



# TS1000 Turbidity Sensor

## Description

The TS1000 Turbidity Sensor provides a reliable and cost effective solution for monitoring of turbidity in a wide range of environmental applications. The integral wiper assembly provides long term reliable operation at remote sites where bio-fouling or sedimentation is likely.

The TS1000 is a low power unit and provides both 4-20mA and 0-2.5V outputs. The wiper is triggered by a separate control wire.

The probe is directly connectable to the Datalogger and Transmitter Model HYDRODATA-2000/3000C that also controls the wiper.

The sensor is ideal for use in all water monitoring applications, including tidal and estuary monitoring.

A durable acetal body, double O ring design ensures suitability for harsh environment applications. It can be supplied in various ranges, and is fitted with a moulded polyurethane cable as standard. Other cable options may be available.

The TS1000 sensor is easy to install and provides users with a rugged and reliable solution to long term monitoring. For more information please contact your nearest sales office.

## Features

- Turbidity measurement conforms to 1507027
- Integral self cleaning wiper
- Rugged acetal body
- Field replaceable wiper pad.

## Benefits

- Can be installed in active waters (acidic or salty) where stainless steel is not suitable
- Reliable and Robust sensor ensures minimal field visits for maintenance
- Suitable for marine applications and waterways with high sediment loads.

## Applications

- Monitoring of streams and rivers, lakes and urban waterways
- Catchment studies and forestry management
- Water supply storages including stratification studies
- Intermediate and final effluent treatment monitoring
- Drinking water filtration efficiency
- Tidal, estuary and oceanographic monitoring.

## Dimensions





## TS1000 Specification

Measurement technique	90° Infra-red (1507027)
Std ranges available (factory set)	100NTU, 400NTU and 1,000NTU
Resolution	01NTU, 0.2NTU, 0.3NTU
Linearity	+1-1% +1-1% +1-3%
Calibration standard	APS AEPA polymer solutions 0,100NTU,400NTU,1000NTU
Cable type	Polyurethane sheathed cable, OD 8mm, with 3mm vent tube, moulded entry, bare wire connection
Cable lengths	10, 20, 30, 50, 100, 150 m (32, 65, 100, 165, 325, 490 ft)
Power supply	8 to 30Vdc (at sensor)
Power LSD protection	2000 volts
Current consumption	Sensor 15-40mA while operating Plus extra 30-35mA — while wiping
Sensor warm-up time	10 seconds
Outputs	0 - 2.5V and 4 - 20mA concurrent
Wiper arrangement	Disposable foam pad on PVC arm. Field replaceable
Wiper control	Pull control wire to GND momentarily Pulse time required >50ms, and <4 sec
Wipe time	6 seconds (1 revolution)
Operating temperature	0-50°C
Depth rating (water column)	100m
Storage temperature	-5°C - +60°C
Weight	500g plus cable weight (665g per 1 0m length)
Dimensions (L x OD)	322.90mm x 47mm
Wetted materials	UPVC, aceta1,316 passivated stainless steel, polyurethane, viton

### Optional Extras and Accessories

The TS1000 can be connected to the Datalogger HYDRODATA-2000/3000C for data storage, data transmission and wiper control.

### How to Order

The following information will be required:

- Sensor full scale range (NTU)
- Moulded cable length (m )

