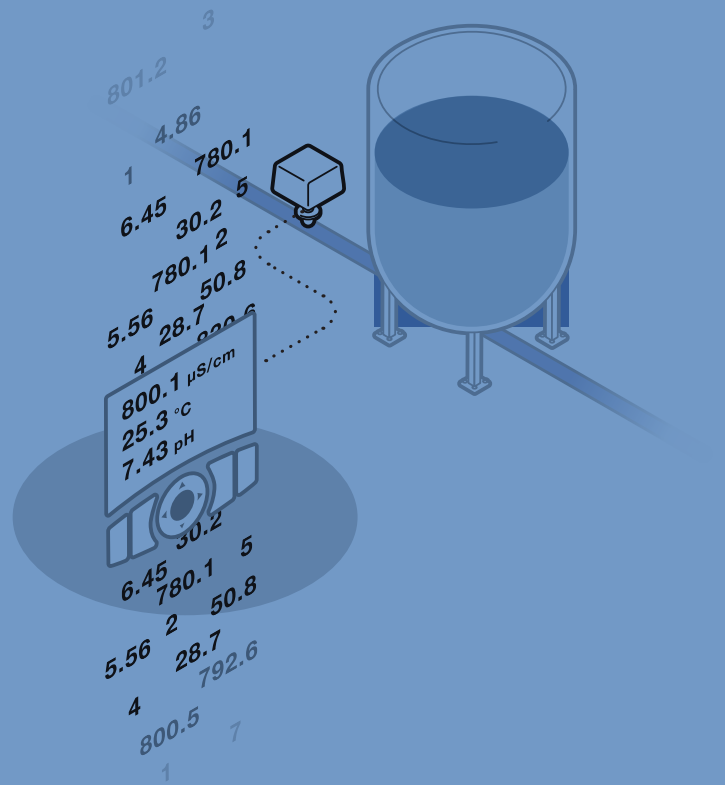




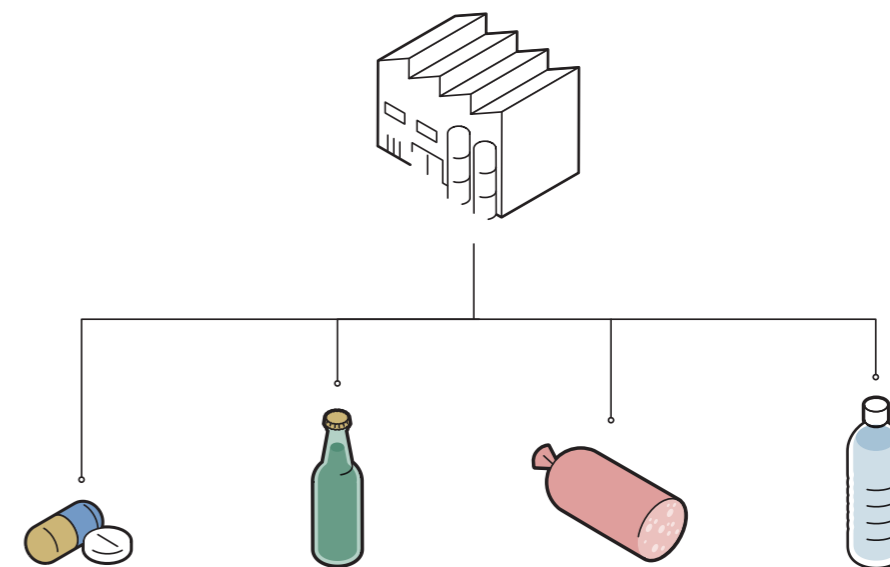
# Analysing water, time-saving and efficient





**/ Time-saving and cost-effective water analysis / You know the quality of your process water better than anyone: Highly purified water for the pharmaceutical industry requires a different type of treatment than water used to produce food and beverages. Bürkert offers time-saving solutions that will help you continuously monitor and document this water quality. This ensures that you can react quickly to any variances, avoid process failures or faulty batches and verify that you have your water quality under control at all times.**

Spring water, well water or surface water – even raw water quality can vary considerably. In your water treatment plant, you must constantly check that the water meets your product-specific quality requirements as well as the applicable legal regulations at your production facility and in your sales markets. What's more, you must be able to document water quality at all times.

