

Operating instructions



OmniaTap *touch*



Foreword

Ladies and Gentlemen,

The team at stakpure GmbH would like to thank you for the trust you have placed in us.

By choosing this ultrapure water system from our company, you have opted for an innovative, high-quality and durable product.

Before installing and commissioning your ultrapure water system, please read the installation and operating instructions in these operating instructions carefully.

Please note that only trained personnel have access to operate this system.

To ensure the water quality, only use original accessories, spare parts and consumables from stakpure.

Please note that, as the manufacturer, we cannot accept any liability for possible damage to the appliance, connected peripherals or buildings and persons in the event of improper use or improper installation or operation, or the use of third-party parts of any kind.

We wish you every success with your new water treatment system.

stakpure GmbH, in February 2025.

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Symbols used



Warnings with this symbol indicate a hazard which, if not avoided, could result in death or serious injury.



Warnings with this symbol indicate a hazard which, if not avoided, could result in minor or moderate injury.



This symbol indicates a risk of possible material damage.



This symbol indicates useful information.

1 User instructions

Please read these instructions carefully and completely before installing the OmniaTap system and putting it into operation for the first time. It is an important part of the product and contains basic instructions that must be observed during installation, operation and maintenance.

The operating instructions must always be available at the operating location. If you leave the OmniaTap system to other persons, you must also hand over these instructions.

The personnel for operation, maintenance, inspection and installation must have the appropriate qualifications for this work. The area of responsibility, competence and supervision of the personnel must be precisely regulated by the operator.

Not only the safety instructions listed in this section must be observed, but also the safety regulations applicable to the installation site. In particular, the accident prevention regulations.

2 Safety instructions

The safety instructions described below are for your own safety and help to prevent possible damage to the OmniaTap system. Read the instructions before installation, commissioning and maintenance and follow them carefully.

 WARNING	Danger of electric shock! An improper electrical supply to the OmniaTap system can lead to an electric shock! - Only use the wide-range power supply unit supplied with the OmniaTap system for the electrical supply. - Only use a properly earthed socket that provides an AC voltage of 100-240V at 50-60Hz for the electrical supply of the OmniaTap system's wide-range power supply unit. - The rear housing cover may only be opened for maintenance work when the mains plug is disconnected.
 WARNING	Danger from falling! Improper handling or installation can cause the OmniaTap system to fall and cause injury! - Always ensure that the system is stable. - For wall mounting, ensure that the system is mounted stably. - When handling / transporting the system, observe the system's stopping points, which you will find in these operating instructions.
 WARNING	Danger from slipping! Incorrect or faulty installation or operation as well as a leak in the system can lead to uncontrolled leakage of liquid and thus to a risk of slipping! - Always ensure that the system is operated correctly and always use a sufficiently large container when drawing off water. - Ensure that the inlet and outlet pipes are tightly fitted. - Ensure that the rinsing water is channelled into a drain without pressure.

	Risk of skin and eye injuries! Contact with the disinfectant can lead to skin and eye irritation and/or injuries! - When disinfecting the OmniaTap system, always wear suitable safety clothing (at least gloves and safety goggles) to avoid contact with the disinfectant. - Ensure that no disinfectant can escape uncontrolled from the system and check the connection hoses for correct and tight fit. - Follow the instructions supplied with the disinfectant or disinfection kit exactly. Escaping UV radiation can cause skin and eye irritation or injuries! - Only change the UV lamp of an OmniaTap system when it is switched off and the mains plug is disconnected. - When changing the UV lamp, ensure that the lamp is correctly seated in the UV reactor.
	Risk of crushing and clamping injuries! Incorrect handling of the OmniaTap system can lead to crushing and clamping injuries! - When handling / transporting the system, observe the system's stopping points, which you will find in these operating instructions. - When handling the movable dispenser arm, pay attention to possible pinch points in the area of the joint on the main housing. Only move the arm by holding the dispenser handle.

The safety instructions listed in these operating instructions, the existing national regulations for accident prevention and any internal work, operating and safety regulations of the operator must be observed.

These operating instructions must be available at the operating site at all times.

The system may only be installed, operated and maintained by trained, specialised personnel.

The CE mark loses its validity if structural changes are made or accessories not authorised by the manufacturer are installed. Conversion and modification of the system are only permitted after consultation with the manufacturer. Original spare parts and accessories authorised by the manufacturer ensure safety.

Please note that the manufacturer is exempt from any liability for damage caused by improper use or use not in accordance with the intended purpose.



Protect the system from frost. The ambient temperature at the installation site should be at least +2°C.

Only operate the system within the specified feed water pressure range.

Access to the mains cable and the mains plug must always be freely accessible.

When connecting water treatment systems, a safety device must be used to protect the drinking water from contamination in accordance with DIN EN 1717.

Depending on the country, a safety combination consisting of a backflow preventer and a system separator may have to be installed on the building side.

A DN 50 floor drain with free drainage must be provided in the operating room. If there is no floor drain, we recommend the use of a water guard to prevent damage to the system, equipment and building. Otherwise, the manufacturer accepts no liability for any water damage that may occur.

The base of the system must have sufficient load-bearing capacity (see technical data for weight).

During installation, ensure that there is sufficient clearance for easy operation, maintenance and repair.

Maintenance work may only be carried out by trained specialist personnel.

3 Intended use

The systems in the OmniaTap series are used for the direct treatment of drinking water to produce pure and ultrapure water for laboratory use. The OmniaTap system must be supplied with drinking water in accordance with DIN 2000 to ensure maximum quality of the pure and ultrapure water and the longest possible service life of the consumables. Any other use of the system is not permitted and is considered improper use.

The pure / ultrapure water produced is used as a solvent or rinsing agent in a wide variety of analytical methods such as high performance liquid chromatography (HPLC), ion chromatography (IC), atomic absorption spectrometry (AAS), ultra-trace analysis, etc. It is also used in a variety of chemical and biochemical applications, such as the preparation of reagents, cell cultures, etc.

The treated water is not suitable for consumption.

The system must not be used for the manufacture of medicinal products and is not a medical device.

4 Transport and packaging

The OmniaTap systems are carefully checked and packaged before despatch, but damage may occur during transport.

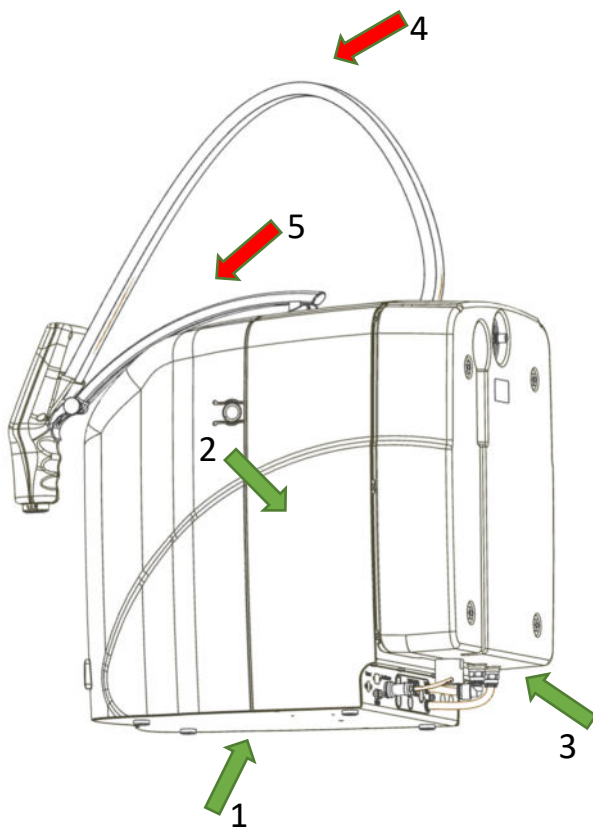
Check the packaging and the system for possible transport damage. If you notice any damage, please contact the shipping or transport company responsible for the delivery directly.



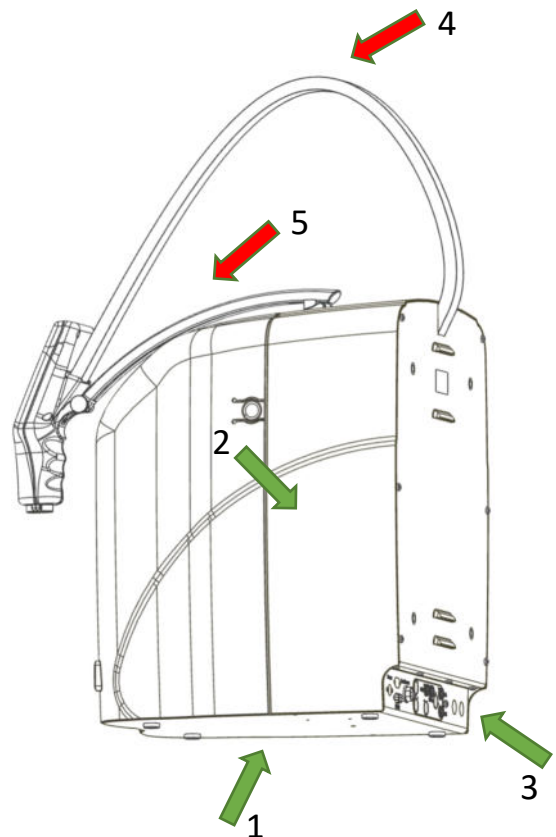
To transport the appliance, only lift it by the holding points 1, 2 and 3.

Never lift the appliance by the dispensing hose point 4 or dispensing arm point 5, as this may result in damage to the appliance.

Version with 10 litre tank



Version with 30 or 60 litre tank



5 Scope of delivery

The scope of delivery of the OmniaTap system consists of the following parts:

Quantity	Designation
1	OmniaTap ^{touch} system
1	Pure water tank 10, 30 or 60 litres
1	Desktop power supply 48V 120W
1	Mains connection cable
1	48V 90W plug-in power supply unit (only for 30/60L tank with integrated pressure pump)
1	PE hose blue d8, 5m
1	PE hose d8 incl. inlet protection filter and Water connection adapter R ¾" - d8
2	Insertion angle d8
1	Pre-treatment cartridge
1	Ultrapure water cartridge
1	Sterile filter capsule 0.2µm
1	Sterile ventilation filter (for 10 litre tank)
1	CO2 absorber, aeration filter (for 30/60 L tank)
1	Operating instructions

6 Technical data

Requirements for the feed water	
Source	Drinking water according to DIN 2000
Pressure [bar]	1 - 6
Temperature [°C]	2 - 35
Conductivity [µS/cm] at 25°C	< 2000 ¹
Blocking index (SDI), or fouling index (FI)	< 5 ²
Dissolved CO ₂ [ppm]	< 30
Free chlorine [ppm]	< 0,1
TOC [ppm]	< 2
Hardness (as CaCO ₃) [ppm]	< 300
Iron/manganese [mg/l]	< 0,05
Silicic acid [ppm]	< 30
pH range	4 - 10

1. Feed water with high conductivity can reduce the service life of the cartridges. With a conductivity between 800-2000 µS/cm, we recommend using a water softener.
2. For values between 3-5, pre-treatment must be carried out beforehand.

Product water ASTM I ¹			
	OmniaTap ^{touch}		
	12/20	12/20 UV-TOC	12/20 UV-TOC/UF
Conductivity [$\mu\text{S}/\text{cm}$] at 25°C	0,055	0,055	0,055
Resistance [$\text{M}\Omega \text{ cm}$] at 25°C	18,2	18,2	18,2
TOC [ppb] ⁴	< 10	< 5	< 5
Particles > 0.2 μm [$1/\text{ml}$] ²	< 1	< 1	< 1
Bacteria [CFU/ml] ²	< 0,01	< 0,01	< 0,01
Pyrogens (endotoxins) [EU/ml] ³	-	-	< 0,001
RNases [pg/ml] ³	-	-	< 1
DNases [pg/ml] ³	-	-	< 5
Proteases [$\mu\text{g}/\text{ml}$] ³	-	-	< 0,15
Flow rate [l/min]	up to 2	up to 2	up to 2

1. The specified values are typical and may vary depending on the quality of the feed water.

2. With sterile filter capsule 19100300 or bio final filter 19102100.

3. With bio final filter 19102100.

4. To achieve the optimum TOC values, the appliance must be operated in recirculation for at least 48 hours after commissioning and after a filter change be operated in recirculation for at least 48 hours.

