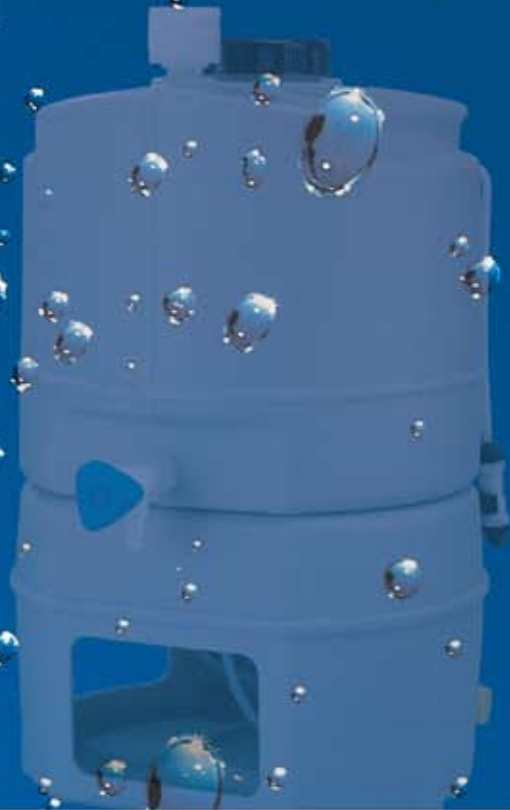


Everyday ultrapure water. Even for demanding lab applications.

Compact high-tech! TKA Smart2Pure 12.



**Two in one.
ASTM Types I/II water.
Instantly and fresh.**

TKA WATER
PURIFICATION
SYSTEMS

■ **TKA Smart2Pure 12.**
The password for converting normal tap water to ultrapure water.



■ **ASTM Type I**
Ultrapure water.

For example, for:

- Molecular biology, microbiology, PCR, inorganic and organic trace analysis
- HPLC, ICP, TOC-analysis

■ **ASTM Type II**
Ultrapure water.

For example, for

- Rinsing laboratory glassware
- Preparing and diluting buffers, reagents, tissue culture media and dyes
- Sample preparation for analytical methods such as flame AAS

■ **More ideas = more benefits!**

How TKA Smart2Pure 12 differs from other compact class systems:

Powerful performance!

- Permeate flow 12 l/h
- Flow rate 1.0 l/min

Lasting economy!

- Water purification progresses through separate modules, each with quick connects for simple individual replacement

• **Module 1**

Pretreatment module with integrated reverse osmosis membrane

• **Module 2**

Cartridge containing high-quality ultrapure resins with very long service intervals

Easiest to operate!

- Just press a button to get ultrapure water – no adjustments necessary, the microprocessor control is a self-controlling component
- Ultrapure water quality is ensured by the limiting value input
- RS 232 Interface
- The display can be tilted to your optimal reading position

Positioning anywhere in the laboratory

- Laboratory bench-top operated or wall-mounted

Usable worldwide!

- Whether 220/230 V, 110/120 V or other voltages – and even with fluctuating voltages – the automatic voltage regulator continually supplies the system with a constant 24 volts

TKA Smart2Pure 12.
Ultrapure water at the press of a button! Position it, connect it, use it!



Economical!

Two long-life cartridges. Each requires replacement only when really necessary!

One, two, three...

...rapid cartridge change due to quick-connects.



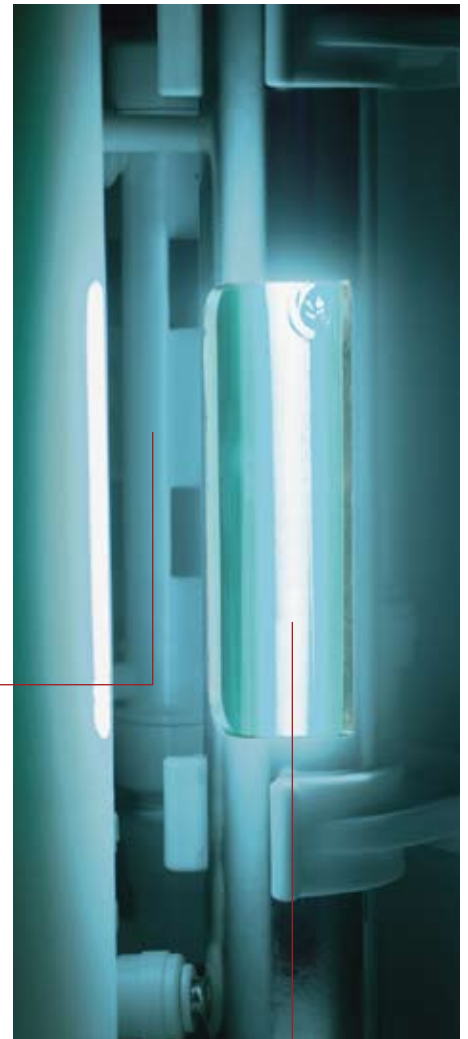
Space saving!