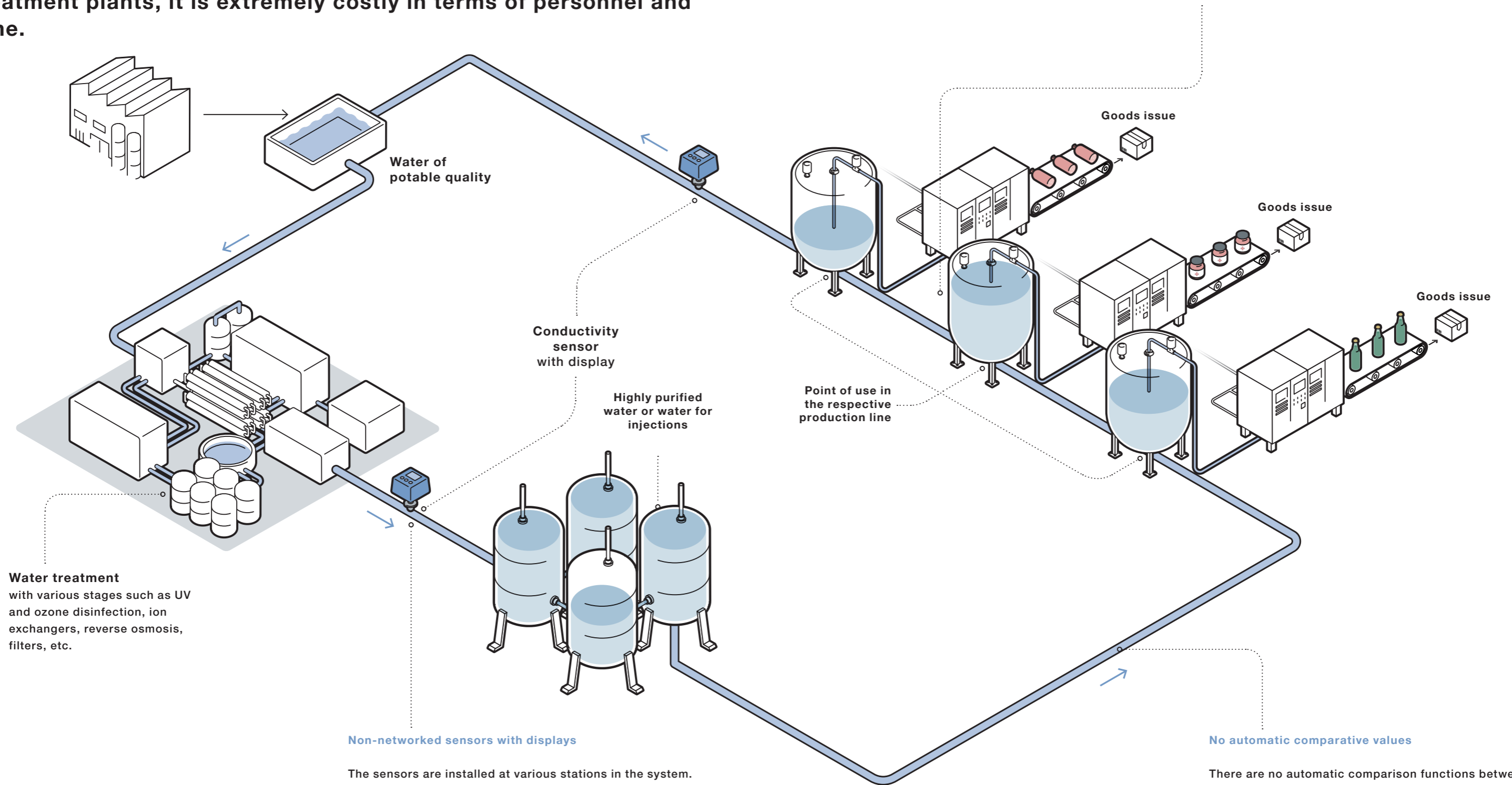


Do you want to monitor your water quality permanently and as efficiently as possible? Read on to discover how a multi-channel transmitter and multi-function controller from Bürkert can help you do this.