Product water ASTM II			
	OmniaTap ^{touch}		
	12/20	12/20 UV-TOC	12/20 UV-TOC/UF
Conductivity [$\mu\text{S}/\text{cm}$] at 25°C	0,067 - 0,1	0,067 - 0,1	0,067 - 0,1
Resistance [$\text{M}\Omega \text{ cm}$] at 25°C	15 - 10	15 - 10	15 - 10
Retention rate for germs and particles	99 %	99 %	99 %
Permeate output / l/h at 15°C	12/20	12/20	12/20

Water connections	
Feed water inlet	Hose OD 8mm
Waste water outlet	Hose OD 8mm
Threaded connection for sterile filter	G1/4"
Sterile filter outlet	Hose nozzle 6mm
Tank overflow	Hose OD 8mm

Electrical connections	
Tension	100 - 240 VAC
Frequency	50/60Hz
Power consumption (max.)	120W
USB interface	USB socket type A
Serial interface (optional)	RS 232

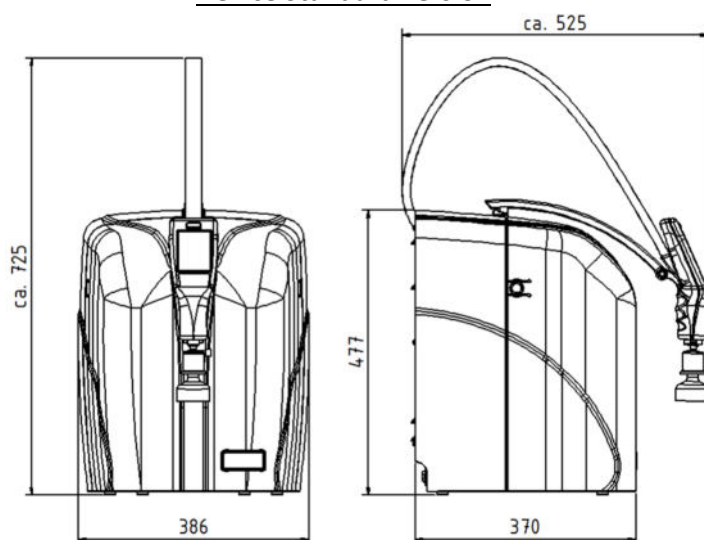
Cell constants	
Conductivity measuring cell LF 1	0.1 cm^{-1}
Conductivity measuring cell LF 2	0.01 cm^{-1}
Conductivity measuring cell LF 4	0.01 cm^{-1}
Conductivity measuring cell LF 5	0.01 cm^{-1}

Airborne sound emission	
Sound pressure level	60 dB(A)

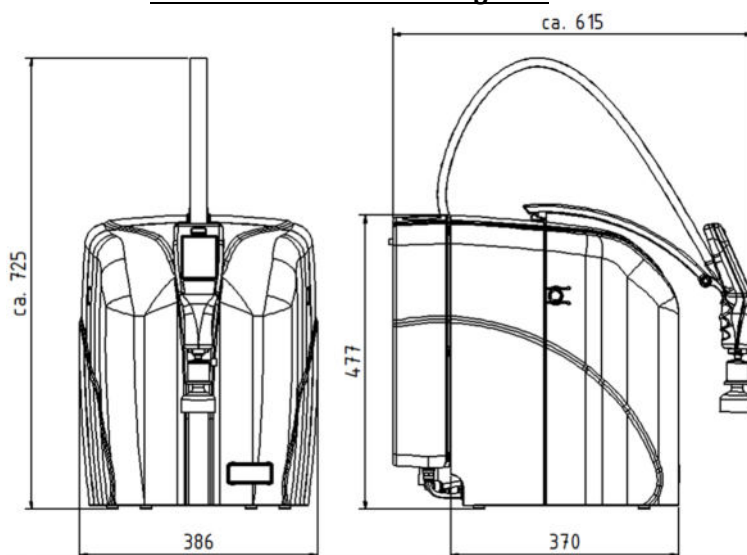
Ambient conditions	
Operating range	Interiors
Max. Height above sea level	Up to 2000 m
Ambient temperature	min. +2°C to max. 40°C, 80% rel. LF, non-condensing
Optimum operating temperature	10°C to 25°C
Mains voltage fluctuation	Max ±10 % of the rated voltage
Degree of soiling	2

Dimensions & weight of devices				
	OmniaTap ^{touch} 12/20		OmniaTap ^{touch} 12/20 with docking tank 10 litres	
	Standard	UV-TOC UV-TOC/UF	Standard	UV-TOC UV-TOC/UF
Height [mm]	725	725	725	725
Depth [mm]	525	525	615	615
Width [mm]	386	386	386	386
Tank capacity (usable volume) [litres]	---	---	10	10
Unladen weight [kg]	17	18	20	21
Operating weight [kg]	19	20	32	33

Device Standard version

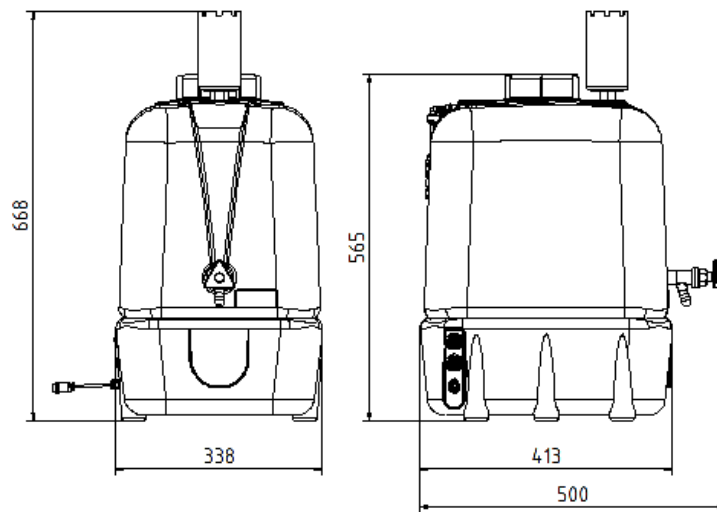


Device with 10 litre docking tank

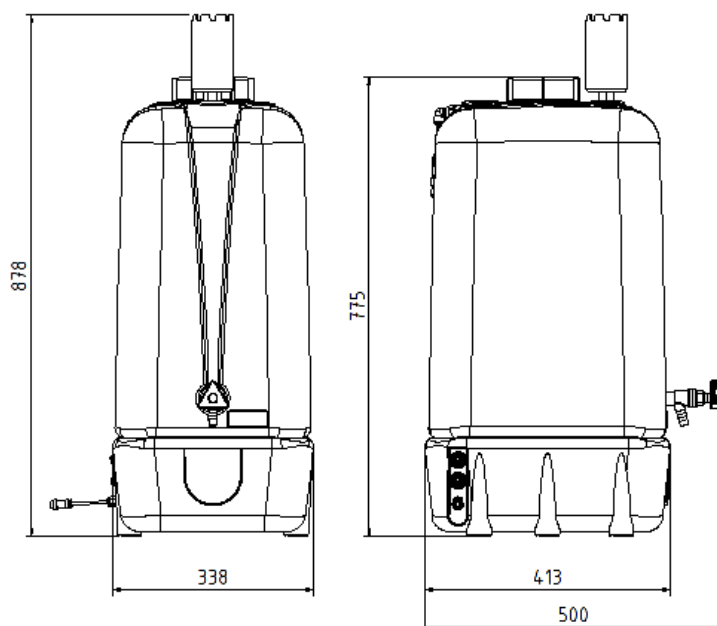


Dimensions & weight of clean water tanks				
	Standard incl. 3/4" connection for external pressure pump		with integrated pressure pump	
	30 litres	60 litres	30 litres	60 litres
Height [mm]	565	775	565	775
Depth [mm]	413	413	413	413
Width [mm]	338	338	338	338
Tank capacity (usable volume) [litres]	30	60	30	60
Unladen weight [kg]	7	8	10	11
Operating weight [kg]	37	68	40	71

30 litre tank



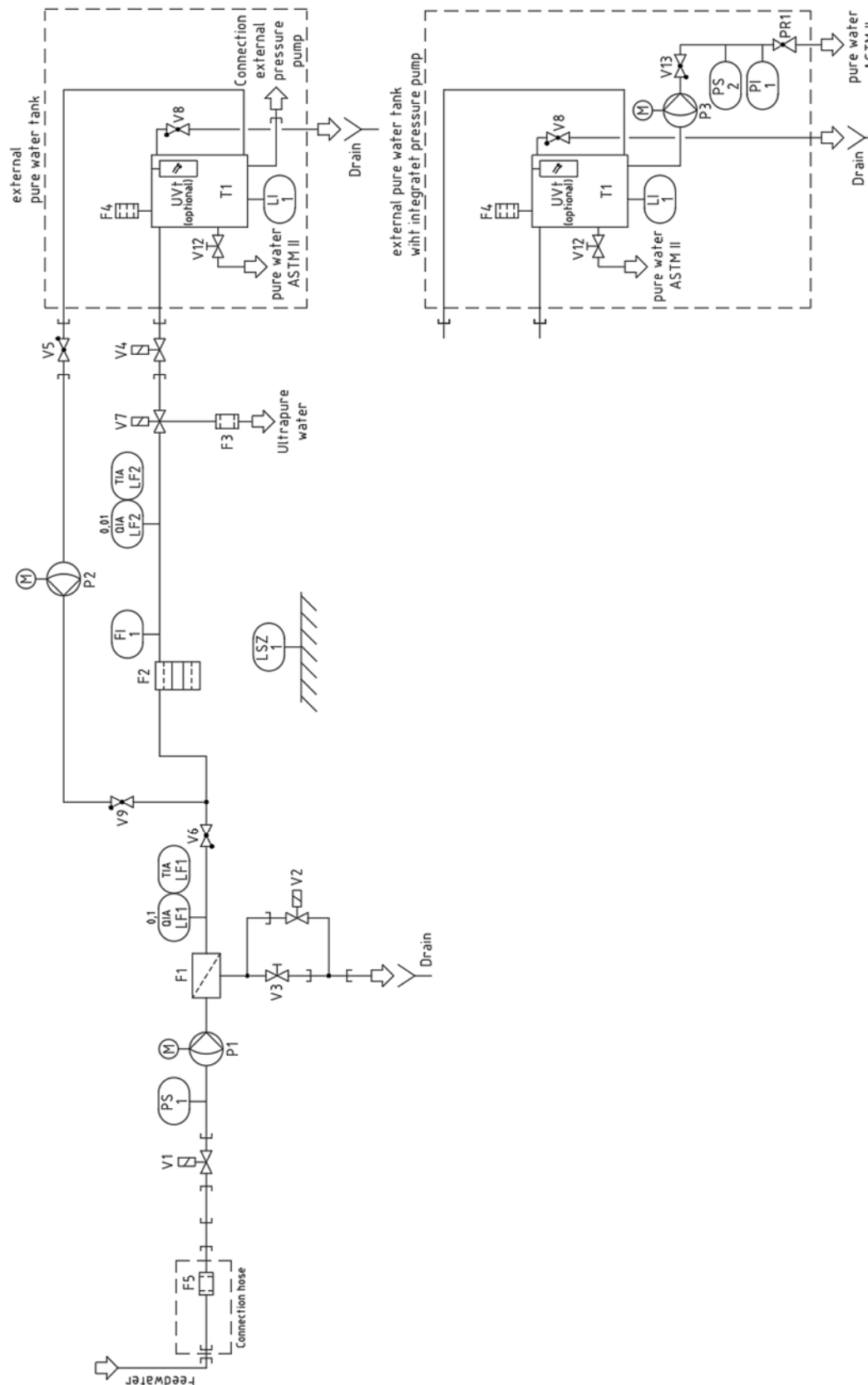
60 litre tank



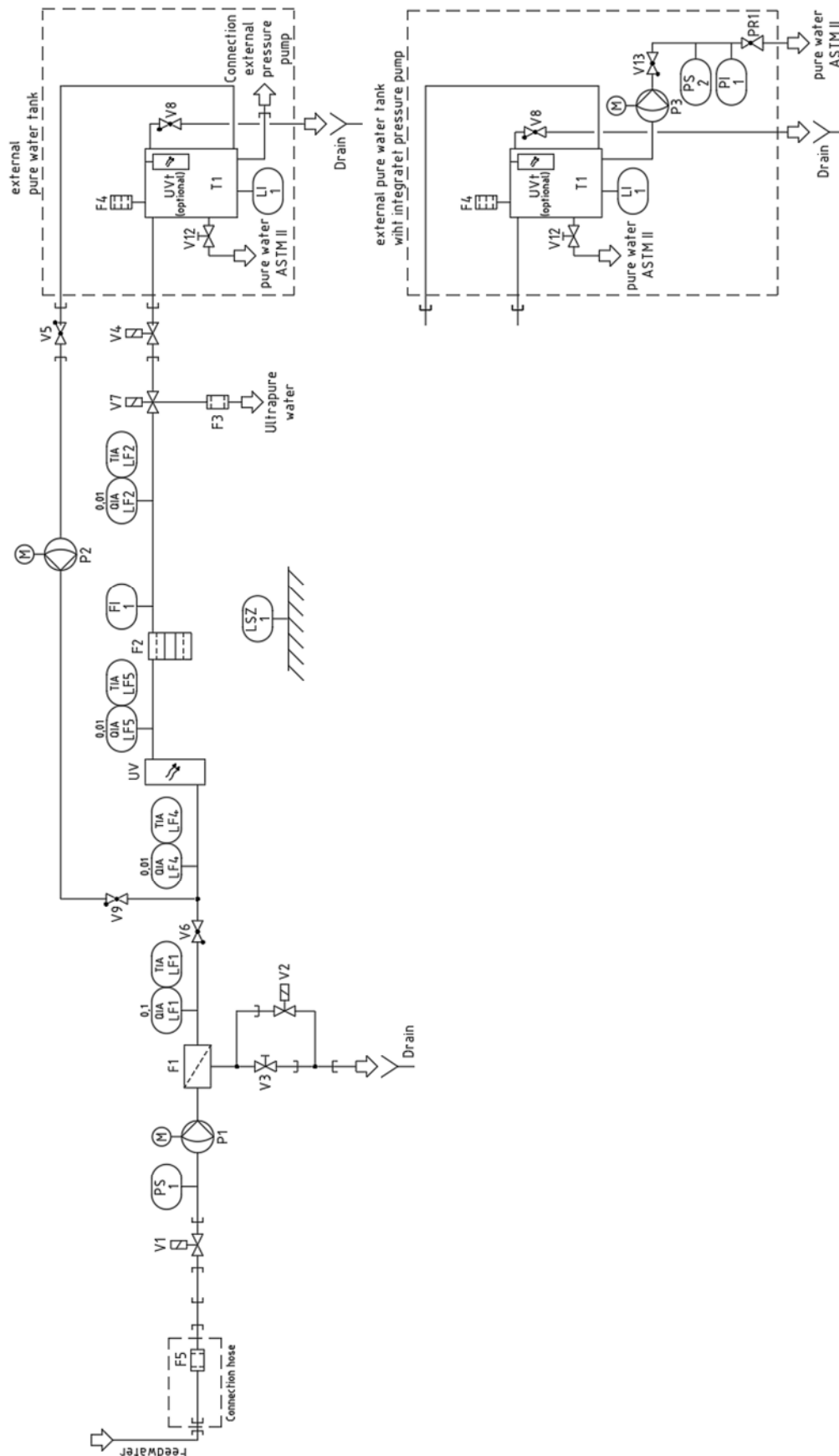
Materials of components in contact with water	
Solenoid valve input	POM, EPDM
Flush solenoid valve	POM, EPDM
Solenoid valve extraction	POM, EPDM
Pump heads	Nylon, glass fibre reinforced
Conductivity measuring cells	POM, stainless steel
Cartridge tubes	PP
Hoses	PE
Hose connector	POM
Seals	EPDM
UV reactor	Stainless steel
UV immersion tube	Quartz glass
Ultrafilter housing	PC
Tank	PE

