

Omnia pure and
ultrapure water systems
Convenient.
Compact. Adaptable.

Dispenser
is standard!



For demanding applications
in life sciences and labs,

and as supplier to analysers,
autoclaves, glassware washers.

stakpure

H₂O pure. Pure and ultrapure water

For QC, R&D and analytical labs in science, pharmaceuticals and industries.

Whether for demanding applications in life sciences and chemical analysis or for supplying analyzers, autoclaves and laboratory glassware washers – with five systems, the new stakpure Omnia series provides the ideal solution for any task and satisfies international water standards such as ASTM, ISO 3696 and CLSI. The systems are characterized by their economy and flexibility in many applications.



OmniaTap

OmniaPure

OmniaLab^{ED}

OmniaTap

OmniaLab^{ED}
OmniaLab^{UP}

OmniaLab^{RO}

Water quality	ASTM I pure water		ASTM II pure water		ASTM III water from reverse osmosis
daily water quantity	< 40 liter	20–100 liter	> 100 liter	< 40 liter	> 100 liter
feedwater	feedwater	pretreated water	pretreated water	feedwater	pretreated water
applications	<ul style="list-style-type: none"> • AAS (Atomic Absorption Spectroscopy) • IC (Ion Chromatography) • ICP (Inductively Coupled Plasma) • ICP-MS (Inductively Coupled Plasma Mass Spectrometry) • HPLC (High-performance liquid chromatography) • HPLC + (Ultratrace Element Analysis) • Electrochemistry and Electrophoresis • TOC-Analysis • Molecular- and Microbiology • cell culture mediums 		<ul style="list-style-type: none"> • Reagent Preparation + Sample Dilution • Buffer and media preparation • Photometry + Spectrophotometry • RIA (Radioimmunoassay) • ELISA (Enzyme-linked immunosorbent assay) • Pathology + Histology • General chemistry • Feeding of ultrapure water systems: <ul style="list-style-type: none"> - laboratory washers (OmniaLab) - autoclaves + sterilizers 		<ul style="list-style-type: none"> • Feeding of ultrapure water systems: <ul style="list-style-type: none"> - laboratory washers - autoclaves - sterilizers - steam generator - climatic chamber

Water quality standards

For various fields of use and requirements.

International Organization for Standardization (ISO)

ISO 3696:1987 distinguishes between three degrees of purity for water for analytical purposes in laboratories.

Parameter	Grade 1	Grade 2	Grade 3
pH value at 25 °C	–	–	5.0–7.0
Conductivity (µS/cm at 25 °C)	0.1	1.0	5.0
Oxidizable matter, oxygen content (mg/l, max.)	–	0.08	0.4
Absorption at 254 nm and a length of 1 cm (absorption units, max.)	0.001	0.01	–
Residue after evaporation by heating to 110 °C (mg/kg, max.)	–	1	2
Silicon content (mg/l, max.)	0.01	0.02	–

Clinical Laboratory Standards Institute (CLSI)

This institute defined the quality requirements of water for clinical laboratories. The regulations that were valid up to 2006 (NCCL types 1, 2 and 3) but were then invalidated by the requirement that water must be suitable for the intended usage. Only the degree of purity of so-called “Clinical laboratory reagent water” (CLRW) is described.

Parameter	CLRW
Resistance	10 MΩ x cm
TOC	< 500 ppb
Bacteria	< 10 CFU/ml
Particle content	Inline 0.2 µm-filter

American Society for Testing and Materials (ASTM)

The ASTM D1193-06 (2011) deals with the requirements for chemical analyses and physical tests.