Simply stand it on the lab bench, or mount it directly to the wall.



High performance filter!

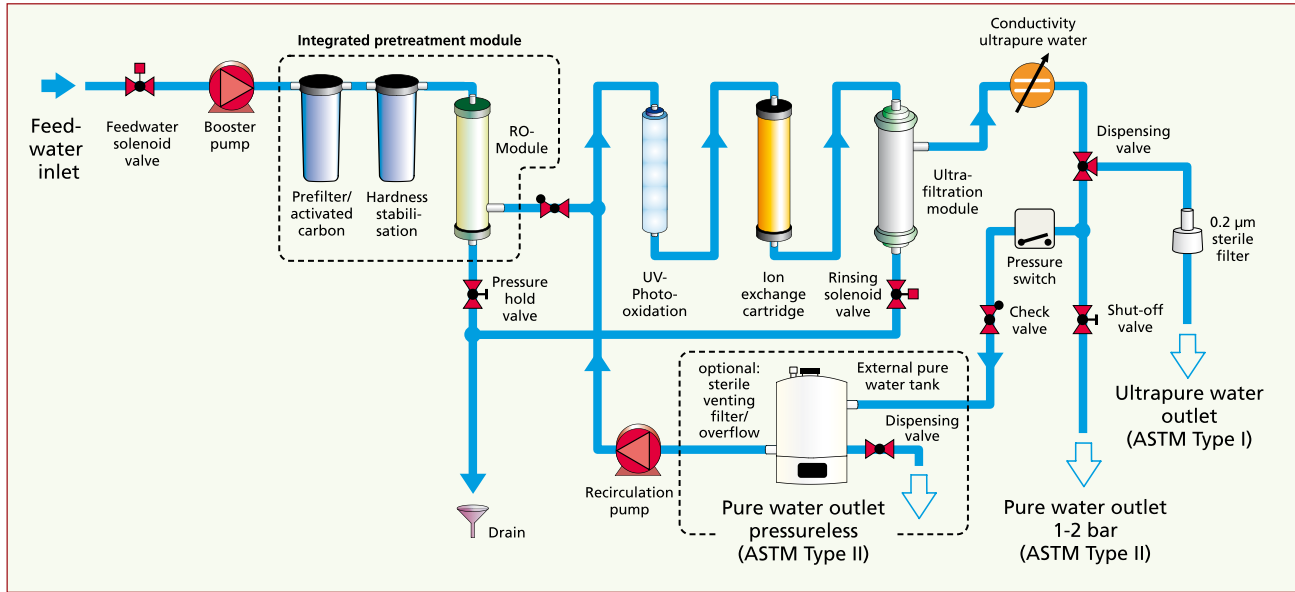
Option of an integrated ultrafilter, generously dimensioned for pyrogene-free and nuclease-free water. The automatic self-cleaning gives years of service.



UV Oxidation 185/254 nm!

Optionally with additional UV oxidation for reducing the content of microorganisms and their metabolites.

Flow chart TKA Smart2Pure 12 UV/UF with external tank.



Absolutely sterile!

Ultrapure water is dispensed through a standardly built-in sterile filter.



Convenient

Swivel-mounted display – always easy to read!

The result:

Ultrapure water of the quality required:

ASTM Type I

Production of ultrapure water for low volume requirements. The ultrapure water is delivered via a sterile filter.

Conductivity in $\mu\text{S}/\text{cm}$:	0.055
Resistance in $\text{M} \times \text{cm}$ at 25°C :	18.2
Bacterial content in CFU/ml:	< 1
Particle content:	< 1
Flow rate per minute:	1.0 litre

ASTM Type II

12 litres per hour. Ready-to-take at any time from the 30 or 60 litre tank.