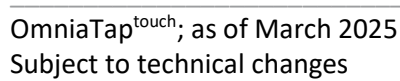
7 Flow diagrams

7.1 Flow chart OmniaTap^{touch}



7.2 Flow chart OmniaTap^{touch} UV-TOC





R+I no.	Designation	R+I no.	Designation
F1	Pre-treatment cartridge	PS1	Pressure switch
F2	Ultrapure water cartridge	PS2	Pressure switch
F3	Sterile filter	T1	Pure water tank
F4	Sterile ventilation filter	UF	Ultrafiltration module
F5	Cap filter (in the connection hose)	UV	UV photooxidation
FI1	Flow meter	UVt	UV disinfection (optional, not with 10 litre tank)
LF1	QIA conductivity measuring cell Pre-treatment	V1	Inlet solenoid valve
LF1	TIA temperature sensor Pre-treatment	V2	Rinsing solenoid valve
LF2	QIA conductivity measuring cell ultrapure water	V3	Pressure retaining valve
LF2	TIA temperature sensor ultrapure water	V4	Circulation solenoid valve
LF4	QIA conductivity measuring cell TOC	V5	Check valve
LF4	TIA Temperature sensor TOC	V6	Check valve
LF5	QIA conductivity measuring cell TOC	V7	Withdrawal solenoid valve
LF5	TIA Temperature sensor TOC	V8	Sterile overflow
LI1	Level sensor	V9	Check valve
LSZ1	Leakage sensor	V10	Check valve
P1	Booster pump	V11	Check valve
P2	Circulation pump	V12	Withdrawal tap
P3	Pressure pump	V13	Check valve
PI1	Pressure gauge		

8 System description

8.1 System equipment

The individual system variants of the OmniaTap series differ in terms of their equipment. You can find the respective features in the following table.

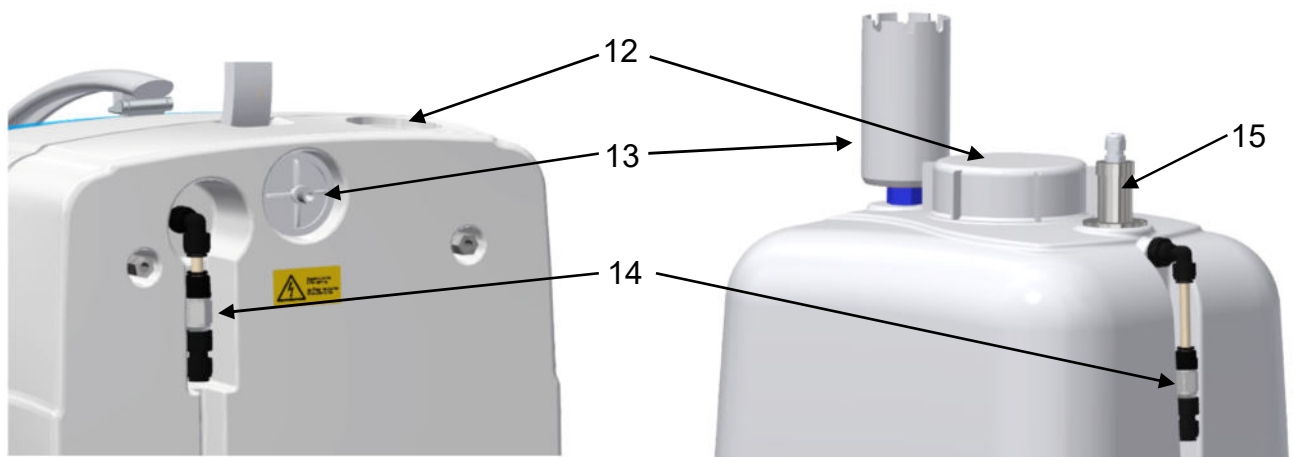
	OmniaTap Standard		OmniaTap UV-TOC		OmniaTap UV-TOC/UF	
Permeate capacity l/h	12	20	12	20	12	20
Article no.	18210101	18210201	18210104	18210202	18210103	18210203
Pre-treatment cartridge	•		•		•	
Ultrapure water cartridge	•		•		•	
UV photooxidation			•		•	
TOC monitoring			•		•	
Ultrafiltration					•	

8.2 System structure

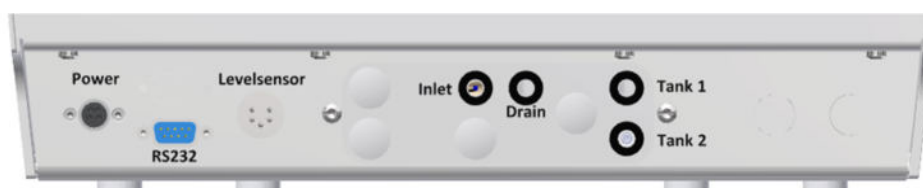


- 1: Detachable OptiFill dispenser with integrated control unit and USB connection
- 2: Rotatable and height-adjustable dispenser arm
- 3: Snap lock
- 4: Removable cover
- 5: Pure water tank (only for 10 litre tank)
- 6: Pre-treatment cartridge
- 7: Ultrapure water cartridge

- 8: UV reactor
- 9: Ultrafiltration module
- 10: Dispenser holder
- 11: USB connection
- 12: Tank opening with cap
- 13: Sterile ventilation filter
- 14: Sterile tank overflow
- 15: UV disinfection (only 30/60 L tank optional)

10 litre tank version**30/60 litre tank version**

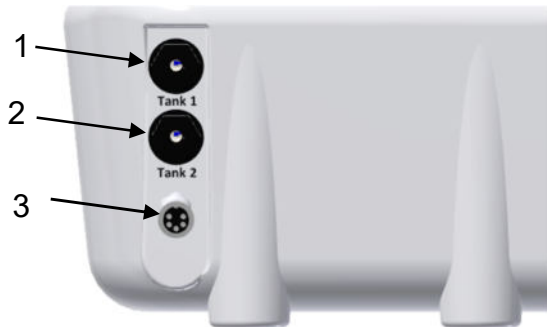
8.3 System connections on the rear

View with integrated 10 litre tank**View without integrated 10 litre tank**

Inlet: Feed water connection Drain: Rinsing water connection Power: Power supply connection RS232: Connection for data printer (optional)	Tank 1: Connection ext. tank flow Tank 2: Connection ext. tank return Levelsensor: Level sensor connection
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8.4 Connections 30/60 litre tanks

Rear left



Rear right

only for version with
integrated pressure pump

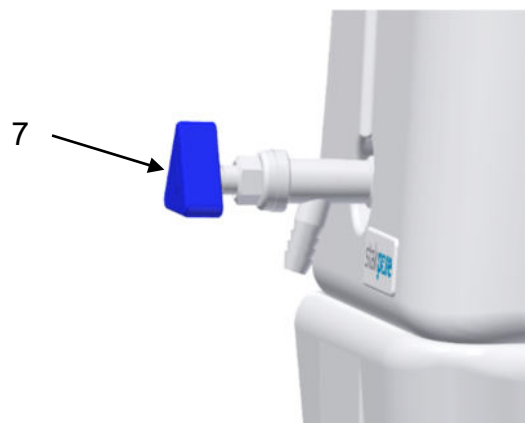
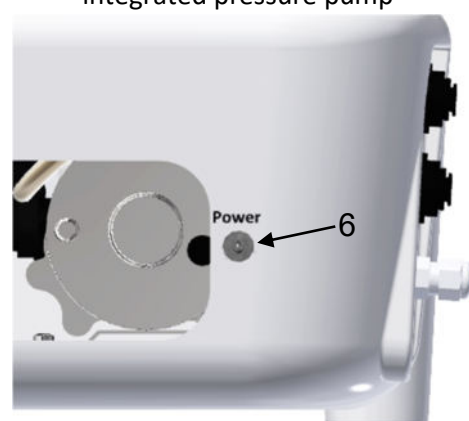


Rear



Rear

only for version with
integrated pressure pump



1: Tank 1, connection flow D 8mm
2: Tank 2 connection return D 8mm
3: 5-pin socket for level sensor
4: Pure water pressure outlet D 8mm

5: Connection for external pressure pump
R3/4" AG
6: Power, power supply connection 48 V DC
7: Withdrawal tap

9 Functional description

The systems in the OmniaTap series process drinking water directly into pure and ultrapure water by utilising several treatment technologies. The ultrapure water produced fulfils the respective requirements of ASTM, ISO, USP and CLSI standards.

For treatment, the feed water is fed into the OmniaTap system, which is pumped through the pre-treatment cartridge with integrated reverse osmosis module by means of a booster pump. The quality of the pre-treated water and therefore the condition of the pre-treatment cartridge is continuously monitored by the first conductivity measurement (LF1). The current values of the conductivity measurement can be shown on the display of the operating / dispensing unit (OptiFill Dispenser) for checking purposes. In the next step, the water is passed through a UV reactor, where it is disinfected using UV radiation. The TOC values are constantly monitored by the conductivity measuring cells LF4 and LF5 and shown on the display. The water then flows through the ultrapure water cartridge, which removes the remaining ions. To remove a maximum of non-ionised compounds, the water is then filtered through an ultrafiltration module (only with OmniaTap UV-TOC/UF). The quality of the ultrapure water and the condition of the consumables are monitored using a temperature-compensated conductivity measurement (LF2). The measured conductivity values are shown on the OptiFill dispenser display.

The treated water is first pumped into the tank up to the maximum fill level. To ensure a consistently high quality of the treated water, the circulation pump periodically circulates the water from the tank through the ion exchanger cartridge, the UV reactor and the ultrafiltration module (only with OmniaTap UV-TOC/UF) back into the tank.

Ultrapure water can be drawn directly from the OmniaTap system via the OptiFill dispenser. In order to achieve maximum water quality, the water is pumped from the tank via the ultrapure water cartridge, the UV reactor and the ultrafiltration module (only with OmniaTap UV-TOC/UF) to the OptiFill dispenser using the circulation pump immediately before removal. As the final treatment stage, the ultrapure water passes through a sterile filter attached to the OptiFill dispenser.

With the 30/60 litre tank version with integrated pressure pump, or with an optionally available pump station for the 10 litre tank version, an external consumer can be supplied directly with pure water from the tank. With the 30/60 litre tanks, it is also possible to draw pure water directly from the tank via a tap.

10 Assembly

10.1 Operating environment

Observe the following requirements when selecting the installation location:

- The feed water pressure must be between 1 and 6 bar.
- The standing surface must be level.
- A suitable earthed socket must be available for the electrical supply of the OmniaTap system (see Technical data).
- There must be sufficient free working space for problem-free operation, maintenance and repair.
- There must be sufficient space to operate the system.
- A house-side, lockable feed water connection with R $\frac{3}{4}$ " external thread is required.



The system is intended exclusively for operation within an industrial environment. Electromagnetic immunity cannot be guaranteed in other environments.



Temperatures below +2°C can damage the appliance due to frost!

The feed water pressure must be less than 6 bar, otherwise the system may be damaged!
Use a pressure reducer if necessary.

Make sure that a free drain is available to prevent water damage!



A free outlet, primarily a DN 50 funnel siphon, must be provided for the rinsing water of the OmniaTap system in the immediate vicinity of the location. The upper edge of the outlet must not exceed a height of 300 mm above the level of the device in order to ensure a free outlet and thus perfect functionality of the drain. It must be ensured that the flush water pipe is neither blocked nor throttled.



A DN 50 floor drain with free drainage must be provided in the operating room. If there is no floor drain, we recommend the use of a water guard to prevent damage to the system, equipment and building.