Type	Grade	Conductivity (µS/cm), max.	Resistance (MΩ x cm), min.	pH	TOC (µg/l), max.	Sodium (µg/l), max.	Chloride (µg/l), max.	Silicon (µg/l), max.	Bacteria (CFU/ml), max.	Endotoxins (EU/ml), max.
Ultrapure Water	I*	0.056	18.0	–	50	1	1	3	–	–
	A	0.056	18.0	–	50	1	1	3	10/1000	0.03
	B	0.056	18.0	–	50	1	1	3	10/100	0.25
	C	0.056	18.0	–	50	1	1	3	100/10	–
Pure water	II	1.0	1.0	–	50	5	5	3	–	–
	A	1.0	1.0	–	50	5	5	3	10/1000	0.03
	B	1.0	1.0	–	50	5	5	3	10/100	0.25
	C	1.0	1.0	–	50	5	5	3	100/10	–
Pure water	III	0.25	4.0	–	200	10	10	500	–	–
	A	0.25	4.0	–	200	10	10	500	10/1000	0.03
	B	0.25	4.0	–	200	10	10	500	10/100	0.25
	C	0.25	4.0	–	200	10	10	500	100/10	–
Pure water	IV	5.0	0.2	5.0–8.0	–	50	50	–	–	–
	A	5.0	0.2	5.0–8.0	–	50	50	–	10/1000	0.03
	B	5.0	0.2	5.0–8.0	–	50	50	–	10/100	0.25
	C	5.0	0.2	5.0–8.0	–	50	50	–	100/10	–

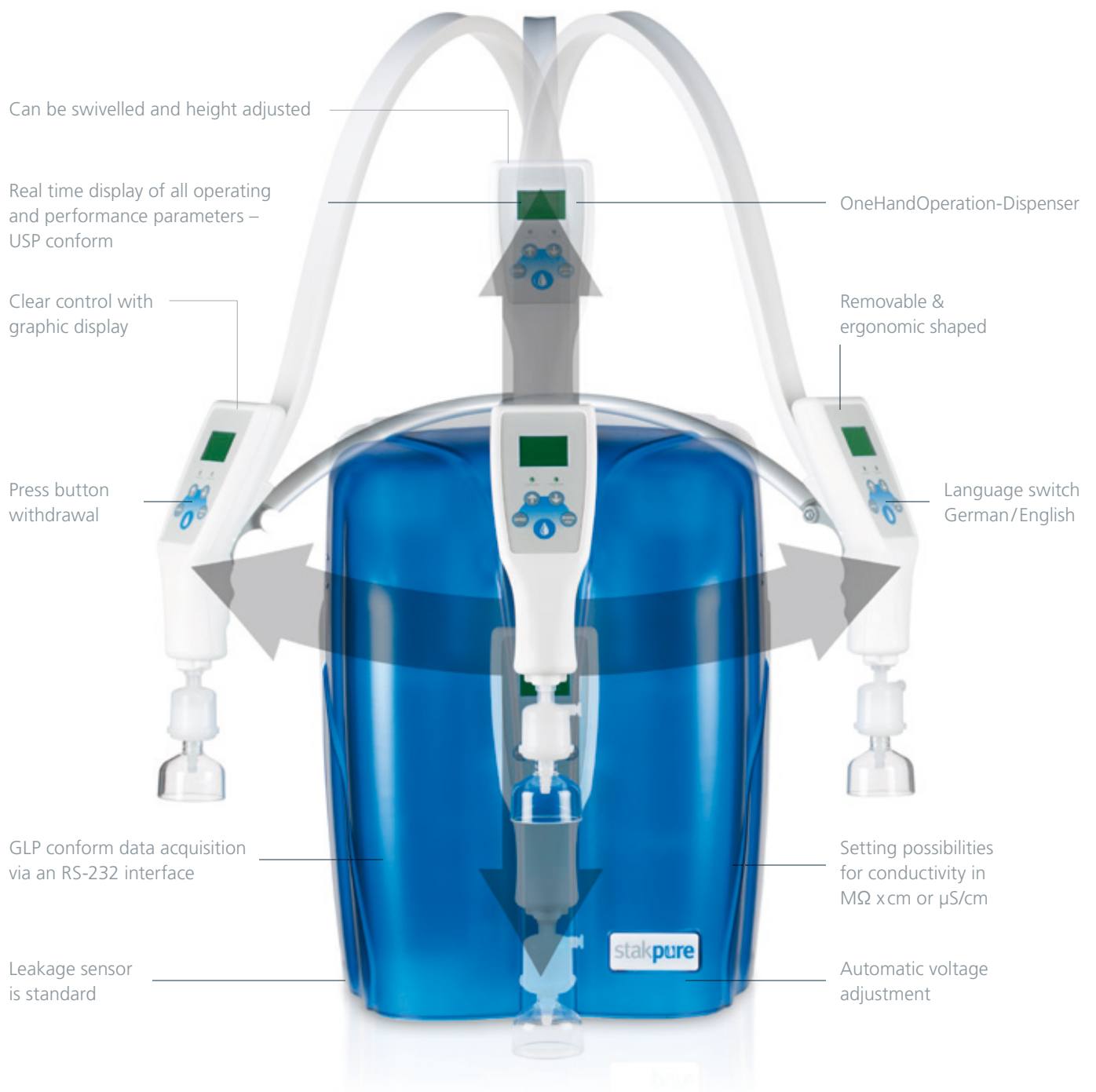
* Using an appropriate 0,2µm membrane filter.

