# **Monitoring surface water** Netilion Smart System in the municipality of Baltschieder



The municipality of Baltschieder lies adjacent to the municipality of Visp in the northeast of the Swiss canton of Valais. The village currently has a population of 1,200. The centre of the village is located at the end of the Baltschieder valley with its eponymous River Baltschieder.

"We opted to use the new Smart System for surface water for the purpose of temporarily recording analytical measured values for the River Baltschieder. The system records key analytical parameters for us. Its main advantage is that the measured values are continuously transmitted to the Netilion Cloud and can be called up easily from a workstation."

Philipp Kalbermatten Municipality of Baltschieder Dorfplatz, Baltschieder, Switzerland





Philipp Kalbermatten

Recording pH, conductivity, turbidity and temperature in a reliable manner means that the surface water of the River Baltschieder can be analyzed for the purpose of ensuring that any contamination is detected and tracked.

## The challenge facing the customer

Up until now, the municipality of Baltschieder has not had access to consistent information on certain parameters relating to the water quality of the River Baltschieder. This meant that contamination or natural effects were not detected and dealt with in a timely manner. What was needed was a reliable monitoring system that required little effort to install and maintain.

## Our solution

The Netilion Smart System for surface water ensures reliable detection of the quality parameters required by the municipality:

Measuring water quality in the River Baltschieder

- Turbidity: The smart Turbimax CUS52D sensor measures turbidity with laboratory-grade accuracy and enables low-maintenance operation.
- Conductivity: The Condumax CLS21D is a robust and accurate conductivity sensor for all process and environmental applications.
- pH: The Orbisint CPS11D is the digital all-rounder for process and environmental technology. This durable device provides reliable measurements and requires little maintenance.
- The multi-channel Liquiline CM444 transmitter collects the measurement information.
- The Modbus Edge Device transmits the measured data to the Netilion Cloud.
- A smartphone application delivers the measurement, diagnostic and alarm information directly into the hands of the customer.



#### Result

The result is that the measured variables from the River Baltschieder are continuously recorded at 15-minute intervals and displayed online to municipal employees on their smartphones. Instrument status information provides indications regarding maintenance requirements and underlines the reliability of the measured values displayed. To analyze the data, the measured values can be downloaded from the Netilion Cloud using the CSV Export function, and documented.

#### Features and benefits

- Continuous monitoring of water quality
- Measured values displayed via smartphone app
- Trend indicator on smartphone for previous 24 hours
- Diagnostic information relating to instrument status
- Data export to Excel for analysis and documentation



Netilion Smart Systems App



Liquiline transmitter

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