10.2 Assembly



Set up the OmniaTap system at the operating location and ensure that the system is stable. Never lift the system for transport by the dispenser arm, but only by the rear wall, base or side walls of the main housing. See chapter "Transport and packaging".



Leaks can cause water to escape. Therefore, always ensure that the floor around the work surface is dry to avoid accidents caused by slipping.

Use the connection accessories to connect the OmniaTap system to the feed water connection and to the free drain. Observe the requirements for the feed water (see Technical data). Connect the connection hose with integrated cap filter with its R3/4" internal thread to the feed water connection on the house side. Now insert the free end of the 8 mm hose into the 8 mm quick connector labelled "Inlet" on the back of the system (see System connections). Then connect the second 8 mm hose to the "Drain" appliance connection and guide the free end of the hose into a drain through which the rinse water can drain without pressure.

Version with integrated 10 litre tank:

The 10 litre tank is mounted directly on the back of the appliance at the factory. Connect the sterile tank overflow to the free drain using an 8 mm hose. Screw the sterile ventilation filter into the thread provided at the rear, top left of the tank. (See chapter "System description")

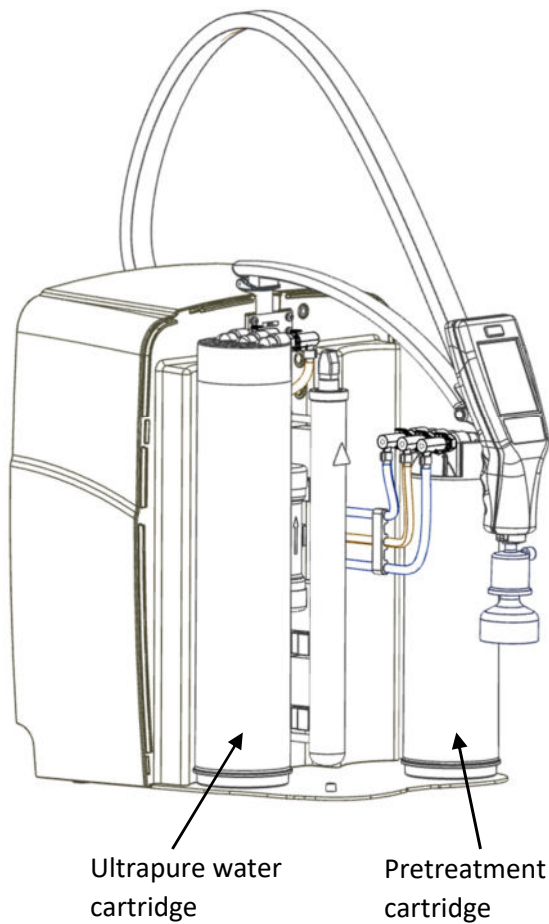
Version with external 30/60 litre tank:

Place the tank in the desired location and proceed as described in the chapter "Installing the external tank".

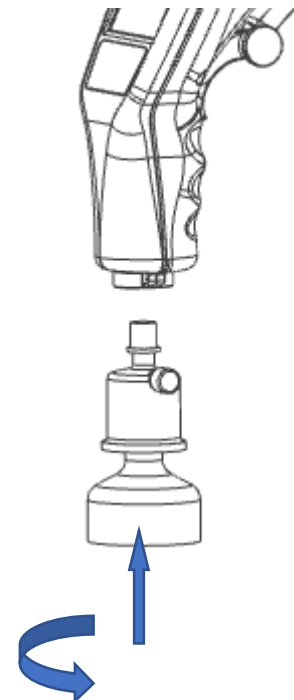
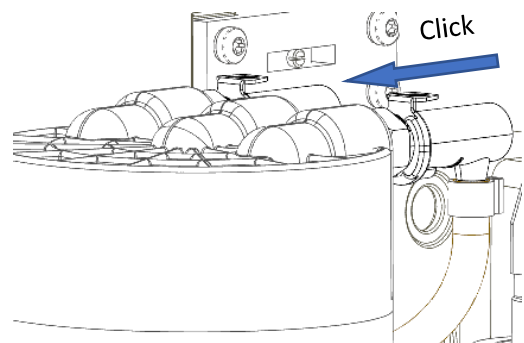
Finally, open the shut-off valve on the feed water connection on the house side. Check the hose connections for leaks.

Remove the cover of the OmniaTap system and insert the pre-treatment cartridge into the right-hand slot and the ultrapure water cartridge into the left-hand slot. Connect the cartridges with the quick-release couplings by pushing them on; the quick-release fasteners must engage audibly.

See illustration



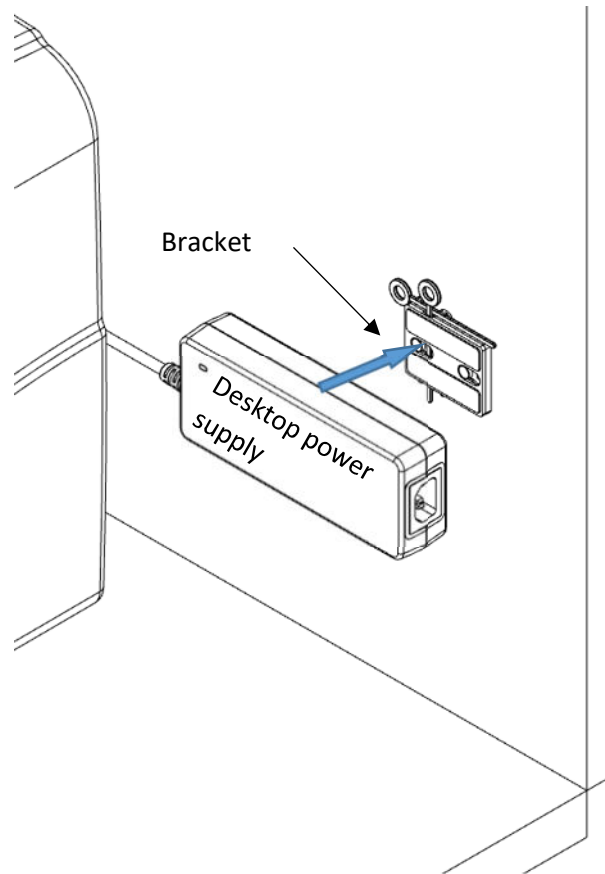
Attaching the quick-release



Finally, screw on the sterile filter with its G1/4" thread into the outlet of the OptiFill dispenser (see illustration).



To protect the desktop power supply unit from moisture, it must not be operated lying next to the appliance on the table. Attach the power supply unit to a suitable wall near the appliance using the bracket supplied (see example in the illustration).



Plug the 4-pin coupling of the power supply unit into the "Power" connection of the OmniaTap system. Ensure that the mains connection cable is connected to the desktop power supply unit and then insert the earthed plug into a suitable earthed socket (see Technical data).

10.3 Wall mounting

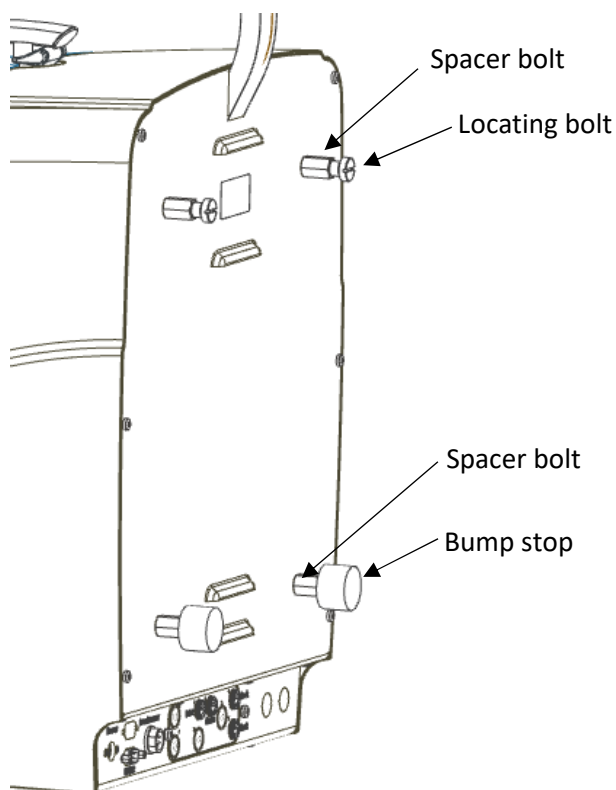


Risk of injury from falling and crushing!

The OmniaTap system may only be mounted on a suitable wall using the optional wall bracket. Only use the wall bracket for the OmniaTap system. Ensure that the wall and the mounting material have a sufficient load-bearing capacity of at least 100kg. The fixing material supplied with the wall bracket is designed for use in conjunction with concrete or solid stone. Check the suitability of the fixing material in relation to the wall material and replace it with a suitable one if necessary.

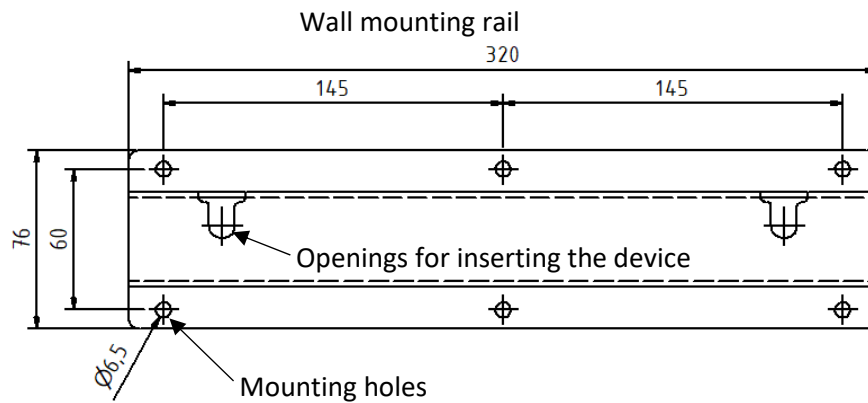
The optional wall bracket allows you to mount your OmniaTap system on a suitable wall to save space. The free wall surface should be approx. (W x H) 600mm x 800mm. For professional and secure wall mounting, we recommend installation by our customer service team.

Firstly, your OmniaTap system must be prepared for wall mounting. The parts required for this are included with the wall bracket. To prepare the OmniaTap system, screw the two M8 locating bolts into the two upper M8 threaded bushes on the back of the system. The two stop buffers are screwed into the two lower M8 threaded bushes on the rear of the system. (see illustration).



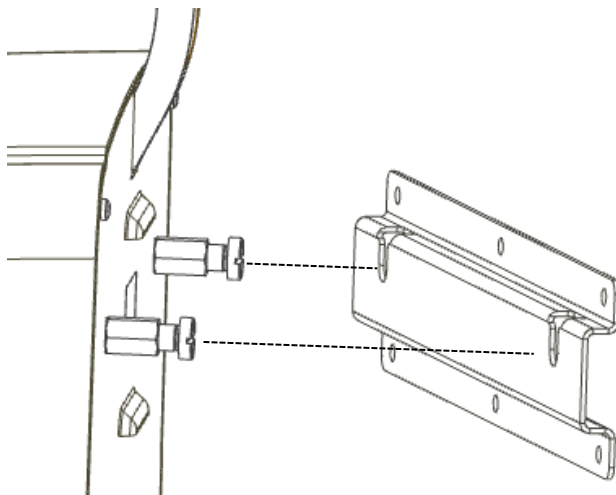
The next step is to attach the wall mounting rail to the wall.

This requires 6 holes with a diameter of 8 mm and a depth of at least 60 mm. Drill the holes as shown in the "Wall mounting rail" illustration below. Ensure that they are aligned horizontally.



Then insert the wall plugs into the drill holes and fix the wall bracket rail to the wall with the screws so that the two mounting holes are facing upwards. Please note that the fixing material supplied with the wall bracket is intended for installation in concrete and solid brick walls. If the wall bracket is to be attached to a wall made of a different material, the fixing material must be replaced with suitable material.

You can now hook the OmniaTap system into the wall mounting rail. To do this, lift the system by gripping it at the specified holding points (see "Transport and packaging"). Secure yourself against falling when lifting the system with the help of a second person. Now hook the two mounting bolts of the system into the mounting holes of the wall mounting rail. Ensure that the system is additionally supported on the wall by the two bumpers.