Omnia

Pure and ultrapure water systems

Convenient. Compact. Adaptable.

OptiFill Dispenser is standard



The Omnia series is extremely convenient to use. All devices are fitted with the Optifill one-hand dispenser with integrated control- and monitoring unit. One-handed operation, removable, can be swivelled and height-adjusted, and with a flexible connection for easy water dispensing into any type of container.



The ergonomic shaped dispenser is easily operable.



The easily accessible control and service cover ensures that consumables can be replaced in seconds.



Compact in design, these space-saving devices with their slender housing can be mounted on the wall, placed easily on the laboratory bench or in a base cabinet. Configure the system you choose for flexible use and economical operation.

The mains unit with automatic voltage adjustment to 24 V enables use anywhere in the world. With the new Omnia series, the name is the programme – Omnia is Latin for “everything”.

OmniaPure

The specialist.

For H₂O pure type ASTM I.

When your need is for highest quality pure water that fulfils the demands of analytical and life science laboratory requirements, then one of these OmniaPure systems type will be right for you. You can configurate it. The incorporated pre-treatment constantly ensures the reliability of your experimental results and reduces running costs.

Features

- OptiFill dispenser is standard
- Spent filter is quickly changed
- Leakage sensor is standard
- Integrated pressure reducer is standard
- Precise volume control
- Ready-to-use, including filter cartridges



