

PRODUCT INFORMATION
PROCESS ANALYSIS
TURBIDITY MEASUREMENTS
SURFACE SCATTER 7 SC



Outstanding results in high temperatures: SS7 sc turbidimeter

- **Low maintenance and long operation life due to contact-free measurement**
- **Wide measuring range from 0.01-9999 NTU**
- **For fluids up to 80°C**
- **Digital SC controller for up to 8 sensors**
- **Data logger and alarm functions**

For difficult analysis

High temperature samples put many demands on measurement technology. The SURFACE SCATTER 7 sc is an ideal solution.

Its clever design avoids any contact between sample and optical components. Corrosion-resistant materials extend its service life. This rugged instrument is virtually maintenance-free. Very hot fluids are cooled by a heat exchanger if needed.

Versatile

The SS7 sc is ideal for industrial applications, e.g. in the paper, food and petrochemical industries.

It reliably analyses process water, starch, oil, grease and corrosive green and white liquor from pulping processes. It can also handle oil and hydrogen-sulphide contaminated water in oil fields.

Contact-free turbidity measurement

Technical data

Measurement method	90° scatter light, tungsten filament white light, contact-free
Measuring range	0.01-9999.9 NTU (TE/F)
Resolution	0.01 NTU to 99.99 NTU 0.1 NTU from 100.0-9999.9 NTU
Accuracy	0.01-2000 NTU: ± 5.0 % of the reading or ± 0.1 NTU (whichever is higher) 2000-9999 NTU: ± 10.0 % of the reading
Repeatability	Better than ± 1.0 % of the reading or ± 0.04 NTU (whichever is higher for the given range)
Response time	Initial response in 45 seconds
Calibration	With formazin standards
Sample flow	1.0-2.0 l/min
Sample temperature	SS7 sc: 0-50 °C SS7 sc-HST: 0-70 °C, intermittent 70-80 °C
Operating temperature	0-50 °C
Power requirements	12 V ± 5 %, 20 W max. (provided by SC Controller)
Material	Corrosion-resistant plastic
Dimensions	64.2 x 67.5 x 19.0 cm (H x W x D)
Weight	SS7 sc: 15.8 kg; SS7 sc-HST: 18 kg
Mounting	Wall mounted

Subject to change.

Order information

NAME	ART. NO.
SURFACE SCATTER 7 sc (SS7 sc)	LPV431
SURFACE SCATTER 7 sc High Sample Temperature (SS7 sc HST)	LPV432
SC 100 Controller for up to two sensors	LXV401
SC 1000 Digital Controller for up to eight sensors; Extremely variable, e.g. as SC 1000 network or with wireless communication	LXV400 + LXV402
Wall mounting kit	44247-00
Automatic cleaning system (115 V)	46692-12
Automatic cleaning system (230 V)	46692-22
Upgrade kit for converting a SS7 sc into a SS7 sc HST (for higher sample temperatures)	45000-43
STABL CAL formazin standard solution, 400 NTU, 500 ml	71216-49
STABL CAL formazin standard solution, 4000 NTU, 500 ml	2461-49

The principle of contact-free turbidity measurement

The sample flows upwards through the measurement chamber. As the fluid overflows at the top, a stable, flat surface is formed, and this is where the measurement is carried out.

The light source emits a high-intensity beam of light, which strikes the surface of the liquid diagonally. The detector registers the light that is scattered at 90° to the incident beam. This scattered light is proportional to the content of suspended particles in the sample.



SC 100 Controller
Up to two SC probes can be connected



SC 1000 Digital Controller
Up to eight SC probes can be connected; can be easily upgraded.

SC Digital Controller

SC Controllers are the universal platform for all probes and analysers from HACH LANGE. For single parameter solutions and complex networks. They deliver maximum long-term operational reliability and cost savings.