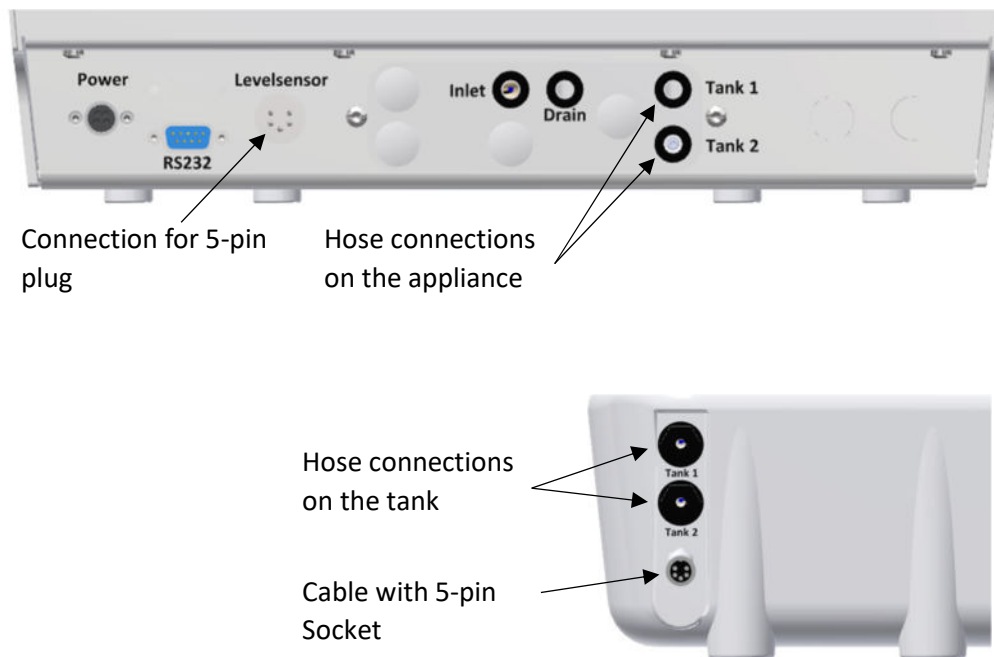


10.4 Mounting external tank

If you have purchased an appliance with an external 30 or 60 litre pure water tank, connect this to your OmniaTap appliance as follows.

Place the pure water tank in a suitable location or mount the tank on the wall using an optional wall bracket, as described in the following chapter. The distance between the tank and the appliance should not be more than 2 metres

Connect the appliance to the tank using the 8 mm hose included in the scope of delivery. Insert the first hose into the "Tank 1" connection on the appliance and connect it to the "Tank 1" connection on the tank. Then connect the "Tank 2" connections on the appliance to the "Tank 2" connection on the tank. Connect the 5-pin socket on the tank to the 5-pin plug on the device labelled "Levensensor". Connect the sterile tank overflow to the free drain using an 8 mm hose. Screw the sterile ventilation filter into the thread provided on the top of the tank. For the version with integrated pressure pump, plug the power supply unit into a suitable socket and insert the plug into the "Power" connection on the back of the tank. (See chapter "System description")



10.5 Wall-mounted external tank



Risk of injury from falling and crushing!

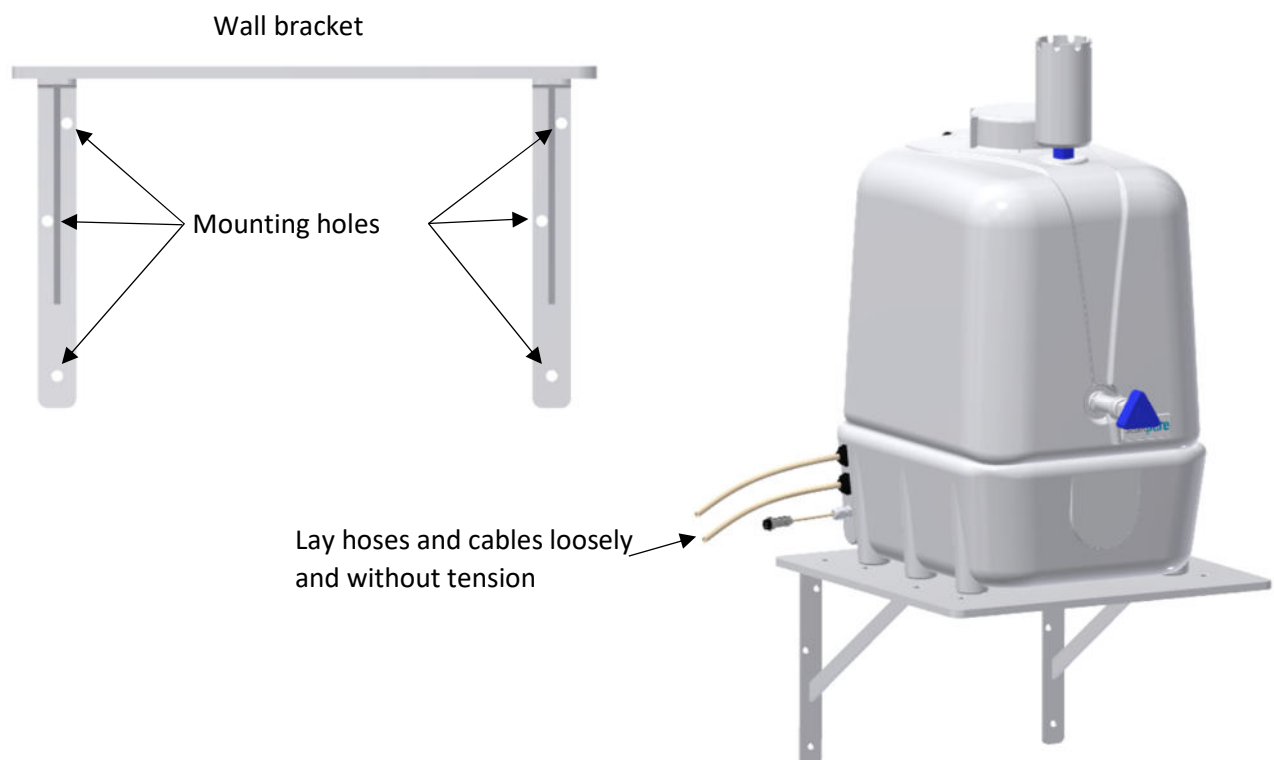
Ensure that the wall and the fastening material have a sufficient load-bearing capacity of at least 150kg. The fixing material supplied with the wall bracket is designed for use in conjunction with concrete or solid brick. Check the suitability of the fixing material in relation to the wall material and replace it with a suitable one if necessary.

The optionally available wall bracket for the external tank allows you to attach it to a suitable wall to save space. For professional and secure wall mounting, we recommend installation by our customer service team.

To attach the wall bracket to the wall, 6 holes with a diameter of 8 mm and a depth of at least 60 mm are required. Hold the wall bracket in the desired position on the wall and mark the drill holes through the 6 fixing holes on the wall. Ensure that the wall bracket is aligned horizontally. Drill the holes in the wall and insert the wall plugs supplied. Fasten the wall bracket to the wall using the screws supplied.



Place the clean water tank on the console, making sure that the hoses and cable are laid loosely and without tension to prevent the clean water tank from falling off the console.

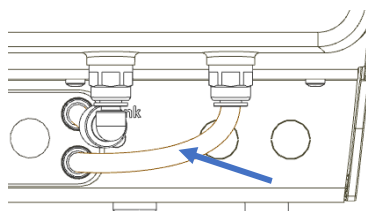


10.6 Installation of an optional pump station

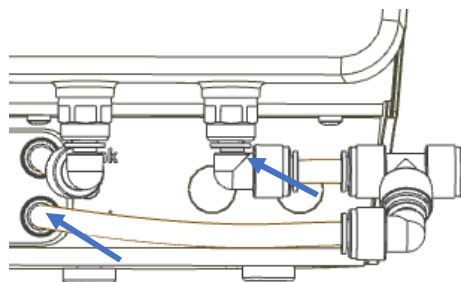
To be able to supply an external consumer such as an analyser directly with pure water from the tank of the OmniaTap system, an optional pump station, article number 16580000, is available. The pump station can be connected directly to the tank of the OmniaTap system. Proceed as follows to connect the pump station:

1. Make sure that the OmniaTap system is disconnected from the mains voltage and that the tank has been completely emptied.

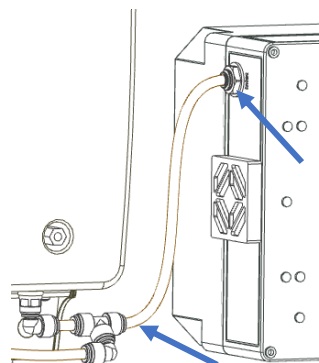
2. Now remove the hose connection of the right-hand tank connection on the rear of the system as shown in the adjacent illustration.



3. The pump station is supplied with a T-connector prepared with hoses. Insert the fitting and the end of the hose into the corresponding connections of the tank and the system as shown in the adjacent illustration.



4. Now connect the "Inlet" connection of the pump station to the free connection of the T-connector using the 8 mm hose supplied.



5. You can now connect an external consumer to the outlet of the pump station using an 8 mm hose. The flow rate is approx. 72l/h at 2bar outlet pressure.



11 Operating concept

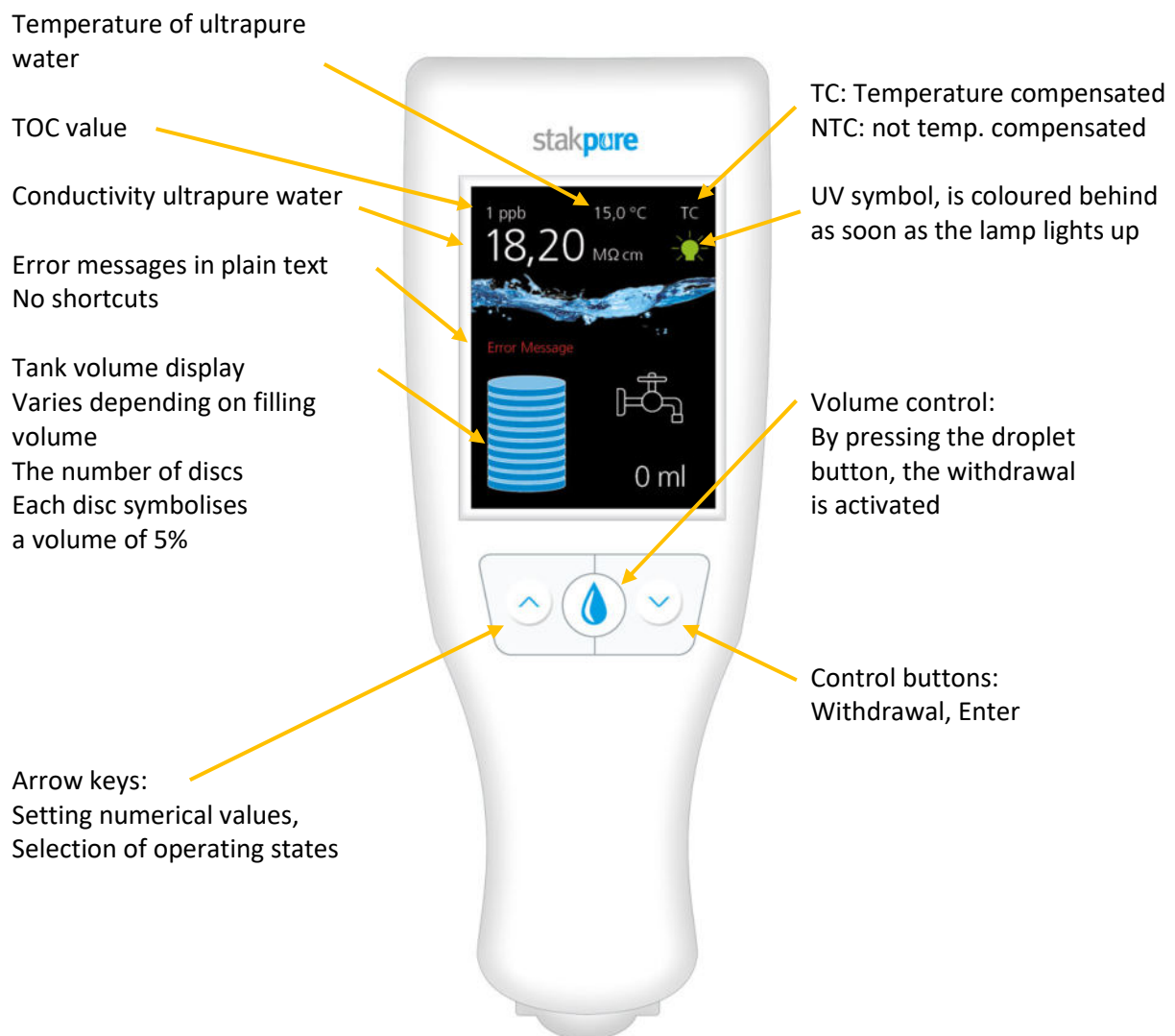
The Omnia devices are operated using the three buttons below the display. If entries are required in the respective menus, an ESC and Enter button also appear on the screen as touch buttons.

You can access the menus by "swiping"; if you slide the main display upwards, you will reach the customer menu. All other conductivities including limit value and temperature of the corresponding measuring cell, operating hours (pumps, UV) are displayed there.