**/ High water quality demands close attention / Only a permanent system of monitoring water quality will guarantee a high degree of process reliability and the flawless quality of your end products. Although this can be achieved in conventional water treatment plants, it is extremely costly in terms of personnel and time.**

**Time-consuming inspection of water quality**

If deficient water quality is only discovered during the quality control for the product, you have already incurred a major loss. Entire product batches may then be unsaleable and will need to be disposed of at great expense.



**Water treatment** with various stages such as UV and ozone disinfection, ion exchangers, reverse osmosis, filters, etc.

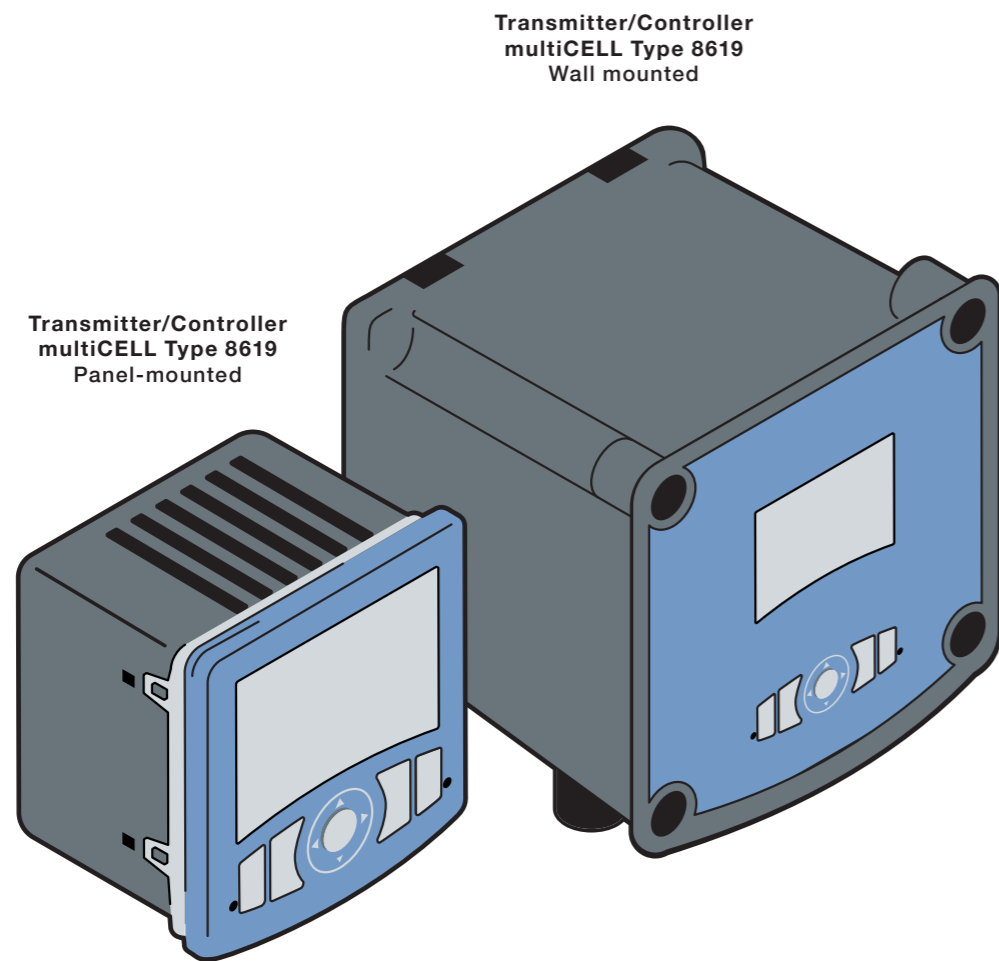
**Non-networked sensors with displays**

The sensors are installed at various stations in the system. Readings must be taken from each sensor and the values then entered into a system. Costly sensors equipped with displays are used.

