ultra pure module, UV lamp and ultra filtration module. The  $\mu\text{S}$  - 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 Astacus<sup>2</sup> Life Science TI.



## Technical Specifications



ultra pure 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 $\mu\text{m}$ 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

<b>type of feed water</b>	<b>reverse osmosis (RO) water or deionized (DI) water</b>
<b>feed water conductivity</b>	<b>&lt; 10 <math>\mu\text{S}/\text{cm}</math></b>
<b>inlet pressure</b>	<b>0 to 1.5 bar</b>
<b>total organic content (TOC)</b>	<b>&lt; 50 ppb</b>
<b>temperature</b>	<b>5 to 25 °C</b>

## Configurations

Astacus<sup>2</sup> 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 continuously 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.

### **wall mounted configuration**

To save valuable benchtop space the system can be ordered as wall mounted configuration. The whole system can be mounted on the wall with inclined display.

### **bench integrated (BI version)**

To save valuable benchtop space the Astacus<sup>2</sup> 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.



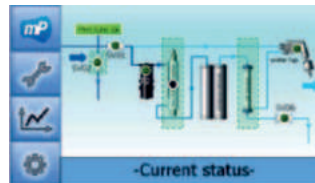
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# User Interface & Software

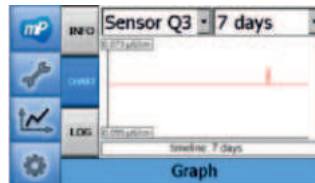
Currently recorded data and warning messages will be displayed on the touch screen monitor. The software furthermore supports the user with a self-diagnostic module which reduced service time and costs.



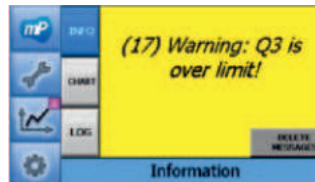
Main Screen: The Software allows the user to see all information to use maintenance tool and track back historical values up to 1 year.



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.
Ultrapure Module MemPak LS (Life Science)	190-0087
Ultrapure Module MemPak AL (Analytical)	190-0088
UV lamp (185 nm/ 254 nm)	921-0138
Ultrafiltration Module	190-0096
Final Filter, capsule 0.2 µm	190-0013
Disinfection Tablets	290-0227



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*Made in Germany, more than 25 years...*



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