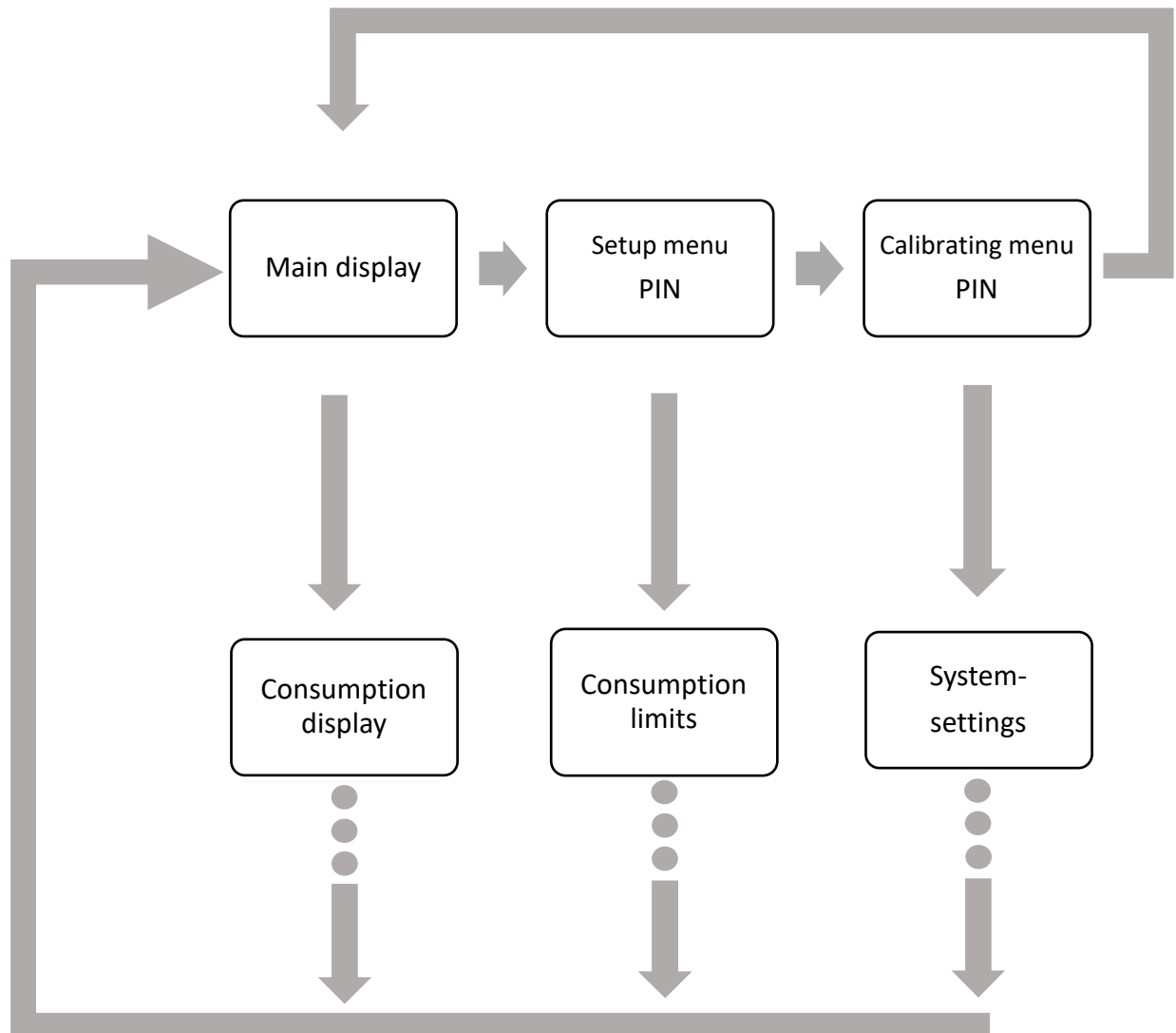
If you slide the screen to the left, the setup menu appears first. You then navigate through the setup menu in a vertical direction.

If you move the screen from the setup menu further to the left, you will reach the calibration menu. You then navigate through the calibration menu in a vertical direction.

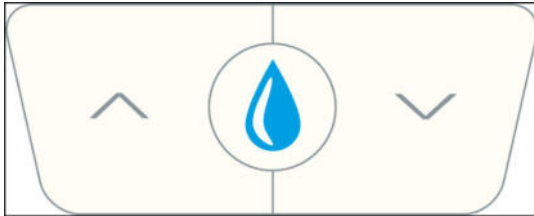
11.1 Main display



11.2 Navigation



11.3 Operating concept



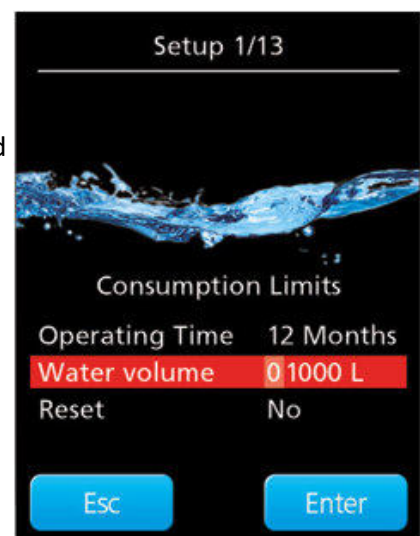
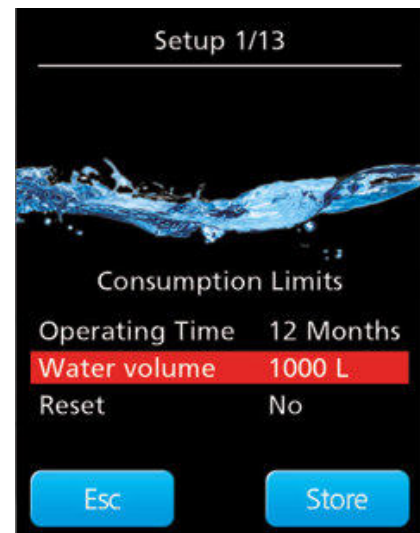
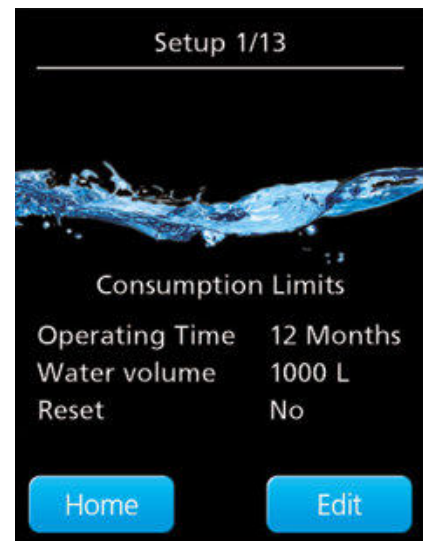
After pressing the "Change" soft key, the selected line is highlighted in red.

Another value can be selected by pressing the arrow key.

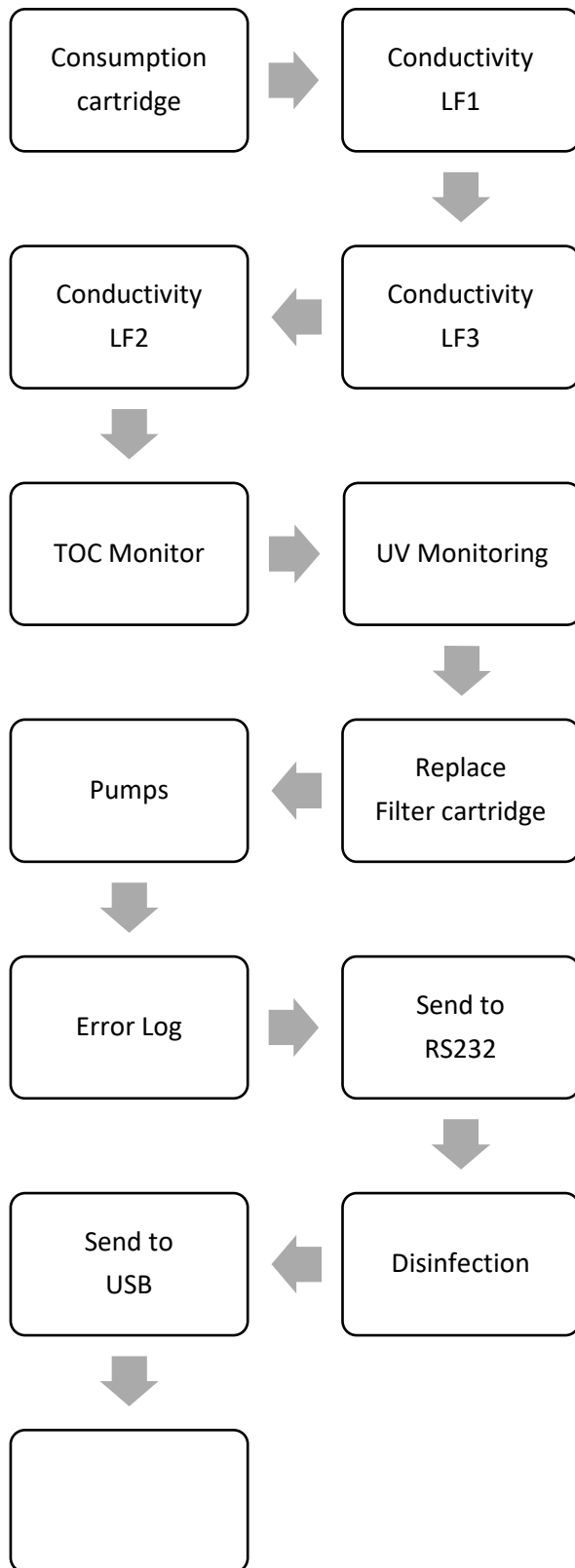
The input is activated with the drop key and the cursor jumps to the first digit.

Use the drop button to move the cursor to the position to be changed and use the arrow keys to set the desired value.

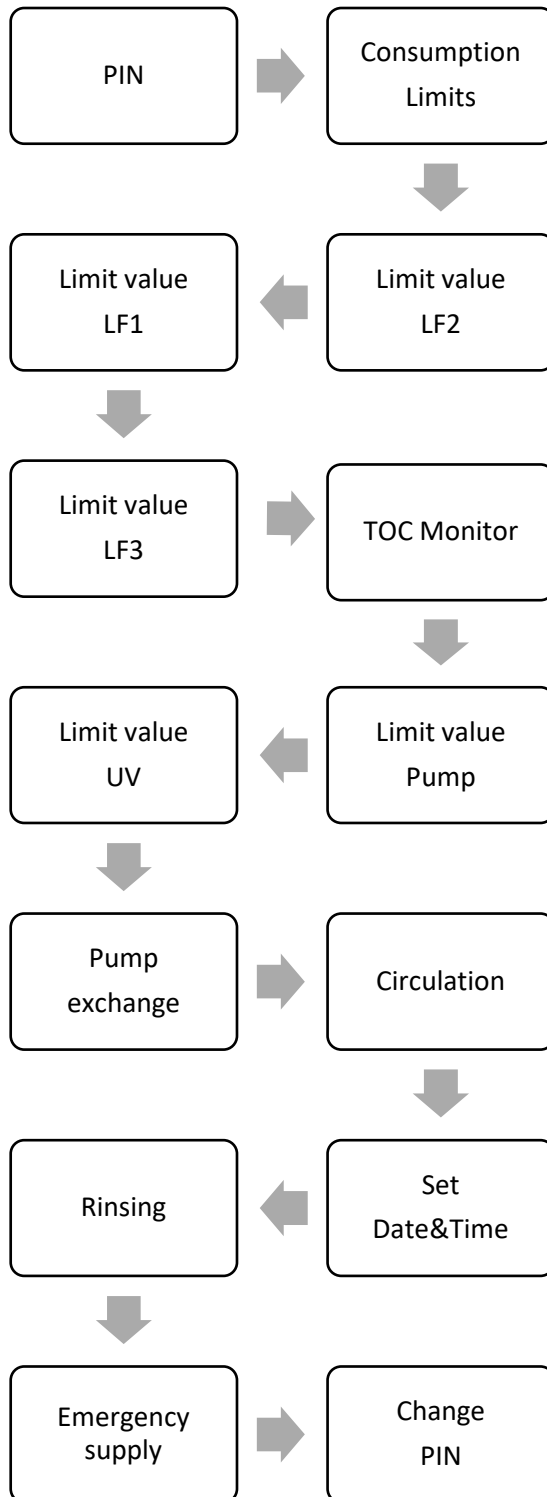
Then confirm the input with Enter and exit the menu with the Home button.