**No automatic comparative values**

There are no automatic comparison functions between the sensors, whose values could provide early indications of malfunctions. There is also no permanent documentation of water quality.

**/ The multi-talent /** The multiCELL Type 8619 conditions the water quality measurements clearly and supports the process of documenting them. It is equally reliable as an analysis or flow transmitter and as a PID controller. The multiCELL Type 8619 can integrate up to six extension modules. The data collected can be transmitted via the standard signal outputs or Industrial Ethernet to a central monitoring tool. The modular software and hardware concept is easily adapted to the individual requirements of practically every application.



Depending on how you wish to install your multiCELL Type 8619, we offer two device variants: wall-mounted and panel-mounted. The functional scope of the two devices is identical. The multi-function controller has a large, robust monochrome display that is easily legible. You can also operate it while wearing gloves. It is also suitable for use in aggressive environments and can function in a wide temperature range.



**Preventive maintenance**



Thanks to the centralised collection of water quality values and the mathematical functions in the transmitter, you can detect malfunctions in good time, plan maintenance more effectively, thereby improve process reliability substantially.

**Reliable documentation**



You do everything to ensure high water quality and process reliability. You should also be able to prove it. This is why the multiCELL Type 8619 supports the continuous documentation of data recorded to enable subsequent tracking.

**One display for all sensors**



The fact that data from different sensors is collected and displayed on the multi-channel transmitter allows you to install more cost-effective sensors without displays. This saves money during procurement and time when the values are read.

**Easy integration**



The hardware and software of the transmitter are modular and offer direct connection facilities for virtually all sensors – flow rate, analysis, pressure, temperature and fill level.

**Open for Industry 4.0**



With continuous and digital monitoring of all the important process values, the measurement data or the device status, you can easily carry out process diagnostics. This puts you in the driving seat for Industry 4.0.

**Key values presented as and when required**



This is why the large and easy-to-read graphic display can be individually configured – with four user-defined views. The colour codes of the additional integrated LEDs conform to the NAMUR standard.

