MONITORING EXCELLENCE.

SIGRIST
PROCESS-PHOTOMETER

AquaScat

In-line turbidity measurement for the water treatment

Applications

- Turbidity measurement in raw water
- Monitoring of flocculation and dosage of flocculants
- Filtration monitoring of filter performance and back-wash control
- Turbidity measurement in treated and final waters
- Turbidity monitoring of water in storage and distribution networks
- Turbidity measurement in process and waste waters

Industries

- Potable Water Treatment Works
- Waste water treatment
- Industrial water production

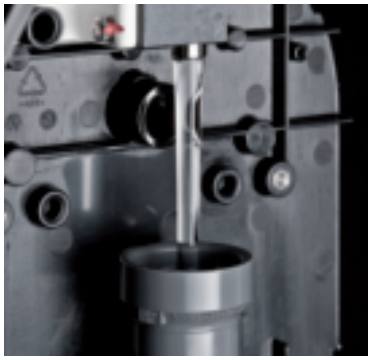
Advantages

- True non-contact measurement in free-fall stream (models WTM, WTM A, HT)
- Dual beam measurement in optimized cell (model P)
- Re-calibration with secondary standard (fully automatic at model WTM A)
- Lowest stray light levels
- Virtually maintenance free
- Convenient operation via touch screen
- Graphical display of trends and/or values
- Visualization of measured values over the past month

AquaScat

In-line turbidity measurement for the water treatment

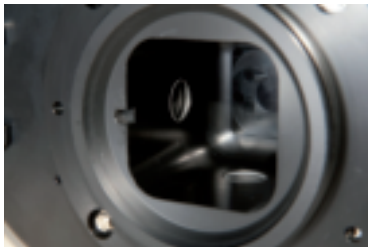
Innovations with true customer benefits



Non-contact free-fall concept

Water passes through the AquaScat models WTM, WTM A and HT without touching the optics.

- No window fouling and hence, the measured values are not falsified.
- Very low and high turbidity values can be measured precisely.
- The entire sample beam is measured which leads to true representative results.
- Extremely low maintenance is the result.



Dual beam concept

At the AquaScat P, transmitted light and scattered light are measured and taken into consideration. The cell is large and the machining is of high quality.

- The influence of the cell contamination is reduced substantially.
- Possible interference by colour is completely eliminated.
- Cell cleaning is minimised.

Very low quantity of stray light

The design of the AquaScat in combination with high quality optical components minimizes the quantity of stray light inside.

- A stable measurement of a few mFNU turbidity is therefore possible.
- Very low zero drift provides excellent long term stability.

Re-calibration with secondary standard

Formazine is used in the factory to calibrate the AquaScat after assembly. For re-calibration, a secondary standard (Zerodur® glass body) is available.

- Precise re-calibration is possible without the use of Formazine.
- In the AquaScat WTM A, this re-calibration is done automatically without stopping the waterflow.

Integrated control unit

The control unit of all the AquaScat family is an integrated colour touch screen.

- Values, graphs, alarm- and status messages can be presented.
- An internal data logger allows recalling and displaying measured data of the last 32 days.

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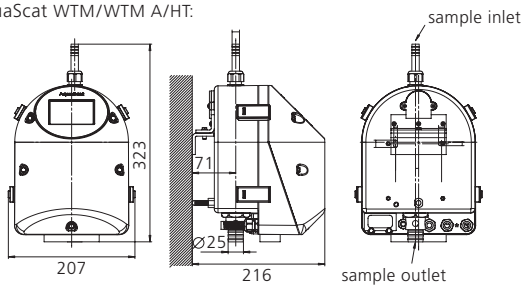
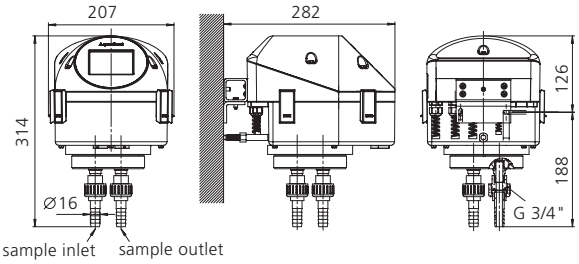
Technical Data

Instrument data:	
Measuring principle:	90° Scattered light according to ISO 7027/EN27027
Light source:	LED 880 nm
Measuring span:	0 .. 4'000 FNU (WTM, WTM A, HT) 0 .. 100 FNU (P)
Measuring ranges:	8, freely programmable
Resolution:	0.001 FNU (WTM, WTM A, P); 0.1 FNU (HT)
Sample temperature:	0 .. +40 °C
Ambient temperature:	–10 .. +50 °C
Humidity:	0 .. 100% rel.
Protection:	IP 54 (WTM, WTM A, HT); IP 65 (P)
Power supply:	18 .. 30 VDC, optional: 100 .. 240 VAC, 47 .. 63Hz
Power consumption max.:	8 W
Installation models WTM/HT:	
Sample inlet/outlet:	Hoses of inner ø 12/25mm
Sample flow:	min. 1.3 l/min, atmospheric pressure
Material inlet/outlet:	SS 316L/PVC
Installation model P:	
Sample inlet/outlet:	Hoses of inner ø 16/16mm or GF-System G¾"
Sample flow:	0.2 .. 2 l/min
Pressure:	max. 10 bar @ 20 °C
Material: Cell/inlet&outlet:	POM/PVC
Control Unit:	
Display:	1/4 VGA, 3.5"
Operation:	Touchscreen
Outputs:	2 × 0/4 .. 20 mA, galv. isolated 2 × Relays 250 VAC, 4A
Inputs:	1 × for optional flow meter 2 × 0/4 .. 20 mA
Digital interfaces:	Ethernet, Modbus TCP, SD-card
Optional:	Profibus DP, Modbus RTU

AquaScat WTM/WTM A/HT:



AquaScat P:



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