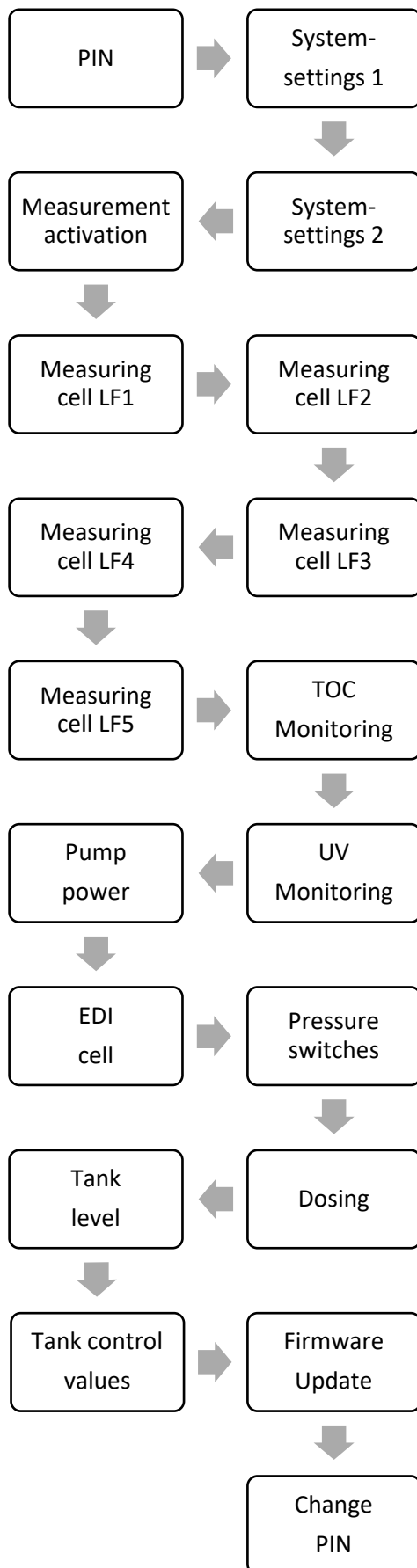
11.4 Client menu



11.5 Setup menu

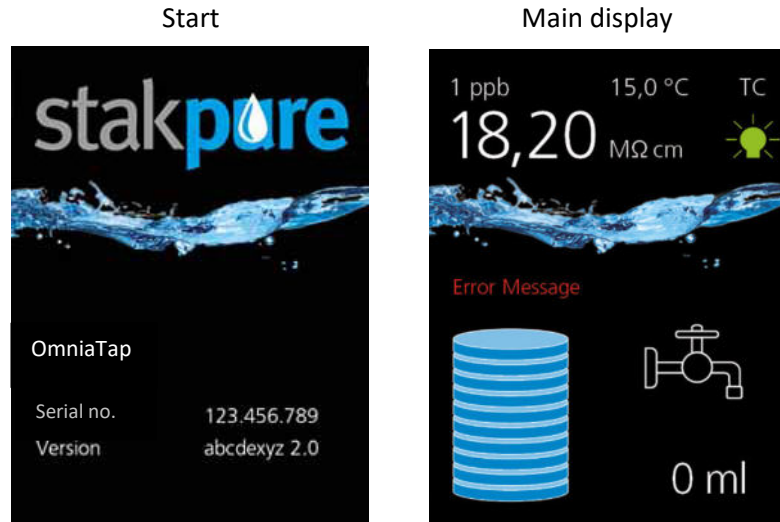


11.6 Calibration menu



12 Commissioning

As soon as the power supply to the OmniaTap xs system is established, the system starts and the system name, serial number and software version are displayed for 3 seconds. The display then changes to the main display.



The system will now automatically start producing pure water and filling the tank. As soon as the maximum filling level of the tank is reached, the system automatically switches to circulation mode. Now empty a tank by pressing the withdrawal button and discard the water that has been withdrawn. The system is now ready for use.

13 Volume-dosed water withdrawal

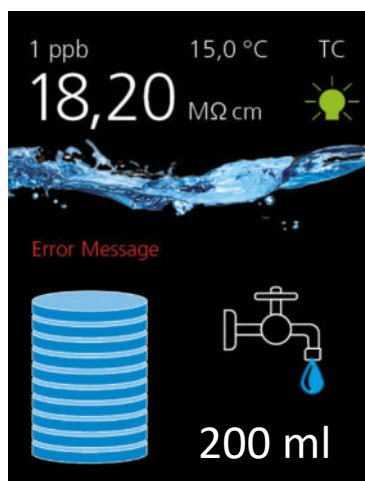
Pressing the drop button activates the dispensing mode, recognisable by a drop indicator under the dispensing tap on the display.

You have two options for volume-dosed water withdrawal.

13.1 Withdrawal with preset values

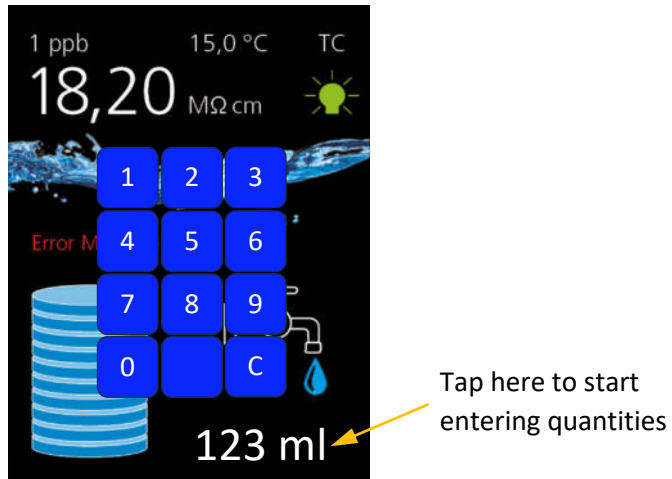
To withdraw a preset withdrawal quantity, press the drop button to enter the withdrawal mode. You can now use the arrow buttons to select one of the preset values (see table below) and confirm with the drip button. Press the drip button again to start dispensing, which stops automatically when the set dispensing value is reached. However, you can also stop water dispensing at any time by pressing the drip button again.

Preselectable dispensing quantity in ml								
50	100	150	200	250	300	400	500	600
800	1000	2000	3000	5000	10000	20000	25000	



13.2 Withdrawal with free quantity input

To withdraw a freely selected withdrawal quantity, press the drop button to enter the withdrawal mode. Tap "ml" on the display to open a keypad for entering the desired withdrawal quantity. Press the drip button to start dispensing, which stops automatically when the set dispensing value is reached. However, you can also stop dispensing water at any time by pressing the drip button again.



You can see the amount of water currently being drawn off on the display while the water is being drawn off. The conductivity of the ultrapure water is displayed to check the water quality.

14 Data output

With the Omnia xs touch devices, you can output various parameters for documentation via a USB interface or optionally print them out using a data printer.

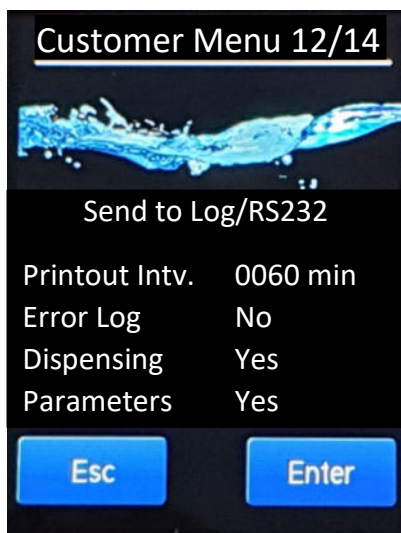
14.1 Data output via data printer

A data printer is available as an option, which you can use to print out and document the various parameters of the device.

Connect the printer to the 9-pin RS232 interface on the back of the device using the connection cable supplied.

To obtain a printer output, you must make the following settings in the system:

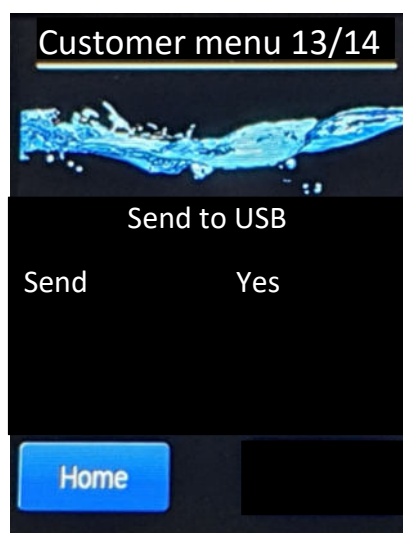
To select the parameters to be output, scroll down from the main menu in the customer menu to item 12/14 "Output log/RS232" and set the desired parameters as shown in the example below.



14.2 Data output via USB

You can also save the data to a USB stick if required. Please note that the output of error and activation codes is limited to a maximum of 50 entries and the output of measurement data to a maximum of 100. If this number is exceeded, the oldest entry is deleted for each subsequent entry.

Insert a USB stick into the USB socket on the top right-hand side of the dispenser. Scroll down from the main menu in the display to item 13/14 "Send to USB" and select "Yes" under "Send"; the data is immediately output to the USB stick as a table in CSV format.



15 Maintenance

Regular maintenance and care of the OmniaTap system is required to ensure consistently good water quality. For professional and regular maintenance of the OmniaTap system, we recommend that you conclude a maintenance contract with an authorised customer service centre.



If improper maintenance, care and repair work is carried out on the system, the warranty for this system will be invalidated. The use of non-approved consumables and spare parts as well as any modifications will also invalidate the warranty and the CE Declaration of Conformity will no longer be valid.



To avoid injury, wear suitable protective clothing such as safety shoes, gloves or safety goggles.



Leaks can cause water to escape. Therefore, always ensure that the floor around the work surface is dry to prevent accidents caused by slipping.



During installation or maintenance work, the system must be de-energised by disconnecting the mains plug, otherwise there is a risk of electric shock.

15.1 Maintenance / care intervals

The frequency of the maintenance measures essentially depends on the quality of the feed water and the quantity of water drawn off. The maintenance intervals listed in the following table are recommendations and may be required earlier depending on the requirements of the ultrapure water.

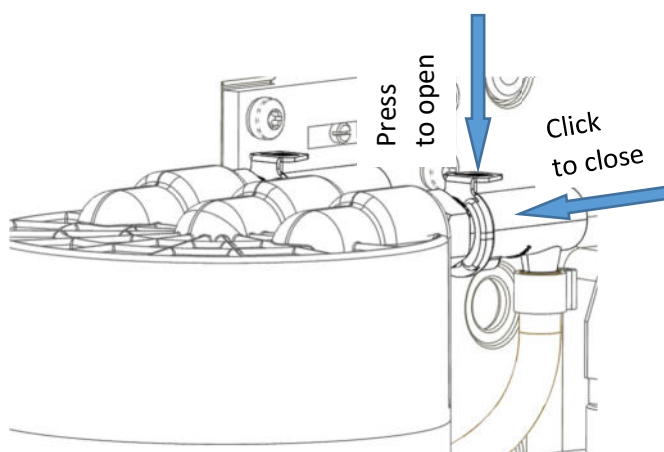
Maintenance measure	Interval
Changing the pre-treatment cartridge	12 months ¹
Changing the ultrapure water cartridge	12 months ²
Changing the UV lamp in the device Changing the UV lamp in the 30/60 L tank (optional)	3000 h ³
Changing the ultrafiltration module	24 months
Changing the sterile filter capsule	12 months
Changing the sterile ventilation filter	12 months
Change CO ₂ absorber	12 months
Disinfection	12 months

1. For the permeate, a limit value of max. 40 µS/cm is set at the factory for the conductivity "LF1". If this value is reached before 12 months have elapsed, the pre-treatment cartridge must be replaced prematurely.
2. In the customer menu, you can set the limit value for the water quantity after the first filter cartridge change. This allows you to customise the replacement interval to your feed water conditions. The filter cartridge should then be replaced once the limit value has been reached, but at the latest after 12 months.
3. Or after 24 months at the latest.

15.2 Changing the cartridges

The cartridges must be replaced at regular intervals (12 months) or if the limit value specified by you is permanently exceeded. The start of the interval is the time at which the respective filter cartridge was first connected to the system. Proceed as described below to replace the pre-treatment and ultrapure water cartridges:

1. Switch off the OmniaTap System by disconnecting it from the mains voltage.
2. Swivel the Optifill dispenser with dispensing arm to the left or right.
3. Remove the cover from the system. To do this, press the two side snap locks (see system description) and pull the cover forwards off the main housing.
4. The ultrapure water cartridge is located in the left-hand slot and the pre-treatment cartridge is located in the front, right-hand slot (see chapter Installation). Open the quick-release fasteners by pressing the clip (see illustration) on the quick-release fastener of the system and remove the cartridge to be replaced.
5. Place the new cartridge in the appropriate position in the system. Use the positioning aid on the base of the housing to make positioning easier.
6. Connect the cartridge to the system using the quick-release fasteners. Make sure that the quick-release fasteners engage audibly.
7. Enter the code printed on the filter cartridge in the customer menu under "Change filter set" and confirm the entry.
8. Replace the cover and turn the OptiFill dispenser back into the desired position.
9. Plug the mains plug back in to start the system.



15.3 Disinfection

To protect the OmniaTap system from contamination by biological deposits, it should be disinfected at regular intervals (12 months). You will need the disinfection kit article no.: 19200058.



Danger of chemical burns!

Disinfection of the OmniaTap system may only be carried out by suitably qualified personnel.

Protect yourself from injury by wearing suitable safety clothing (at least gloves and safety goggles).

Always observe the safety data sheet enclosed with the disinfectant and follow the instructions for handling the disinfectant exactly.

Only use the disinfectant approved for the OmniaTap system.

The disinfection process is described below. The disinfection process takes approx. 30 minutes.

Open the "Disinfection" menu in the customer menu and confirm the start of the disinfection process. You will now be prompted to insert the disinfection cartridge into the device. To continue, first prepare the disinfectant cartridge with the disinfectant according to the instructions enclosed with the disinfection kit. Then remove the ultrapure water cartridge from the system as described in the section 'Changing the cartridges'. Insert the disinfection cartridge into the position of the ultrapure water cartridge and connect it using the quick-release fasteners. Confirm the insertion of the disinfection cartridge by pressing the enter button.

If you want to cancel the process, you can do so within 10 seconds of starting by pressing the Stop button.

In the next step, the system starts circulating the disinfectant solution. Once the circulation phase is complete, the system is automatically rinsed. The remaining time is shown on the display; the entire process takes 30 minutes. This process cannot be cancelled and must be completed in full.

Once disinfection is complete, you will be prompted to reinsert an ultrapure water cartridge. To replace the cartridges, proceed as described in the section "Changing the cartridges" and end the process by pressing the enter button. The system switches to normal operation.