One hand operation



Easy water dispensing

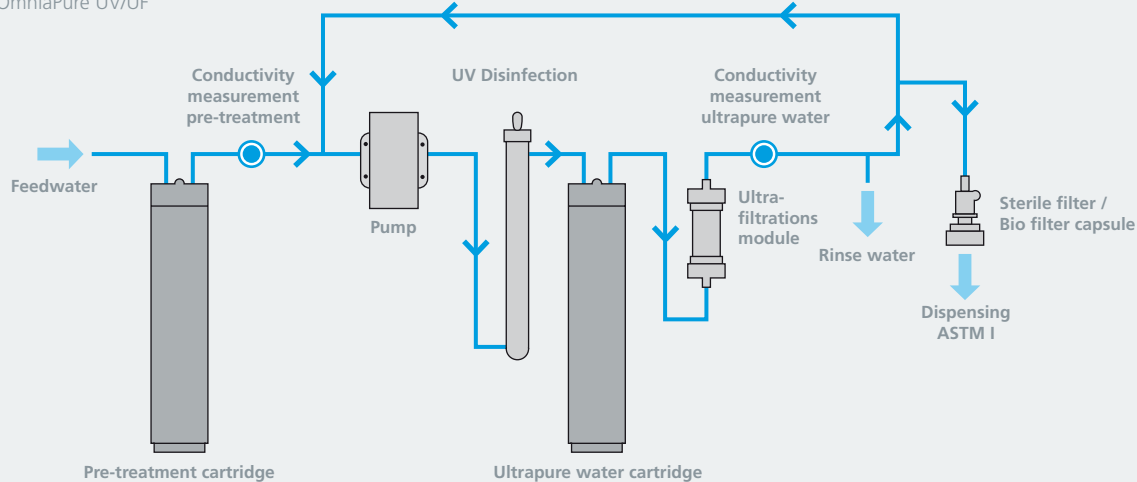


Fits neatly on the wall



Flexible on a work surface

Flow chart OmniaPure UV/UF



Specifications	OmniaPure	OmniaPure UV	OmniaPure UV/UF
ASTM I			
Conductivity $\mu\text{S}/\text{cm}$	0.055	0.055	0.055
Resistance $\text{M}\Omega \times \text{cm}$	18.2	18.2	18.2
TOC-value* ppb	5–10	1–5	1–5
Dispensing performance l/min.	up to 2	up to 2	up to 1.6
Endotoxins* EU/ml	-	-	0.001
RNase* ng/ml	-	-	4
DNase* pg/ μl	-	-	0.01
Particles**/ml	< 1	< 1	< 1
Bacteria** CFU/ml	< 0.1	< 0.1	< 0.1

Feedwater requirements

Water prepared by ion exchange, reverse osmosis, electrodeionisation or distillation

Feedwater temperature $^{\circ}\text{C}$	+2 up to 35	+2 up to 35	+2 up to 35
Input conductivity $\mu\text{S}/\text{cm}$	< 30	< 30	< 30
TOC-value ppb	< 50	< 50	< 50

Technical data

Operating pressure bar	0.1–6	0.1–6	0.1–6
Supply voltage Volt/Hz	90–240/50–60	90–240/50–60	90–240/50–60
Connected load kW	0.1	0.1	0.1
Connector size mm	8 mm hose	8 mm hose	8 mm hose
Ambient temperature $^{\circ}\text{C}$	+2 up to +35	+2 up to +35	+2 up to +35
Dimensions*** W x H x D mm	390 x 720 x 525	390 x 720 x 525	390 x 720 x 525
Weight kg	19	20	20

* in dependence on the feedwater quality ** with sterilizing filter 0.2 μm *** with OptiFill Dispenser

Article no.	System type*	Typical applications
18200001	OmniaPure	AAS, IC, ICP, buffers and media preparation
18200002	OmniaPure UV	Ultra-trace analysis, ICP-MS, HPLC, TOC-analysis
18200003	OmniaPure UV/UF	Life science and microbiology, cell culture media

* filter cartridges and sterile filter capsule 0.2 μm included

Consumable	
19200002	Pre-treatment cartridge OmniaPure
19200003	Ultrapure water cartridge Omnia 055
19100300	Sterile filter capsule 0.2 μm
19102100	Bio filter capsule
19000050	Ultrafiltration module
19200055	UV lamp

Accessories	
19200300	Wall mount Omnia
19200056	Disinfection kit Omnia
19200057	Disinfectant Omnia – 3 Pc./Pkg.

OmniaTap

The Allrounder.

For H₂O pure types ASTM I + II.

OmniaTap is the ideal system when both pure water and ultrapure water are required, but in relatively small amounts. The ability to provide both types from a single system results from the combination of ultramodern purification technologies. These also make it possible to connect the system directly to a drinking water tap. A press on the dispenser button activates dispensing of ultrapure water type ASTM I via the digital dispenser control. The recirculation of the pure water held in the installed 10 litre tank keeps it permanently at type ASTM II quality. The pure water tank has a second outlet for feeding downstream end users.

Features

- OptiFill dispenser is standard
- TapWater set for direct connection to a drinking water tap
- 10-litre pure water tank has a pressure outlet
- Tank volume display in percent
- Simple and economical filter replacement
- Leakage sensor is standard
- Ready-to-use, including filter cartridges



One hand operation



Easy water dispensing



Flexible on a work surface

Specifications	OmniaTap	OmniaTap UV	OmniaTap UV/UF
ASTM II			
Pure water performance l/h at 15 °C	6 or 10	6 or 10	6 or 10
Conductivity µS/cm	0.067–0.1	0.067–0.1	0.067–0.1
Resistance MΩ x cm	15–10	15–10	15–10
Pure water tank pressurized outlet	yes	yes	yes

ASTM I			
Conductivity µS/cm	0.055	0.055	0.055
Resistance MΩ x cm	18.2	18.2	18.2
TOC-value* ppb	5–10	1–5	1–5
Dispensing performance l/min.	up to 2	up to 2	up to 1.6
Endotoxins* EU/ml	-	-	0.001
Particles**/ml	< 1	< 1	< 1
Bacteria** CFU/ml	< 0.1	< 0.1	< 0.1

