

# DTS-12 DIGITAL TURBIDITY SENSOR



Unique, self-cleaning

The marine-capable DTS-12 is the World's Best Instream Turbidity Sensor.

Using true Nephelometric geometry, along with a durable optical face and angled head that sheds bubbles, it provides extremely clean, highly precise data with repeatable, long-term accuracy. The DTS-12 exhibits less than 2 % annual optical drift, providing an incredible 12-month recalibration interval. The unique self-cleaning wiper minimizes bio-fouling. These features can typically save 11 site visits per year.

Set it and forget it. Accurate readings for up to 12 months.

- The DTS-12 is the first turbidity sensor to use a laser diode light source, a coherent, narrow, near-infrared spectral beam that provides a constant intensity with virtually no degradation over time.
- Unique, self-cleaning, bi-directional design utilizes a back- and-forth motion and two cavities in the face of the sensor that scrape away any fouling twice each time the wiper is activated.
- Non-abrasive silicone wiper blade prevents optical face abrasion and cannot be impregnated with sediment or bio-fouling.
- Integrated thermal compensation provides very high thermal stability of light source and electronics.

## APPLICATIONS

- Shipping industry
- Industry
- Rain and waste water monitoring
- Rafting, drifting and waterways
- Lakes, rivers and canals
- Water management

Professional Line	DTS-12
Id-No.	DTS-12
Meas. range turbidity	0...1,600 NTU (nominal)
Accuracy temperature	±0.2 °C
Temp. coefficient	0...40 °C: < -0.3 % / °C
Accuracy turbidity	At 25 °C: ±2 % of reading + 0.2 NTU (0-399 NTU) • ±4 % of reading (400-1,600 NTU) *)
Resolution turbidity	0.01 NTU
Depth rating	30 m

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Professional Line	DTS-12
Interface	SDI-12
Measuring rate	20 Hz
Wipe time	5 seconds (nominal)
Operating conditions	0...40 °C
Power supply	9.6...16 V
Current consumption	Standby: 0.35 mA • Operating: 50 mA • Motor wiping: 200 mA
Measuring elements	Temperature: Encapsulated thermistor • Humidity: Optical nephelometer (sidescatter)
Data evaluation	Mean, Variance, Median, BES, Min, Max, Temperature
Dimensions	Ø 50.8 mm • length 304.8 mm
Weight	604 g
Cable	DTS-CBL-CON-60-V2: Cable, with Endcap, SubConn, 60 ft (18.3 m) DTS-CBL-CON-100-V2: Cable, with Endcap, SubConn, 100 ft (30.5 m)

As of: 02.07.2022