

3S-TRB-L Low Range Turbidity Sensor

Compact online sensor for the determination of water turbidity from 0.01 to 10 NTU

APPLICATION FIELDS

- Drinking water
- Industrial wastewater
- Process water
- Pollution monitoring of surface waters
- Ultrapure water production



ADVANTAGES/FEATURES

• Compact design, sturdy build

Great responsiveness in a small volume thanks to the Fast Loop sample reservoir included in the analyzer. The stainless steel enclosure makes the analyzer resistant to corrosion even in the most harsh industrial conditions.

• Low operating costs

Minimum maintenance necessary: the probe has a fully automatic brush to keep the sensor window always clean.

• Wide measuring range, low detection limit

The 3S-TRB-L low range turbidity sensor analyzes samples in the range 0 - 10 NTU, with an accuracy 0.01 NTU.

• Measurement principle

The sensor is based on determination of sturbidity in water through light scattering measurements. The sensor is compliant with the ISO 7027-1:2016 method for turbidity measurement. The external probe is installed in a dedicated recirculating reservoir to minimize external interferences.



TECHNICAL SPECIFICATIONS

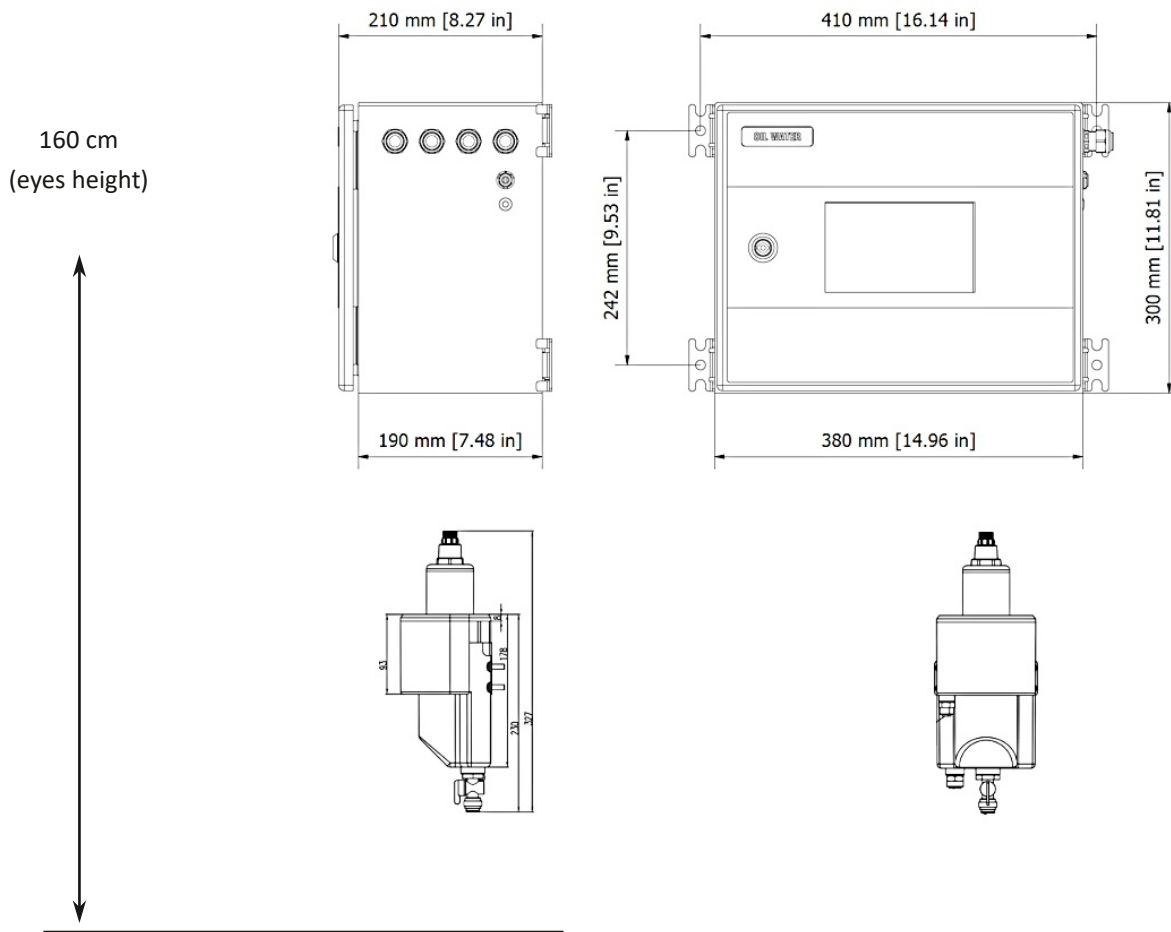
Measured parameters	Turbidity
Measuring principle	Light scattering, ISO 7027-1:2016
Measuring range	0 - 10 NTU
Accuracy	< 2% or 0.01 NTU
Limit of detection	0.01 NTU
Analysis Frequency	< 1 s
Sample	Pressure: pressure-free vessel (depth up to 60 m) Temperature: 5 - 50 °C (41 - 122 °F) Flow Rate: 180 to 500 mL/min Connection: 6 mm (¼-in.) Drain: pressure-free, atmospheric drain
Body Material	Stainless Steel 316L
Dimensions	Ø 36 mm, L 156 mm
Weight	Approx. 1 kg (2.2 lbs)
Power Supply	Voltage: 12 VDC, powered by the 3S-PC1000 controller
Outputs	Via 3S-PC1000 controller (analog, digital, relays)
Installation	With fast-loop reservoir, included
Protection Grade	IP68

FAST LOOP RESERVOIR WITH PROBE



The 3S-TRB-L turbidity probe shown above is installed in the external reservoir, protected from external light and easily accessible for cleaning and maintenance. The reservoir avoid the formation of bubbles that would interfere with the low range measurement.

TECHNICAL DRAWINGS (complete setup)



PRODUCT CODES

A46U10039

3S-PC1000

3S-TRB-L Turbidity sensor low range with probe holder

Probe controller with color touch screen