Feedwater requirements

Drinking water according to DIN 2000			
Feedwater temperature °C	+2 up to 35	+2 up to 35	+2 up to 35
Manganese and iron content mg/l	< 0.05	< 0.05	< 0.05
Free chlorine content mg/l	< 1	< 1	< 1
Silt density index (SDI)	max. 3	max. 3	max. 3

Technical data

Operating pressure bar	1–6	1–6	1–6
Supply voltage Volt/Hz	90–240/50–60	90–240/50–60	90–240/50–60
Connected load kW	0.1	0.1	0.1
Connector size mm	8 mm hose	8 mm hose	8 mm hose
Ambient temperature °C	+2 up to +35	+2 up to +35	+2 up to +35
Dimensions*** W x H x D mm	390 x 720 x 615	390 x 720 x 615	390 x 720 x 615
Weight kg	22	23	23

* in dependence on the feedwater quality

** with sterilizing filter 0.2 µm

*** with OptiFill Dispenser

Article no.	System type*	Typical applications
18200051	OmniaTap 6	AAS, IC, ICP, buffers and media preparation
18200101	OmniaTap 10	AAS, IC, ICP, buffers and media preparation
18200052	OmniaTap 6 UV	Ultra-trace analysis, ICP-MS, HPLC, TOC
18200102	OmniaTap 10 UV	Ultra-trace analysis, ICP-MS, HPLC, TOC
18200053	OmniaTap 6 UV/UF	Life science and microbiology, cell culture media
18200103	OmniaTap 10 UV/UF	Life science and microbiology, cell culture media

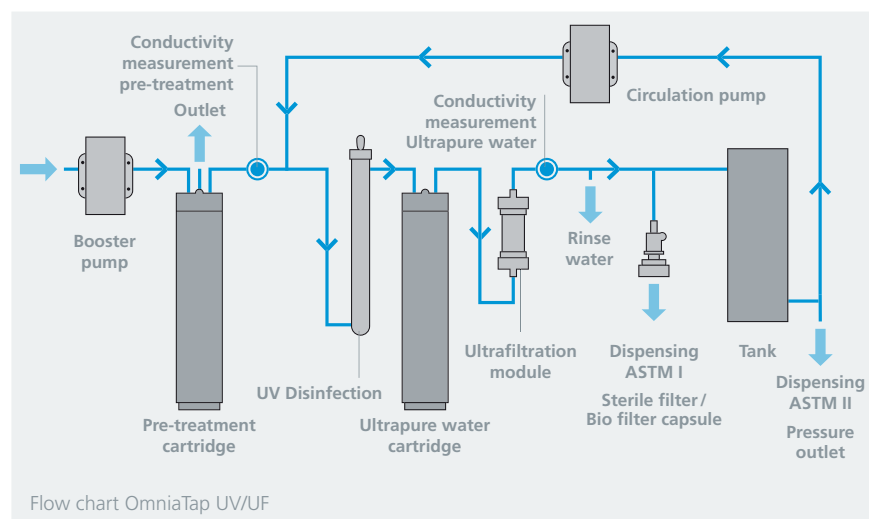
Accessories

19200300	Wall mount Omnia
19200056	Disinfection kit Omnia
19200057	Disinfectant Omnia – 3 pcs./pack
19200021	Pre-treatment unit OmniaTap –10"

Consumable

16510100	Prefilter cartridges 1 µm – 10"
19200005	Pre-treatment cartridge OmniaTap 6
19200010	Pre-treatment cartridge OmniaTap 10
19200003	Ultrapure water cartridge Omnia 055
19100300	Sterile filter capsule 0.2 µm
19102100	Bio filter capsule
19500400	Sterile tank ventilation filter
19000050	Ultrafiltration module
19200055	UV lamp

*filter cartridges and sterile filter capsule 0.2 µm included



OmniaLab^{ED}

The big one.

For H₂O pure types ASTM I + II.

