



Level



Pressure



Flow



Temperature



Liquid Analysis



Registration



Systems Components



Services



Solutions

# The perfect sampler team: Stationary Liquistation CSF48 and portable Liquiport 2010 CSP44 and their sensors



## Sampling the world's water

The new Liquistation CSF48 and Liquiport 2010 CSP44 revolutionize the world of sampling. These samplers are a modern design that provides unique flexibility to suit any kind of water application while complying with global standards and regulations. Based on the Liquiline/Memosens platform creates the same ease of use and maintenance as all Liquiline devices while providing the unique advantage to be upgraded to a multi-channel/multi-parameter monitoring station for up to six parameters.

### Your benefits

- One product to collect samples and measure various parameters at the same time
- Provides reliable sample collection compliant with the EPA and all international regulations
- Fit for a broad range of applications and sampling locations due to the modular hardware and flexible software
- Increases uptime and lowers costs with easy, tool-free removal and replacement of components



People for Process Automation



## Platform concept

One sampler for all applications – Easy to use, simple to maintain

The new Endress+Hauser liquid analysis platform offers uniform operation and unmatched modularity. The latest members of this family are Liquistation CSF48 and its portable version Liquiport 2010 CSP44. They are based on the same electronic hardware and operating concept as the Liquiline transmitters, therefore maximizing ease of use and increasing process reliability.

### Easy to use

- A common, human machine interface simplifies the operator's job. They can configure the sampler quickly and safely. Three user levels allow easy, yet flexible sample programming.
- Intelligent software recognizes sensors automatically allowing "hot plug & play" for all Memosens sensors making commissioning a simple affair.
- This uniform philosophy brings the platform concept to the management level. Plant managers can use the same procedure for integrating the devices in their process control system.
- Ease of use is also a priority for sample transport. Split bottle trays and the large variety of bottle configurations make it safe and comfortable.

### Simple to maintain

- Cleaning the sample intake system is extremely easy. Both, the peristaltic pump and the vacuum pump can be removed and maintained without any tools.
- The compact cooling system with 24 VDC eliminates problems associated with different line voltages and can be maintained and replaced without expert knowledge.
- With Memosens, all sensors can be precalibrated in the laboratory. When connected to the sampler, the intelligent software recognizes the sensors automatically and stores all

calibration values. Exchanging sensors quickly and maximizing process uptime is now possible with Memosens technology.

- The same is true for the exchange of electronic modules. Again, the sampler automatically recognizes the new module and reduces the required maintenance time to a minimum.
- Integration into FieldCare and W@M enables effective asset management. These tools offer all around support throughout the plant lifecycle as well as providing up-to-date and complete information.

One platform – all analytical functions integrated in the samplers.



# Liquistation CSF48 and Liquiport 2010 CSP44

## Sampling and measuring at the same time

Liquistation CSF48 and Liquiport 2010 CSP44 bring the new Endress+Hauser liquid analysis platform to the sampler level. Not only do they offer safe and flexible sampling but can be used as complete measuring stations.

### More than just a sampler

When equipped with sensors with Memosens protocol the sampler turns into a complete system solution for modern environmental monitoring, providing:

- Online measurement of multiple parameters: pH, ORP, conductivity, dissolved oxygen, turbidity and nitrate
- Hot plug & play of the sensors
- Event-controlled sampling: If, for example, a pH sensor is connected to the sampler and the pH value exceeds a certain limit, this event can trigger the sampling

### Two sample intake technologies:

- Vacuum pump for demanding applications. It provides high accuracy and repeatable sample volumes. Its high suction speed guarantees representative sampling
- Peristaltic pump for short intake and suction heights. It can be easily adapted to variable sampling volumes and is suited for toxic applications because of fewer points of contact

### Ultraviable bottle configuration:

- 17 different bottle configurations are available, from one 60-liter bottle to twenty four 1-liter bottles
- Two bottle materials, plastic or glass, allow perfect adaption to any kind of sample and guarantee compliance with EPA, DIN/IEC and ISO

### Flexible sampling programs

Any combination of standard and alarm programs are possible for single or mixed samples.



- Time-proportional sampling starts at a selected time and is repeated in set intervals with identical or variable sample volumes
- Flow-proportional sampling is triggered when the flow input indicates a set flow rate
- Event-controlled sampling is triggered by a set event

### High-quality hardware

- Split bottle trays cut sample weight to half
- Modular housing, patent pending

- Four housing materials: Plastic PS and stainless steel V2A are the cost-effective versions for use in standard wastewater treatment plants. "Bullet-proof" plastic ASA+PC V0 and stainless steel V4A provide extremely high durability for use in industrial wastewater treatment plants and comply to UL standard No. 6101-1
- Vandalism-proof: No screws outside to open the locked housing
- Unique low-voltage, compact cooling system for safe sample storage

### Perfect user interface

- Intuitive menu guidance harmonized over all devices of the liquid analysis family
- Fast navigation through the menus thanks to "PC-like" menus
- Easy operation provided by the Navigator dial and four soft keys
- Large, graphical display shows the maximum amount of information in plain text
- Concise instructions on alarm allows for efficient troubleshooting.



# Accessories

The samplers come with a wide range of accessories. They perfectly adapt the measuring station to process and ambient conditions and allow seamless integration into the existing plant infrastructure.

- Bottle trays with various bottle configurations for perfect adaption to your sampling requirements
- Variety of suction line materials and diameters with stainless steel strainers fit for any application
- SD card for easy software updates, storage of measurement data and transfer of complete configurations to an identical controller
- Field Data Manager for archiving and visualization of historical data
- Commubox FXA291 for connection of Endress+Hauser field devices to the USB interface of a computer via CDI (Common Data Interface). This allows remote operation using e.g. the FieldCare software platform for plant-specific asset management
- Memocheck Sim CYP03D for simulation of measured values of all digital sensors, with programmable simulation sequences

## Flexdip CYH112

Modular holder system for sensors and assemblies in open basins, channels and tanks. The holder system works for nearly any type of mounting - directly on a rail, on the wall or on the floor. Handling is extremely easy thanks to quick clamps.



ISO 9001 Certified

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