

## Turbidity Sensor TTurbXXX

81SX00000 · 81SX00010



The TTurb is a digital sensor for optical turbidity measurements according to the 90° IR scattered light method. Depending on the sensor it can be used in pure water up to 100 NTU as well as in raw-, waste- and process waters up to 4000 NTU. TTurb is available with a 10 m or a 2 m fixed cable.

<b>TTurb100</b>	0...100 NTU
<b>TTurb400</b>	0...400 NTU
<b>TTurb1000</b>	0...1000 NTU
<b>TTurb4000</b>	0...4000 NTU

### Benefits

- Reliable concentration measurements by optical methods
- Pulsed infrared scattered light procedure
- No mechanically moving parts
- Digital reading
- Preprocessing in the sensor increases measurement sensitivity

### Applications

- Measurement of turbidity in drinking water, domestic water, circulating water
- Measurement of turbidity in drinking water treatment plants with low turbidity values

### Accessories

- Cable: Extension cables of 0.3 m, 2 m, 10 m, 25 m
- Controller: TriBox3, TriBox Mini, HS100
- Fittings: FlowCell



## Technical Specifications

<b>Measurement technology</b>	Light source LED Detector photo diode	
<b>Measurement principle</b>	Nephelometry	
<b>Parameter</b>	Turbidity	
<b>Measuring range</b>	0...100, 0...400, 0...1000, (0...4000 opt.) NTU	
<b>Measurement accuracy</b>	± 2 % FS	
<b>Measurement wavelength</b>	860 nm, FWHM 30 nm	
<b>T100 response time</b>	6 s	
<b>Measurement interval</b>	3 s	
<b>Housing material</b>	PET / POM / NBR	
<b>Dimensions (L x Ø)</b>	170 x 36 mm	~ 6.7" x 1.4"
<b>Weight</b>	0.3 kg	~ 0.7 lbs
<b>Interface</b>	Ethernet (TCP/IP) RS-485 (Modbus RTU)	
<b>Power consumption</b>	typically <0.9 W with network < 1.5 W	
<b>Power supply</b>	12...24 VDC (± 10 %)	
<b>Connector</b>	8-pin M12-plug	
<b>Maintenance effort</b>	≤ 0.5 h/month (typical)	
<b>Calibration/maintenance interval</b>	24 months	
<b>System compatibility</b>	Modbus RTU	
<b>Warranty</b>	1 Year (EU: 2 years) on electronics; All wearing parts are not included in the warranty	
<b>Max. pressure</b>	3 bar	~ 43.5 psig
<b>Protection type</b>	IP68	NEMA 6P
<b>Sample temperature</b>	0...+40 °C	~ +32 °F... +104 °F
<b>Ambient temperature</b>	0...+40 °C	~ +32 °F... +104 °F
<b>Storage temperature</b>	0...+80 °C	~ +32 °F... +176 °F
<b>Inflow velocity</b>	0.1 m/s	~ 0.33 fps