**Reduced plant complexity**



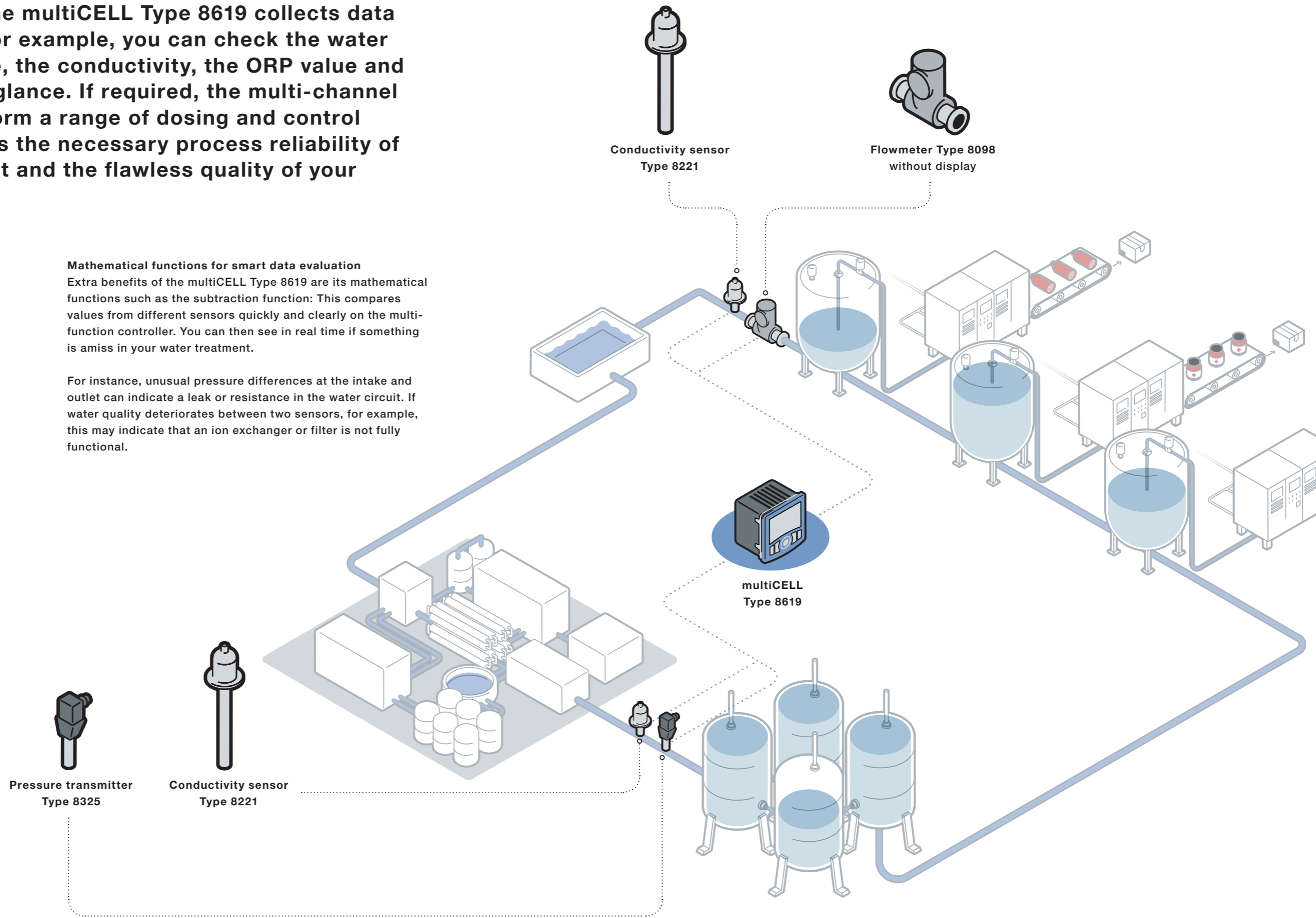
A standardised operating and service concept cuts costs during installation and minimises the time required for installation and maintenance.

**/ Purity under control /** The multiCELL Type 8619 collects data from up to six sensors. For example, you can check the water temperature, the pH value, the conductivity, the ORP value and the chlorine content at a glance. If required, the multi-channel transmitter can also perform a range of dosing and control functions. This guarantees the necessary process reliability of your water treatment plant and the flawless quality of your products.

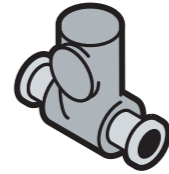
**Mathematical functions for smart data evaluation**

Extra benefits of the multiCELL Type 8619 are its mathematical functions such as the subtraction function: This compares values from different sensors quickly and clearly on the multi-function controller. You can then see in real time if something is amiss in your water treatment.

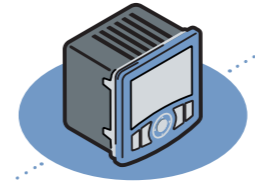
For instance, unusual pressure differences at the intake and outlet can indicate a leak or resistance in the water circuit. If water quality deteriorates between two sensors, for example, this may indicate that an ion exchanger or filter is not fully functional.



