

## 3S-TRB Turbidity / Suspended Solids Sensor

Compact online sensor for the determination of water turbidity up to 4000 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 turbidity sensor is available in ranges up to 4000 NTU with a limit of detection of 0.1 NTU.

#### • Measurement principle

The sensor is based on determination of suspended solids in water through light scattering measurements. The external probe is installed in a sample reservoir and measurements are taken on the circulating sample flow. The probe is available in two versions, high and low range.

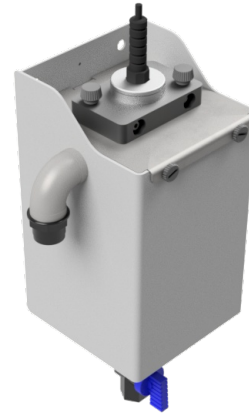
The probe can be installed in the 3S recirculating vessel (not included, shown below), can be pipe-mounted or installed directly in the sample tank.



## TECHNICAL SPECIFICATIONS

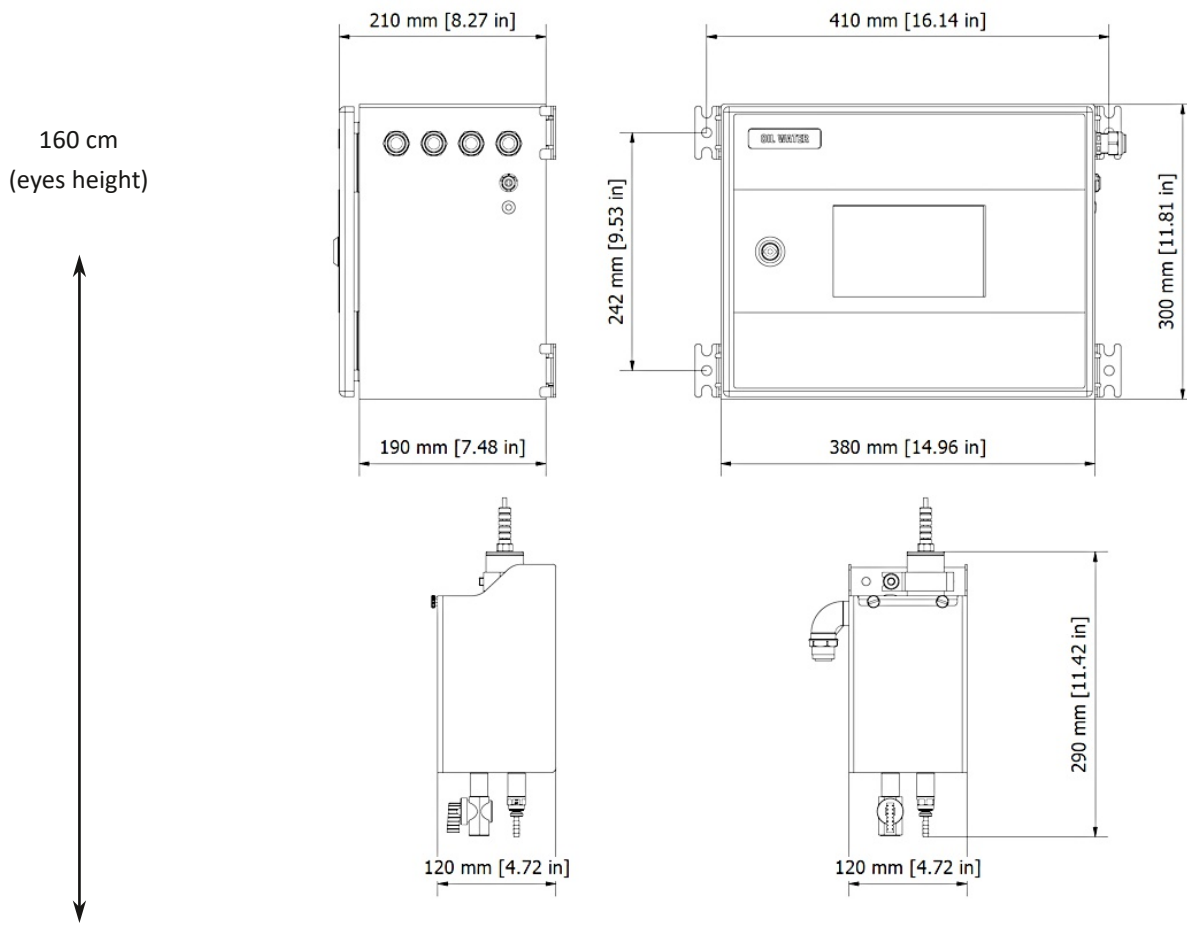
Measured parameters	Turbidity / Suspended Solids
Measuring principle	Light scattering, ISO 7027 method.
Measuring range	0 - 4000 NTU
Accuracy	< 5% or 0.3 NTU
Limit of detection	0.1 NTU
Analysis Frequency	< 1 s
Sample	Pressure: pressure-free vessel (depth up to 60 m) Temperature: 5 - 50 °C (41 - 122 °F) Flow Rate: 80 to 500 mL/min Connection: 6 mm (¼-in.) Drain: pressure-free, atmospheric drain
Body Material	Titanium
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 optional fast-loop reservoir (not included), pipe-mounted (high range only)
Protection Grade	IP68

## FAST LOOP RESERVOIR WITH PROBE



The 3S-TRB turbidity probe shown above is installed in the Fast Loop sample reservoir, protected from external light and easily accessible for cleaning and maintenance (the reservoir is compatible with all 3S probes, has to be purchased separately, product code A46U10035).

## TECHNICAL DRAWINGS (complete setup)



## PRODUCT CODES

A46U10008

3S-TRB Turbidity sensor made of titanium

3S-PC1000

Probe controller with color touch screen

A46U10035

Stainless steel continuous flow D.36 sensor holder