OmniaLab^{ED} is the system of choice when the complete laboratory pure water and ultrapure water requirements are to be fulfilled. The system complies with international water standards such as ASTM, ISO 3696 and CLSI. The economy of it is maximized by the inclusion of a continuously self-regenerating electrodeionizer, without having to give any demanding analytical applications a pass. Further to this, each OmniaLab^{ED}-system holds 100 litres of pure water type ASTM II ready for withdrawal in a storage tank that is equipped with quality recirculation. OmniaLab^{ED} is exactly right as pure water supplier to autoclaves and laboratory washing machines.

Features

- OptiFill dispenser is standard
- Continuous residual salts removal by electro-deionization
- 100 litre storage tank with recirculation and pressure outlet
- Tank volume display in percent
- Tank volume can be modularly increased
- Simple, cost-effective filter replacement
- Leakage sensor is standard



One hand operation



Easy water dispensing



Flexible on a work surface



Tank fits space-savingly under the bench-top



Specifications	OmniaLab ^{ED} 20	OmniaLab ^{ED} 40	OmniaLab ^{ED} 70
ASTM II			
Pure water performance l/h at 15 °C	20	40	70
Conductivity µS/cm	0.1–1	0.1–1	0.1–1
Resistance* MΩ x cm	10–1	10–1	10–1
Silicate removal** %	99.9	99.9	99.9
Dispensing performance dispenser l/min.	up to 2	up to 2	up to 2
Pure water tank pressurized outlet	yes	yes	yes
Particles***/ml	< 1	< 1	< 1
Bacteria*** CFU/ml	< 0.1	< 0.1	< 0.1
optional – ASTM I			
Conductivity µS/cm (with ultrapure water cartridge)	0.055	0.055	0.055
Resistance MΩ x cm (with ultrapure water cartridge)	18.2	18.2	18.2
TOC-value** ppb (with UV-unit)	5–10	5–10	5–10

Feedwater requirements

Drinking water according to DIN 2000			
Feedwater temperature °C	+2 up to 35	+2 up to 35	+2 up to 35
Manganese and iron content mg/l	< 0.05	< 0.05	< 0.05
Free chlorine content mg/l	< 1	< 1	< 1
Silt density index (SDI)	max. 3	max. 3	max. 3

Technical data

Operating pressure bar	2–6	2–6	2–6
Supply voltage Volt/Hz	90–240/50–60	90–240/50–60	90–240/50–60
Connected load kW	0.25	0.25	0.25
Connector size mm	8 mm hose	8 mm hose	8 mm hose
Ambient temperature °C	+2 up to +35	+2 up to +35	+2 up to +35
Dimensions Tower**** B x H x T mm	511 x 1520 x 575	511 x 1520 x 575	511 x 1520 x 575
Dimensions Base cabinet tank mm	511 x 800 x 575	511 x 800 x 575	511 x 800 x 575
Weight kg	60	65	65

* typically 15 MΩ x cm

**in dependence on the feedwater quality

*** with sterilizing filter 0.2 µm

**** with OptiFill Dispenser

Article no.	System type*	Typical applications
18700020	OmniaLab ^{ED} 20	Feedwater for autoclaves and laboratory washers
18700040	OmniaLab ^{ED} 40	Feedwater for autoclaves and laboratory washers
18700070	OmniaLab ^{ED} 70	Feedwater for autoclaves and laboratory washers

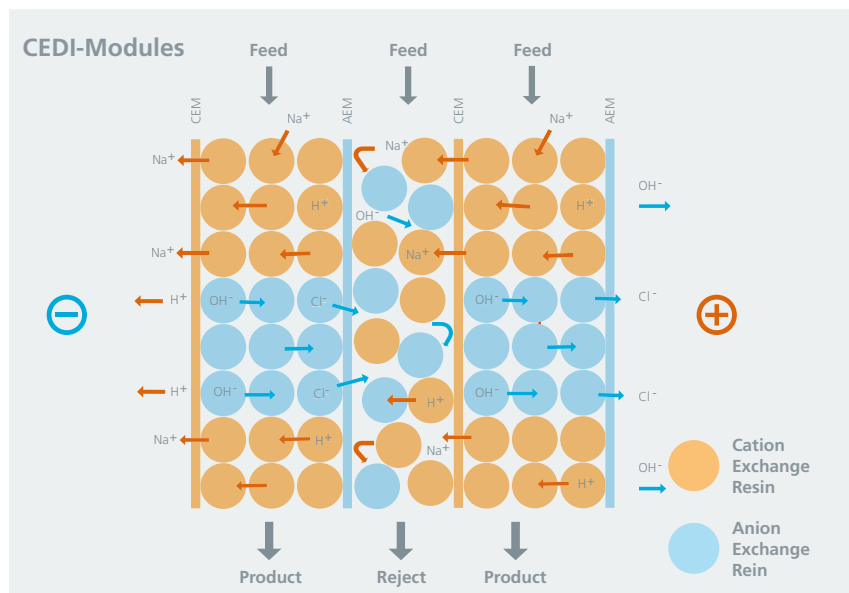
* filter cartridges Omnia 067 and sterile filter capsule 0.2 µm included