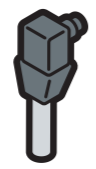
Conductivity sensor  
Type 8221



Flowmeter Type 8098  
without display



multiCELL  
Type 8619

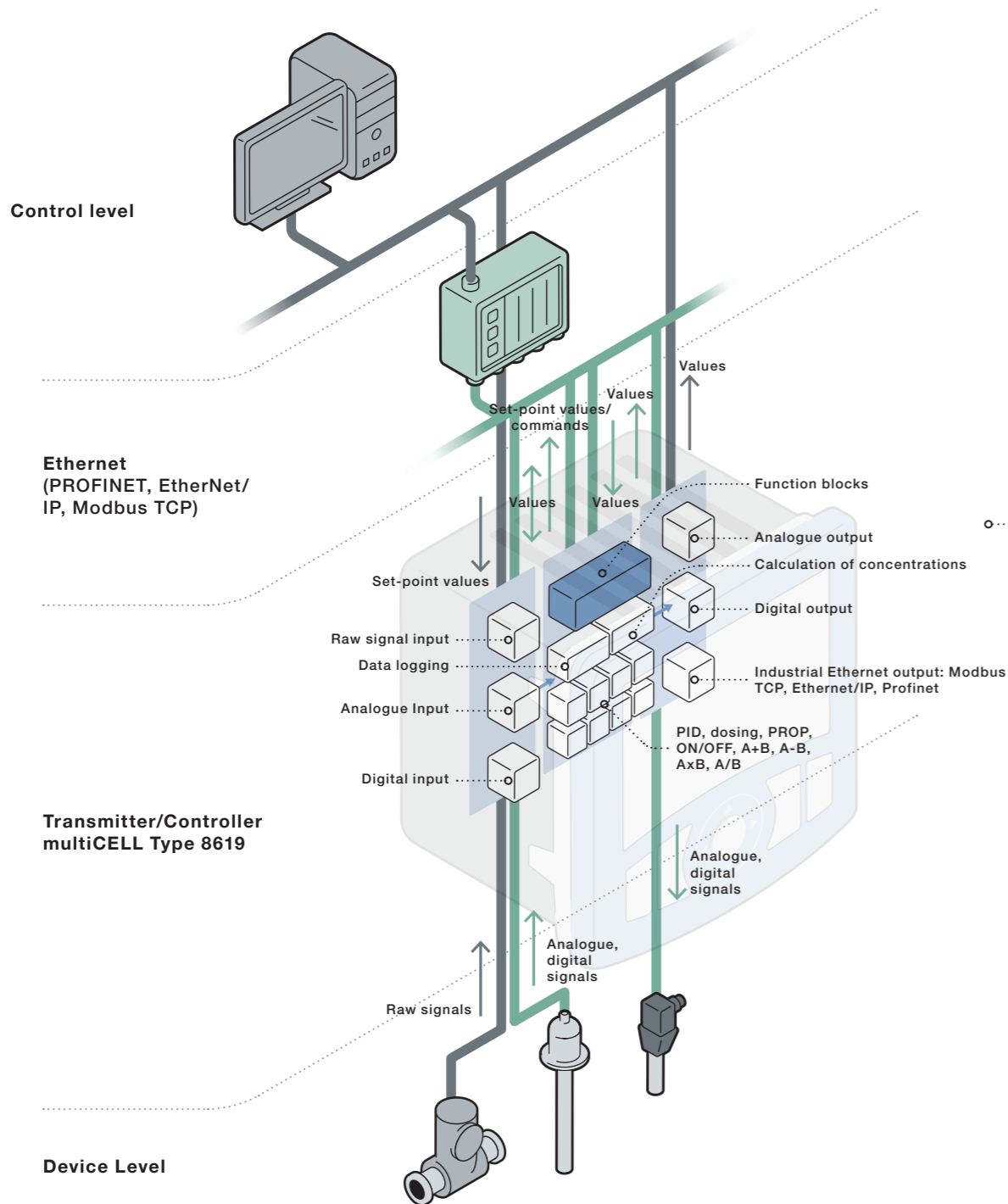


Pressure transmitter  
Type 8325



Conductivity sensor  
Type 8221

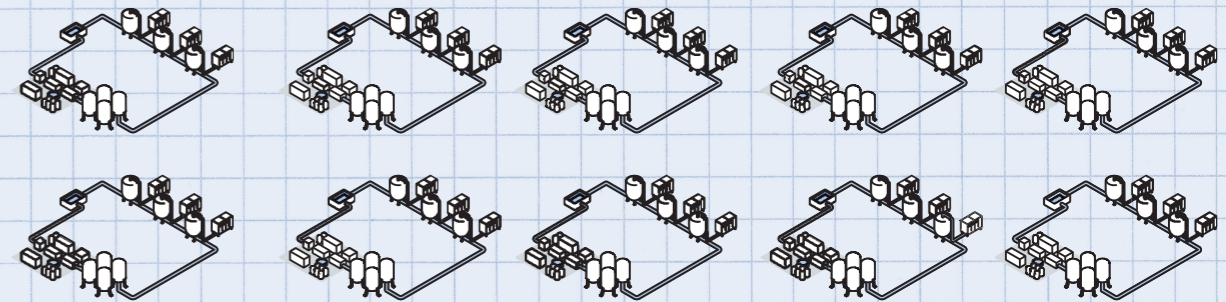
**/ Process control in real time /** The water treatment plants of the future will be networked and will exchange increasing volumes of data. The multiCELL Type 8619 will accompany you on your path to the digital world of Industry 4.0. It supports the PROFINET, EtherNet/IP and Modbus TCP protocols, and transmits the measurement data to a programmable logic controller (PLC). As a result, all relevant process variables, output values and diagnostics data required for digital plant automation and process control are transmitted in real time to the PLC. Another advantage: You save on the cost of excessive wiring.



Example calculation

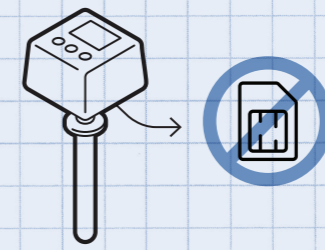
