

AquaScat S Mobile

Self-sufficient, portable turbidity measuring system



Certificates



ACS (Attestation Conformité Sanitaire)

The AquaScat S Mobile combines continuous turbidity measurement and control with mobility. This allows easy access to vital information about the condition of the sample water at critical points throughout the water treatment and distribution process. It is the field instrument for turbidity measurement with the highest accuracy and sensitivity on the market in the mFNU range.

Applications

- Monitoring turbidity in the pipe network (< 1.0 FNU) in accordance with the drinking water ordinance (TWV 2018)
- Sporadic measurements at critical points
- Mobility within the water treatment and the supply area
- Use in case of customer complaints

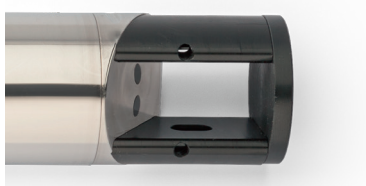
Characteristics

- Quickly ready to use
- Easy to transport
- Compact design with robust suitcase housing
- Fast calibration with control unit
- Precise measurement with display
- Data acquisition also via USB interface
- Mains-independent power supply
- Additional temperature measurement with submerge version

Industries

- Drinking water treatment and distribution
- Waste water and process water treatment
- Beverage and food industry

Innovations with true customer benefits



Mobile measuring sensor

- Portable and robust suitcase with AquaScat S, suitable for mobile, every-day use
- Reliable control unit SICON with data storage covering more than 32 days
- Self-contained power supply
- Robust connection cable to the probe with generous freedom of movement

Precise measurement directly in water

- Turbidity values of a few mFNU
- Integrated temperature measurement

The absorber

- Enables use even outside of dark lines
- Suppresses ambient light
- Ensures precise measured value without interferences

SICON – Fully-fledged control unit

- Displays measured value and measurement history
- Displays functions from setting the desired measuring range to calibration
- Data acquisition via USB interface

Checking unit

AquaScat S is factory calibrated with formazine. For recalibration in operation, a secondary turbidity standard (solid glass body) is available:

- Precise recalibration is possible without the use of formazine.
- Purchase, storage and handling of formazine is not necessary.
- Is optionally available

Possible uses

Different measurements are possible:

- In an open container or channel
- In a sample vessel or in wells or spring shafts
- In open water bodies such as dams

Accessories

- Checking unit
- Additional battery

For a wide variety of mounting options and accessories, please contact our representative or for technical questions: support@sigrist.com

Main technical details

Measuring principle:	90° scattered light according to ISO 7027/EN27027
Measuring span:	0 ... 4'000 FNU
Measuring ranges:	8, freely programmable
Resolution:	0.001 FNU
Sample temperature:	0 °C ... +60 °C
Protection:	IP68 (electrical connector IP67)
Battery life:	max. 20 h

Full details and technical data:



AquaScat S Mobile

Technical data

AquaScat S

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 (submerge version)

Resolution temperature measurement: 0.1 °C

Pressure: max. 10 bar @ 20 °C

Sample flow: max. 3.0 m/s

Ambient temperature: 0 °C ... +45 °C

Ambient humidity: 0 ... 100% rel.

Protection: IP68 (electrical connector IP67)

Power supply: 24 VDC +/-10%, galv. isolated from housing

Power consumption: max. 2 W

Materials: stainless steel 1.4571, PPSU, sapphire

Dimensions: Ø 40 × 200 mm

Cable length to SICON: 10 m

Control unit SICON

Power supply: 9 ... 30 VDCPoI on GND von 24 8 W (with instrument)

Display: 1/4 VGA, 3.5"

Operation: Touchscreen

Ambient temperature: -10 ... +50 °C

Ambient humidity: 0 ... 100 % rel. h.

Protection: IP66

Output: 4 × 0/4 ... 20 mA, galv. isolated
7 × digital

Input: 5 × digital, freely configurable

Digital interfaces: Ethernet, microSD card, USB A
Modbus TCP

Optional modules (max. 2): Profinet, Profibus DP, Modbus RTU, HART
4 × 0/4 ... 20 mA output, galv. isolated
4 × 0/4 ... 20 mA input

Power bank

Battery capacity: 20 Ah
Battery life: max. 20 h

