

AquaScat 2 HT

On-line turbidity meter for water treatment



Applications

- Turbidity measurement in untreated water
- Turbidity in sedimentation stage
- Turbidity before/after filtration stage

Advantages

- Non-contact free-fall measurement; optics are not contaminated
- Simple verification with a solids reference
- Extremely low background turbidity
- Extremely low maintenance
- Convenient operation via colour touchscreen display
- Display of values and / or graphics

Industries

- Drinking water treatment
- Waste water treatment
- Process water in various industries

Innovations with real benefits



Non-contact free-fall measurement

The AquaScat 2 HT measures the turbidity of the water in free fall – without any contact with the optical unit.

- The measuring windows remain clean and do not need to be cleaned, even with high turbidity
- Minimal maintenance thanks to non-contact measurement
- Precise results over the entire turbidity range



Application areas of the AquaScat 2 HT

Thanks to the innovative free-fall measurement, the device is particularly suitable for applications with higher turbidity values.

- Non-contact technology: no contact with the optics – no drift due to contamination
- Ideally suited for raw water control and monitoring of filtration processes
- The device is optimised for higher turbidities > 10 FNU



AquaScat 2 HT Calibration with secondary turbidity standard

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

- Precise recalibration without toxic formazin
- Solids reference is read onto the device at the factory
- Less time required



Integrated control unit

The AquaScat 2 HT has a touchscreen with colour display.

- The display shows optional values, graphics, status and alarm messages.
- An internal data memory enables the visualisation of the measurement data over the last 32 days.

Main technical details

Measuring principle:	90° scattered light in accordance with ISO 7027/EN27027 standard
Light source:	LED 870 nm
Measuring range:	0 ... 4000 FNU
Accuracy*:	0 – 10 FNU: ± 0.1 FNU, or $\pm 1\%$ full range 10 – 4000 FNU: $\pm 1.5\%$
Resolution:	0.1 FNU

* based on factory standard

Full details and technical data:



AquaScat 2 HT

Technical data

Device data

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Accuracy*:	0 – 10 FNU: ± 0.1 FNU, or $\pm 1\%$ full range 10 – 4000 FNU: $\pm 1.5\%$
Resolution:	0.1 FNU
Repeatability:	0.1 FNU or $\pm 0.1\%$
Sample temperature:	0 ... +40 °C
Ambient temperature:	-10 ... +50 °C
Ambient humidity:	0 ... 100 % rel.
Protection (Electronics):	IP66
Power supply:	18 ... 30 VDC
Power consumption max:	8 W

Installation

Sample inlet / outlet:	Hose connection with internal $\varnothing 12/25$ mm
Sample flow rate:	min. 1.3 l/min, unpressurised
Material inlet / outlet:	Stainless steel 1.4435 / 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 ... 20 mA
Digital interfaces:	Ethernet, Modbus TCP, SD card
Optional:	- Profibus DP, Profinet IO, Modbus RTU - analogue

* based on factory standard, sample flow 2.5 l/min