Conductivity in $\mu\text{S}/\text{cm}$:	0.067 – 0.1
Resistance in $\text{M} \times \text{cm}$ at 25°C :	15 – 10
Percentage of germs, bacteria, particles retained by the membrane:	99%
Flow rate per minute:	1.0 litre

TKA Standard storage tanks. For 30 or 60 liters .



Store high purity water safely and conveniently!

An advanced and proven tank construction with many beneficial features:

Large opening

- For easy and effective cleaning by hand. Closed with a screw cap.

Sterile venting filter/tank overflow

- Contamination by microorganisms in the environment is prevented by two safety filters
- Option: A CO₂ absorber that prevents TOC value increases from drawn-in CO₂

Polyethylene tank

- Ultrapure water resistant, opaque to light and food-safe

High purity water dispensing tap

- With 24 cm free space for practical water drawing

Recirculation pump

- The recirculation pump protects the high purity water from bacterial growth during standstills and maintains the low conductivity value

Wall mount

- For simple and space-saving wall mounting

Conical bottom outlet

- Allows complete draining and efficient cleaning and disinfection

Standard storage tanks

	30 liters	60 liters
Volume:	30 liters	60 liters
Material:	PE acc. ME 8159 and NG2431 E, ultrapure water resistant, opaque to light, food-safe	
Outlet tap:	240 mm free headroom	
Overflow:	d8 hose connector	
Diameter:	380 mm	
Height:	598 mm	912 mm
Weight in kg (Standard):	6	7
cat. no.	06.5040	06.5070

Complementary accessories:

06.5001	Sterile overflow
06.5002	CO ₂ absorber + Sterile venting filter, 0.2 µm
06.5003	sterile venting filter, 0.2 µm
06.5006	UV Immersion lamp for Tank
06.5015	Wall mount for 30 l storage tank
06.5016	Wall mount for 60 l storage tank



■ Technical Specifications

	TKA Smart2Pure 12 Standard	TKA Smart2Pure 12 UF*	TKA Smart2Pure 12 UV**	TKA Smart2Pure 12 UF/UV
Permeate performance at 15°C:	12 l/h	12 l/h	12 l/h	12 l/h
Flow rate:	1.0 l/min	0.6 l/min	1.0 l/min	0.6 l/min
Operating pressure in bar, min/max:	1 – 6 bar	1 – 6 bar	1 – 6 bar	1 – 6 bar
ASTM I conductivity:	0.055 µS/cm	0.055 µS/cm	0.055 µS/cm	0.055 µS/cm
Resistance at 25°C:	18.2 MΩ×cm	18.2 MΩ×cm	18.2 MΩ×cm	18.2 MΩ×cm
TOC Value:	5 – 10 ppb	5 – 10 ppb	1 – 5 ppb	1 – 5 ppb
Bacterial content in CFU/ml:	< 1	< 1	< 1	< 1
Particle content:	< 1	< 1	< 1	< 1
Endotoxines in EU/ml:		0.005	0.005	
ASTM II conductivity:	0.067 – 0.1 µS/cm	0.067 – 0.1 µS/cm	0.067 – 0.1 µS/cm	0.067 – 0.1 µS/cm
Resistance at 25°C:	15 – 10 MΩ×cm	15 – 10 MΩ×cm	15 – 10 MΩ×cm	15 – 10 MΩ×cm
Supply voltage:	Automatic voltage regulation to 24 V		Automatic voltage regulation to 24 V	
Power consumption:	0.06 kW	0.06 kW	0.06 kW	0.06 kW
Connector size:	R 3/4"	R 3/4"	R 3/4"	R 3/4"
Dimensions, W x D x H in mm:	305 x 300 x 545	305 x 300 x 545	305 x 300 x 545	305 x 300 x 545
Weight:	22 kg	22 kg	22 kg	22 kg
cat. no., 12 l/h version:	08.2120	08.2121	08.2122	08.2123

* supplemented with an ultrafilter

** supplemented with UV-oxidation, 185/254 nm

Consumables and accessories

Pre-treatment (hardness stabilizing/activated carbon/prefilter 5 µm)	cat. no. 09.4000
Wall mounting bracket for Smart2Pure 12	cat. no. 09.2212
Pretreatment module with RO-membrane, 12 l/h	cat. no. 09.2012
Ultrapure water cartridge	cat. no. 09.1020
Sterile filter	cat. no. 09.1003

Your TKA Representative



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