MONITORING EXCELLENCE.

SIGRIST
PROCESS-PHOTOMETER

AquaScat S

In-line turbidity measurement for the water treatment

Certificates

- ACS (Attestation Conformité Sanitaire)

Applications

- Turbidity measurement in raw water
- Monitoring of flucculation and dosage of flocculants
- Filtration monitoring
- Turbidity measurement in treated water
- Turbidity monitoring of water in storage and distribution networks
- Turbidity measurement in process water

Industries

- Potable water treatment
- Beverage industry
- Food production industry
- Industrial water treatment

Characteristics

- Measurement directly in the water
- Re-calibration with secondary standard
- Lowest stray light level, also in heavily reflecting stainless steel tubing
- Very low maintenance needs
- Various process connections
- Various options to present and to transfer the measured data to PLC/SCADA
- Additional temperature measurement with submerge version
- Web interface

AquaScat S

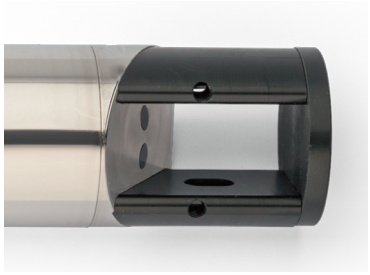
In-line turbidity measurement for the water treatment

Innovations with true customer benefits

Measurement directly in the water

Sensorhead is sloped:

- Water flow creates selfcleaning effect of the sensorhead surface.
- Zero drift in water with turbidities of max. 1 FNU (without manganese, iron or any other sticking substances) is less than 2% per six months of operation



The absorber

The absorber allows the application of the sensor in all possible process installations:

- Eliminates stray light form the environment
- Avoids unwanted influences of the measured values by light reflexions, particularly in stainless steel tubing.
- Turbidity values of a few mFNU can be measured precisely.

Re-calibration with secondary standard (Solid glass body)

Formazine is used in the factory to calibrate the AquaScat S after assembly. For re-calibration, a secondary standard is available:

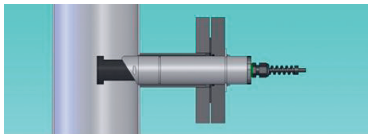
- Precise re-calibration is possible without the use of Formazine.
- Purchase and storage of Formazine is not needed.

System integration

Various options to visualize and to transfer the data to PLC/SCADA are available:

- 8-wire cable
- Conn-R and SICON-C
- SICON/SICON-M
- WLAN

- Most oft the customer requirements can be covered.



Process connections

Various options for process integration are available. There is a solution for almost every customer requirement.

Submerge version

The variant with stainless steel sleeve also enables temperature measurements.

Technical Data

Instrument data

Measuring principle:	90° Scattered light according to ISO 7027/EN27027
Light source:	LED 860 nm
Measuring span:	0 ... 4'000 FNU
Measuring ranges:	8, freely programmable
Resolution:	0.001 FNU
Sample temperature:	0 °C ... +60 °C
Temperature measurement:	0 °C ... +60 °C (immersion version)
Temperature measurement resolution:	0.1 °C
Pressure:	max. 10 bar @ 20 °C
Sample flow:	max. 3.0 m/s
Ambient temperature:	0 °C ... +60 °C
Humidity:	0 ... 100 % rel.
Protection:	IP68 (Electrical connector IP67)
Power supply:	24 VDC +/–10 %, galv. isolated from housing of sensor
Power consumption:	max. 2 W
Materials:	Stainless steel 1.4571, PPSU, sapphire
Dimensions:	Ø 40 × 200 mm

System integration

8-wire cable:	1 × 0/4 ... 20 mA Output (Minus Pole on GND of 24 V supply) 2 × digital outputs (24 V, high-side, max. 25 mA)
Option Connection box Conn-R:	1 × 0/4 ... 20 mA Output (Minus Pole on GND of 24 V supply) 2 × Relays Outputs 230 VAC, 4A Push-button for re-calibration LED info of re-calibration Connector for SICON-C Dimensions: 110 × 151 × 61 mm
Option SICON – SICON-M:	Max. 8 × 0/4 .3. 20 mA Outputs Max. 7 × digital Outputs Max. 5 digital Inputs Modbus TCP Modbus RTU Profibus DP HART Conn-A for max. 8 Sensors Powerbox for max. 12 Relays Dimensions: 130 × 160 × 60 mm
Option WLAN:	IEEE 802.11b/g/n access with web server

Process connections

Options:	– PE tubing welded – Stainless steel tubing with flanges welded – Kit to install directly in basins – Device to extract the sensor under pressure – VARINLINE® clamp connection

photometer.com/c3ec

Your representative:

SIGRIST
PROCESS-PHOTOMETER
SIGRIST-PHOTOMETER AG
Hofurlistrasse 1 · CH-6373 Ennetbürgen
Tel. +41 41 624 54 54 · Fax +41 41 624 54 55
www.photometer.com · info@photometer.com