**A multi-function controller that pays off:** The multiCELL Type 8619 saves time and money. We can supply our multi-channel transmitter pre-configured to your specifications, which significantly reduces the amount of time and money you spend on parameterisation. Particularly for plant engineers who commission many water treatment plants every year, this is a clear advantage. Our sample calculation shows exactly where potential savings are to be found.

Plant for supplying 10 loops



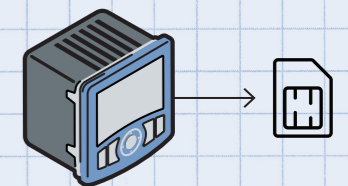
Conventional solution

20 x

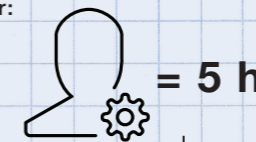


Bürkert solution

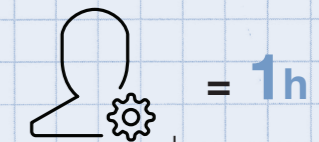
5 x



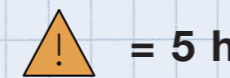
approx. 1 h parameterisation without SD card per transmitter:



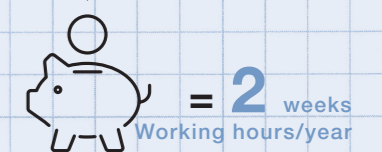
approx. 1 h parameterisation for the required SD card

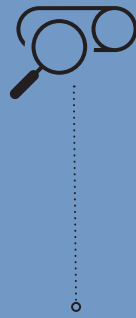


1 h troubleshooting (30 min. per loop), the system "behaviour" must be checked after start-up



Average of 15 plants per year = 75 h  
(based on average working hours of 37.5 h)





## Analysis

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