16 Decommissioning & dismantling

Decommissioning and disassembly may only be carried out by authorised specialist personnel.

If the OmniaTap system is to be decommissioned and dismantled, proceed as follows:

- Disconnect the system from the mains by pulling out the mains plug
- Remove all hoses from the system connections.

The system is now ready for dismantling.



Leaks can cause water to escape. Therefore, always ensure that the floor in the area of the work surface is dry to avoid accidents caused by slipping.

17 Spare parts

R+I no.	Designation	Item number
F5	Hat filter	31000041
FI1	Flow meter	25000070
LF1	Conductivity measuring cell Pre-treatment	14180001
LF2	Conductivity measuring cell ultrapure water	14180004
LF4	Conductivity measuring cell TOC	14180004
LF5	Conductivity measuring cell TOC	14180004
LSZ1	Leakage sensor	50002819
P1	Booster pump	29006000
P2	Circulation pump	29006000
P3	Pressure pump in the tank	29006000
PI1	Pressure gauge	25000020
PR1	Pressure reducer	25200052
PS1	Pressure switch	25000091
PS2	Pressure switch	25000024
UV	UV immersion tube UV ballast 230V	32000026 26000060
UVt	UV immersion tube UV ballast 24V	50001234 26000061
V1	Inlet solenoid valve	50003160
V2	Rinsing solenoid valve	50003160
V3	Pressure retaining valve	25200051
V4	Circulation solenoid valve	50003160
V6	Check valve	25200050
V7	Withdrawal solenoid valve	40000118
V8	Sterile overflow	50001653

V9	Check valve	25200050
V10	Check valve	25200050
V11	Check valve	25200050
V12	Withdrawal tap	25000009
V13	Check valve	25000016
	Interface board	26000053
	CPU TFT board	50003163
	Replacement touch display incl. front handle section	26000075
	Desktop power supply 48V, 120W	26100016
	Plug-in power supply 48VC, 90W	50004156

18 Consumables

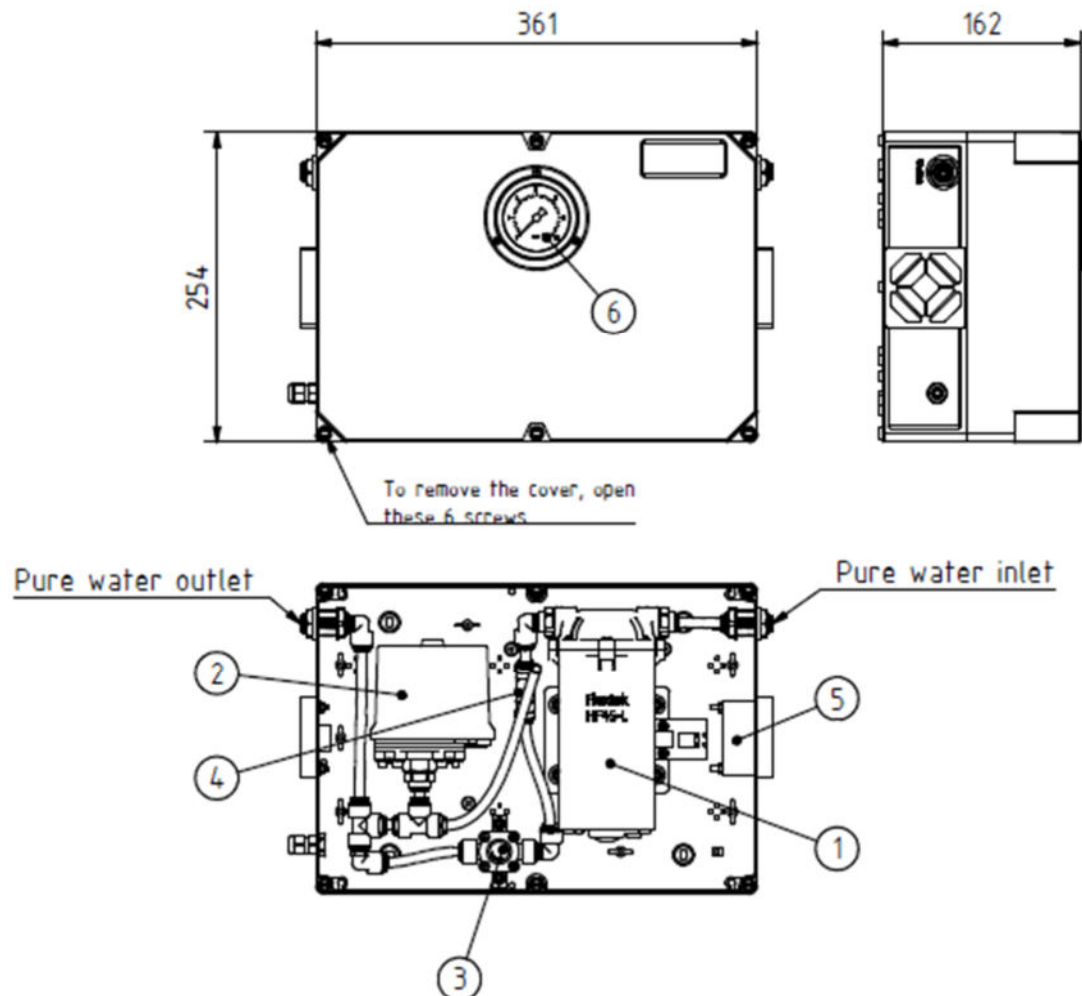
R+I no.	Designation	Item number
F1	Pre-treatment cartridge OmniaTap 12 OmniaTap 20	19200010 19200013
F2	Ultrapure water cartridge	19200003
F3	Sterile filter capsule 0.2µm	19100300
F4	Sterile aeration filter (for 10 litre tank) CO ₂ absorber, aeration filter (for 30/60 L tank) Sterile aeration filter (for 30/60 L tank with external pressure pump)	19500400 19500200 19500300
UF	Ultrafiltration module	19000050
UV	UV lamp 185nm, 11W	19200055
UVt	UV lamp 254nm, 16W	19200054
	Printer paper rolls 1 PU = 5 pieces	18900004

19 Accessories

Designation	Item number
Bio final filter 0.1µm, negatively charged	19102100
Omnia disinfection kit	19200058
Disinfection syringe incl. disinfectant	19200057
Wall bracket Omnia	19200300
External pump station	16580000
Data printer incl. printer paper rolls	19200060
UV disinfection for clean water tank 30/60 L	19200050

20 External pump station (option)

With this pump station, you can supply external consumers such as an analyser directly with pure water from the tank of the OmniaTap system.



Technical data	
Tension	100 - 240 VAC
Frequency	50/60Hz
Power consumption (max.)	100W
Pure water flow rate	72 l/h at 2 bar

20.1 Spare parts external pump station

No.	Designation	Item number
1	Pressure pump	29006000
2	Pressure switch	25000024
3	Pressure reducer	25200052
4	Check valve	25000050
5	Fan	50002308
7	Pressure gauge	25000020

21 Faults, causes & solutions

21.1 Fault table

Malfunction	Possible cause	Solution
System does not start / The display shows nothing	No or faulty power supply	Ensure the power supply in accordance with the specifications at " 6Technical data ".
System does not produce pure water, tank is not filled	System receives no feed water	Check the hose connection of the feed water supply. Open the feed water supply on the house side.
	Inlet pressure is too low	Check the inlet pressure (feed water pressure) and increase it if necessary.
	The membrane of the pre-treatment cartridge is blocked	Insert a new pre-treatment cartridge
	The pressurising valve or the operating pressure is set incorrectly	Please contact customer service
	Pressure pump is defective or working incorrectly	Please contact customer service
No water can be drawn off	Tank level too low	If the tank level is lower than the minimum fill level (10%), no water can be removed. Wait until the tank is sufficiently full (>15%)
	There is air in the line from the tank to the treatment unit	Bleed the system by leaving the tapping running for 5 minutes or until water appears. Contact customer service if necessary
	Extraction solenoid valve is Defective	Please contact the Customer service
The system does not flush	The flush solenoid valve is defective.	Please contact customer service
Extraction capacity is too low	The circulation pump is not working correctly	Please contact customer service

21.2 Error messages

Error messages are shown flashing and in red on the display. If there are several errors, these are displayed one after the other. Once the error has been rectified, the display goes out after approx. 15 seconds.

Error message	Possible cause	Solution
Feed water pressure	No feed water supply, or feed water pressure is too low	Check the feed water supply, increase the feed water pressure if necessary
Limit Pretreatment Permeate	Pre-treatment cartridge is exhausted	Insert a new pre-treatment cartridge
	Feed water does not fulfil the requirements	Check the quality of the feed water
	Limit value for LF1 set too low	Check the setting for the limit value LF1
Limit pure water	Ultrapure water cartridge is exhausted	Replace the ultrapure water cartridge
	Pre-treatment cartridge is exhausted	Insert a new pre-treatment cartridge
	Feed water does not fulfil the requirements	Check the quality of the feed water
	Limit value for LF2 set too low	Check the setting for the limit value LF2
Limit TOC Conduct.	Limit value for TOC is set too low	Check the setting of the TOC limit value
	Feed water does not fulfil the requirements	Check the quality of the feed water
Pretreatment Temp.	Limit value for LF1 is set too low	Check the temperature limit setting
	Feed water temperature too high	Check the feed water temperature
Pure Water Temperature	Limit value for LF2 is set too low	Check the temperature limit setting
	Ultrapure water temperature too high	Check the feed water temperature
TOC Cell Temperature	Limit value for LF5 is set too low	Check the temperature limit setting
	Feed water temperature too high	Check the feed water temperature
Measurement Cell LF1	Defect of the Conductivity measurement LF1	Please contact customer service
Measurement Cell LF2	Defect of the Conductivity measurement LF2	Please contact customer service
Measurement Cell LF4	Defect of the Conductivity measurement LF4	Please contact customer service
Measurement Cell LF5	Defect of the Conductivity measurement LF5	Please contact customer service

Temp. Sensor LF1	Defect of the Conductivity measurement LF1	Please contact customer service
Temp. Sensor LF2	Defect of the Conductivity measurement LF2	Please contact customer service
Temp. Sensor LF4	Defect of the Conductivity measurement LF4	Please contact customer service
Temp. Sensor LF5	Defect of the Conductivity measurement LF5	Please contact customer service
UV lamp	UV lamp or UV ballast defective	UV lamp or UV ballast must be replaced. Please contact customer service
Leakage	Leaking hose connection or component in the device	Stop/disconnect the feed water supply to the system, de-energise the system by pulling out the mains plug and contact customer service
Level Sensor	Defect in the tank level sensor. The operation of the system is stopped to prevent a possible overflow of the tank.	Please contact customer service
Overfilled Tank	Tank is too full or overflowing. Input solenoid valve defective.	Close the feed water supply and contact customer service.
Dispensing valve	Removal solenoid valve in the dispenser defective.	Please contact customer service.
Inlet valve	Input solenoid valve is defective.	Please contact customer service.
Circulation valve	Circulation solenoid valve is defective.	Please contact customer service.
Rinsing valve	Flush solenoid valve is defective.	Please contact customer service.
Circulation pump	Circulation pump is defective.	Please contact customer service.
RO pump	Booster pump is defective.	Please contact customer service.
Run Time UV	Max. Operating hours of the UV lamp have been exceeded	UV lamp must be replaced

Dry Run	Tank level too low	Check the feed water supply
		If the tank level is lower than the minimum fill level (10%), no water can be drawn become. Wait until the Tank sufficient (>15%) is filled
		Wait until enough pure water has been produced
Run time filter	The maximum operating time of the ultrapure water cartridge has been reached.	Please change the ultrapure water cartridge
Op. volume filter	The maximum operating volume of the ultrapure water cartridge has been reached.	Please change the ultrapure water cartridge
Run time P1	The maximum number of operating hours of the booster pump has been reached.	Please contact customer service.
Run time P2	The maximum number of operating hours for the circulation pump has been reached.	Please contact customer service.
Switching cycles P1	The maximum number of switching cycles of the booster pump has been reached.	Please contact customer service.
Switching cycles P2	The maximum number of switching cycles of the circulation pump has been reached.	Please contact customer service.

22 Waste disposal



Stakpure ultrapure water systems are labelled with a "crossed-out waste bin". This means that your old electrical appliance must not be disposed of with normal household waste in accordance with European Regulation 2012/19/EU. You can dispose of the waste electrical and electronic equipment at one of the local recycling collection centres for waste electrical and electronic equipment, or Stakpure will dispose of your old appliance in a professional, environmentally friendly manner. To clarify the procedure for returning your old electrical appliance, please contact your retailer or contact us directly:

stakpure GmbH
Mrs Yvonne Reuter
D - 56414 Niederahr
Phone: +49 2602 10673-107
E-mail: yvonne.reuter@stakpure.com

We expressly point out that in accordance with § 19a ElektroG, any personal data on the appliances to be disposed of must be deleted by you.

In countries outside the European Economic Area, please contact the local authorities or waste disposal companies for disposal.

If the packaging of the appliance is no longer required, it can be recycled in an environmentally friendly manner in the appropriate waste bin.

The pre-treatment and filter cartridges can be disposed of in the residual waste in accordance with local regulations.



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