

Everyday ultrapure water. Even for demanding laboratory uses.

# Compact high-tech! TKA Smart2Pure.



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

**TKA** WATER  
PURIFICATION  
SYSTEMS

**TKA Smart2Pure. For small volumes.  
But of highest quality!**



### ■ **ASTM Type I Ultrapure water.**

**For example, for:**

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

### ■ **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



### ■ **Instantly and fresh.**

**With TKA Smart2Pure**

This is the password for converting normal tap water to ultrapure water of ASTM Types I and II.

All in one! TKA Smart2Pure is a compact complete-system that produces 3 or 6 litres of ultrapure water per hour. The built-in 6 litre tank for ultrapure water has a conical bottom for complete emptying. It is equipped with a sterile vent filter and a pressure pump for supplying equipment connected downstream (e.g. autoclaves, analyzers). If required, a flexible dispenser with a sterile filter can

be connected to the tank. The system has a small footprint, is very attractively designed and looks good in any laboratory.

TKA Smart2Pure operates with the same high-tech purification procedures as the well known TKA Pacific and GenPure systems.



#### **Convenient**

Swivel-mounted display - always easy to read!

**TKA Smart2Pure.**  
**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.

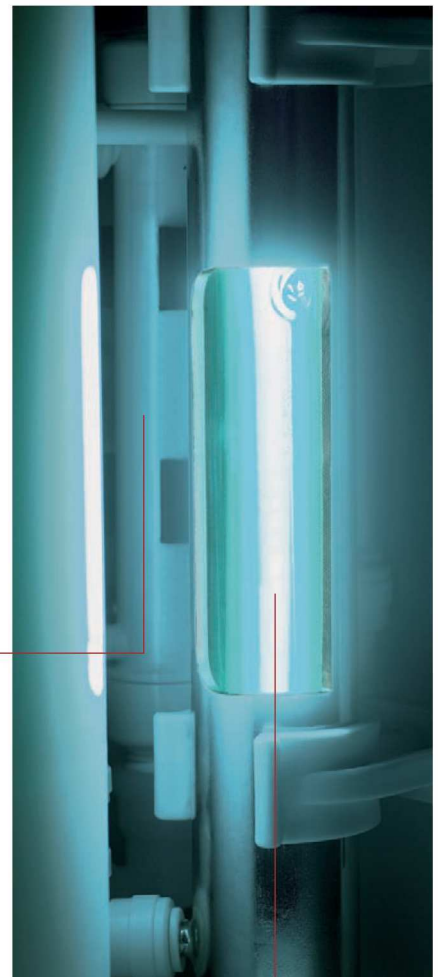


**Space saving!**

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

**High performance filter!**

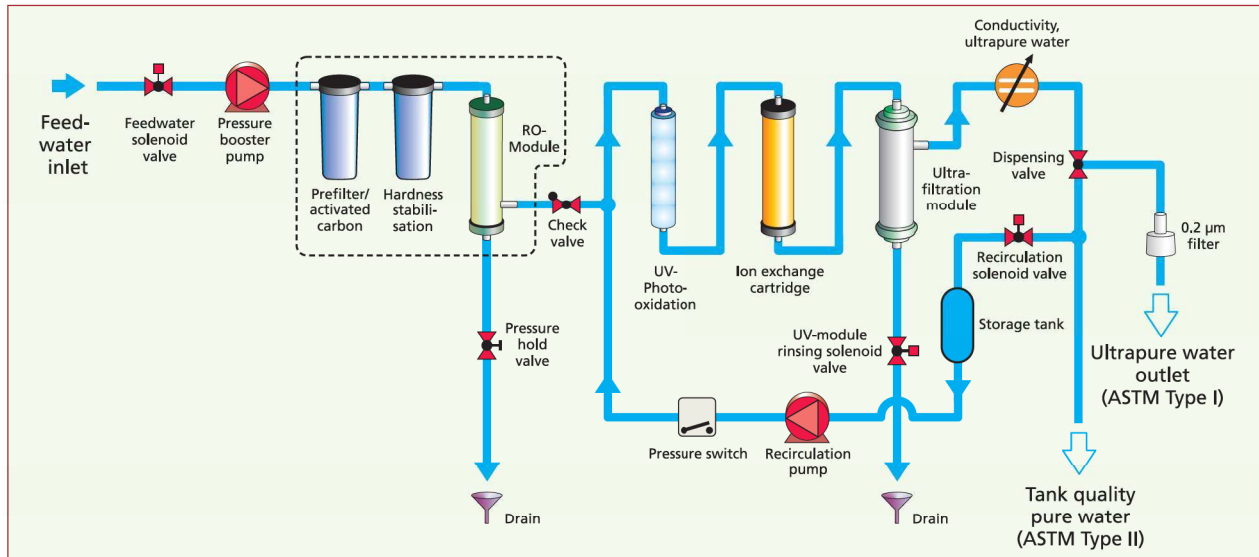
Option of an integrated ultrafilter, generously dimensioned for pyrogen-free and nuclease-free water. The automatic self-cleaning gives years of service.