Accessories

19200020	Pre-treatment unit OmniaLab – 10"
19200050	UV Tank disinfecting unit
19200051	UV Flow through disinfection – 254
19200052	UV Unit for TOC reduction – 185
19200100	Additional docking tank 100 litres
16561200	External pressure booster pump MQ 2000
16561600	External pressure booster pump MQ 3000

Consumable

16520101	Pre-filter cartridges 5 µm + hardness stabilisation
19200003	Ultrapure water cartridge Omnia 055
19200004	Pure water cartridge Omnia 067
19100300	Sterile filter capsule 0.2 µm
19200053	UV-lamp for tank disinfection
19200054	UV-lamp, 254
19200055	UV-lamp, 185
19500200	CO ₂ -Absorber + tank ventilation
19500300	Sterile tank ventilation filter



OmniaLab^{UP}

The constant one.

For H₂O pure type ASTM II.

OmniaLab^{UP} is the choice when you need a constant supply of high-quality water to laboratories. For this, OmniaLab^{UP} holds 100 litres of ASTM II pure water in reserve in a storage tank with quality recirculation. It is an optimal supplier to autoclaves, lab rinsing machines and ultrapure water systems. The water produced conforms to international medical technology water standards such as ASTM, ISO 3696 and CLSI.

Features

- OptiFill Dispenser is standard
- 100 l tank with quality recirculation and pressure outlet
- Tank volume display in percent
- Tank volume can be modularly increased
- Simple, cost-effective filter replacement
- Leakage sensor is standard



One hand operation



Easy water dispensing



Flexible on a work surface



Tank fits space-savingly under the bench top

Specifications	OmniaLab ^{UP} 20	OmniaLab ^{UP} 40
ASTM II		
Pure water performance l/h at 15 °C	20	40
Conductivity µS/cm	0.067–0.1	0.067–0.1
Resistance MΩ x cm	15–10	15–10
Dispensing performance dispenser l/min.	up to 2	up to 2
Pure water tank pressurized outlet	yes	yes
Particles*/ml	< 1	< 1
Bacteria CFU/ml	< 0.1	< 0.1
Feedwater requirements		
Drinking water according to DIN 2000		
Feedwater temperature °C	+2 up to 35	+2 up to 35
Manganese and iron content mg/l	< 0.05	< 0.05
Free chlorine content mg/l	< 1	< 1
Silt density index (SDI)	max. 3	max. 3
Technical data		
Operating pressure bar	2–6	2–6
Supply voltage Volt/Hz	90–240/50–60	90–240/50–60
Connected load kW	0.1	0.1
Connector size mm	8 mm hose	8 mm hose
Ambient temperature	+2 up to +35 °C	+2 up to +35 °C
Dimensions Tower* B x H x T mm	511 x 1520 x 575	511 x 1520 x 575
Dimensions Base cabinet tank mm	511 x 800 x 575	511 x 800 x 575
Weight kg	55	57

* with sterilizing filter 0.2 µm ** with OptiFill Dispenser

Article no.	System type*	Typical applications
18600020	OmniaLab ^{UP} 20	Feedwater for autoclaves and laboratory washers
18600040	OmniaLab ^{UP} 40	Feedwater for autoclaves and laboratory washers

