

AquaScat 2 P

On-line turbidity meter for water treatment



Applications

- Turbidity in raw water with high gas content
- Turbidity after rapid filtration
- Turbidity before/after membrane filtration
- Turbidity before/after disinfection
- Turbidity in drinking water before feeding into the network

Advantages

- Fouling compensation thanks to dual-beam measurement technology

- Water pressure in the measuring cell prevents outgassing of air
- Adjustment with secondary turbidity standard
- Extremely low basic brightening
- Convenient operation via colour touchscreen display
- Display of values and/or graphics

Industries

- Drinking water treatment
- Process water in various industries

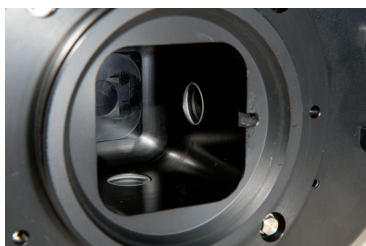
Innovations with real benefits



Fouling compensation thanks to dual-beam measurement technology

With the AquaScat 2 P, the intensity of the transmitted light is measured and set in relation to the scattered light.

- The influence of cell contamination is massively reduced
- Any colour influences that may be present are completely eliminated
- The cleaning interval is long



Extremely low background brightening

A sophisticated device design in combination with the use of high-quality optical components minimises background brightening.

- Stable measurement of a few mFNU turbidity is possible
- Low zero drift guarantees long-term stability
- Suitable for process-critical control systems



Simple device calibration check (solid reference)

The AquaScat 2 P is calibrated with formazin at the factory. A secondary turbidity standard (solid reference) is available for recalibration during operation.

- Precise recalibration without toxic formazin
- The solid reference is stable and does not change its optical properties
- Inexpensive, fast and reliable–no need to flush the lines



Integrated control unit

The AquaScat 2 P has a touchscreen with colour display.

- The display shows optional values, graphics, status and alarm messages
- Quick and easy parameterisation directly on the device
- An internal data memory enables visualisation of the measurement data over the last 32 days

Main technical details

Measuring principle:	90° scattered light in accordance with standard ISO 7027/EN27027
Light source:	LED 870 nm
Measuring range:	0 ... 100 FNU
Accuracy*:	0 – 10 FNU: ± 0.002 FNU or $\pm 1\%$ 10 – 100 FNU: $\pm 1.5\%$
Resolution:	0.001 FNU

* related to factory standard

Full details and technical data:



AquaScat 2 P

Technical data

Device data

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Accuracy*:	0 – 10 FNU: ± 0.002 FNU or $\pm 1\%$ 10 – 100 FNU: $\pm 1.5\%$
Resolution:	0.001 FNU
Repeatability:	0.001 FNU or $\pm 0.1\%$
Medium temperature:	0 ... +60 °C
Ambient temperature:	0 ... +50 °C
Ambient humidity:	0 ... 100 % rel.
Protection class	
measuring cell:	IP65
Power supply:	18 ... 30 VDC
Power consumption max:	8 W

Installation

Sample inlet / outlet:	Hose connection with internal $\varnothing 16/16$ mm or GF system G $\frac{3}{4}$ " Sample flow rate: min. 0.2 l/min
Pressure:	max. 10 bar @ 20 °C
Material cell/inlet & outlet:	POM / PVC

Operating unit

Display:	1/4 VGA, 3.5'
Operation:	Touchscreen
Outputs:	2 x 0/4 ... 20 mA, galvanically isolated 2 x relays 250 VAC, 4A
Inputs:	1 x for optional flow meter 2 x 0/4 ... Flow meter 2 x 0/4 ... 20 mA
Digital interfaces:	Ethernet, Modbus TCP, SD card
Optional:	– Profibus DP, Profinet IO, Modbus RTU – analogue
Optional sensors:	pH, conductivity, ORP and DO

* related to factory standard