**UV-Oxidation 185/254 nm!**

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

## TKA Smart2Pure UV/UF Flow chart.



## The result: Ultrapure water of the quality required:

### ASTM Type I

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

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

### ASTM Type II

3 or 6 Litres per hour. Always freshly produced and ready-to-take at any time from the built-in 6 litre tank.

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



### Absolutely sterile!

Ultrapure water is dispensed through a standardly supplied sterile filter.

## More ideas = more benefits!

How TKA Smart2Pure differs from other compact-class systems:

### Powerful performance!

- Permeate flow 3 or 6 l/h
- Flow rate 1.0 l/min
- 6-Litre tank with integrated pressure and recirculation pumps

### 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 controls itself
- Ultrapure water quality is ensured by the limiting value input
- RS 232 Interface
- The display can be tilted to your optimal reading position

### Placement anywhere

- Stand it on the laboratory bench
- Mount it on the wall

### 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

### Almost maintenance-free!

- The tank is made of ultrapure water resistant, pigment-free and food-safe polyethylene and has a conical bottom outlet for complete emptying
- Can be easily cleaned and disinfected





## Specifications

	TKA Smart2Pure Standard	TKA Smart2Pure UF*	TKA Smart2Pure UV**	TKA Smart2Pure UF/UV
Permeate performance at 15°C:	3 l/h or 6 l/h	3 l/h or 6 l/h	3 l/h or 6 l/h	3 l/h or 6 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
Endotoxins 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 400 x 545	305 x 400 x 545	305 x 400 x 545	305 x 400 x 545
Weight:	22 kg	22 kg	22 kg	22 kg
Article no., 3 l/h version:	08.2030	08.2031	08.2032	08.2033
Article no., 6 l/h version:	08.2060	08.2061	08.2062	08.2063

\* supplemented with an ultrafilter

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

### Consumables and accessories

Wall-mount	Article-no. 09.2212
Pretreatment module with RO-membrane, 3 l/h	Article-no. 09.2003
Pretreatment module with RO-membrane, 6 l/h	Article-no. 09.2006
Ultrapure water cartridge	Article-no. 09.1020
Sterile filter	Article-no. 09.1003
Vent filter for tank	Article-no. 22.0091

Distributed by:



**Carl Stuart Limited**

ADVANCED APPLIED TECHNOLOGIES

#### Contact Us:

Irl Ph: 01 4523432  
 UK Ph: 08452 30 40 30  
 Web: [www.carlstuart.com](http://www.carlstuart.com)  
 Email: [info@carlstuart.com](mailto:info@carlstuart.com)



TKA Wasseraufbereitungssysteme GmbH

Stockland 3  
 D-56412 Niederelbert  
 Telephone: +49 (0) 26 02 / 10 69 9-0  
 Telefax: +49 (0) 26 02 / 10 69 9-50  
 eMail: [info@tka.de](mailto:info@tka.de)  
[www.tka.de](http://www.tka.de)