*filter cartridges Omnia 067 and sterile filter capsule 0.2 µm included

Accessories	
19200020	Pre-treatment unit OmniaLab – 10"
19200050	UV Tank disinfecting unit
19200051	UV Flow through disinfection – 254
19200100	Additional docking tank 100 litres
16561200	External pressure booster pump MQ 2000
16561600	External pressure booster pump MQ 3000

Consumable	
16520101	Prefilter cartridges 5 µm + hardness stabilisation
19200004	Pure water cartridge Omnia 067
19100300	Sterile filter capsule 0.2 µm
19200053	UV-lamp for tank disinfection
19200054	UV-lamp, 254
19500200	CO ₂ -Absorber + tank ventilation
19500300	Sterile tank ventilation filter

OmniaLab^{RO}

The big one.

For H₂O pure type ASTM III.

OmniaLab^{RO} fulfils your requirement when you have a need of a constant large volume of reverse osmosis water. For this, OmniaLab^{RO} holds 100 litres of such water in reserve in a storage tank. It is an optimal supplier to autoclaves, lab rinsing machines, air humidifiers and ultrapure water systems.

Features

- With 100 l pure water tank
- Tank volume display in percent
- Tank volume can be modularly increased
- Leakage sensor is standard



Specifications	OmniaLab [®] 20	OmniaLab [®] 40	OmniaLab [®] 60	OmniaLab [®] 80
ASTM III				
Pure water performance l/h at 15 °C	20	40	60	80
RO membrane retention rate in % (ions, germs and bacteria)	> 98	> 98	> 98	> 98
Feedwater requirements				
Drinking water according to DIN 2000				
Feedwater temperature °C	+2 up to 35	+2 up to 35	+2 up to 35	+2 up to 35
Manganese and iron content mg/l	< 0.05	< 0.05	< 0.05	< 0.05
Free chlorine content mg/l	< 1	< 1	< 1	< 1
Silt density index(SDI)	max. 3	max. 3	max. 3	max. 3
Technical data				
Operating pressure bar	2–6	2–6	2–6	2–6
Supply voltage Volt/Hz	90–240/50–60	90–240/50–60	90–240/50–60	90–240/50–60
Connected load kW	0.1	0.1	0.1	0.1
Connector size mm	8 mm hose	8 mm hose	8 mm hose	8 mm hose
Ambient temperature	+2 up to +35°C	+2 up to +35°C	+2 up to +35°C	+2 up to +35°C
Dimensions Tower* B x H x T mm	511 x 1520 x 575	511 x 1520 x 575	511 x 1520 x 575	511 x 1520 x 575
Dimensions Base cabinet tank mm	511 x 800 x 575	511 x 800 x 575	511 x 800 x 575	511 x 800 x 575
Weight kg	55	57	60	65

* with OptiFill Dispenser

Article no.	System type	Typical applications	Accessories	
18500020	OmniaLab [®] 20	Feedwater for autoclaves and laboratory washers, ultrapure water systems and air humidifiers	19200020	Pre-treatment unit OmniaLab – 10"
18500040	OmniaLab [®] 40	Feedwater for autoclaves and laboratory washers, ultrapure water systems and air humidifiers	19200050	UV Tank disinfecting unit
18500060	OmniaLab [®] 60	Feedwater for autoclaves and laboratory washers, ultrapure water systems and air humidifiers	19200100	Additional docking tank 100 litres
18500080	OmniaLab [®] 80	Feedwater for autoclaves and laboratory washers, ultrapure water systems and air humidifiers	16561200	External pressure booster pump MQ 2000
			16561600	External pressure booster pump MQ 3000
			Consumable	
			16520101	Prefilter cartridges 5 µm + hardness stabilisation
			19200053	UV-lamp for tank disinfection
			19500300	Sterile tank ventilation filter

stakpure

stakpure GmbH

Auf dem Kesseling 11

D 56414 Niederahr

Phone: +49 (0) 2602 10673-0

Fax: +49 (0) 2602 10673-200

info@stakpure.de

www.stakpure.de



Leo Trumm
Danny Schmidt
Julius Albrecht
Ansgar Knur

Is reliable and economic preparation of pure and/or ultrapure water a topic for you? Just call us!

info@stakpure.de
www.stakpure.de



We are certified according to ISO 9001: 2015

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