



# Turbi-Tech 2000LS

## Suspended Solids or Turbidity Sensor

PRODUCT DATASHEET

### APPLICATIONS

Final Effluent Turbidity  
Final Effluent Solids  
Inlet Solids  
Surface Water

### MEASUREMENT PRINCIPAL

90° Light Scatter  
ISO 7027 Compliant

### FEATURES

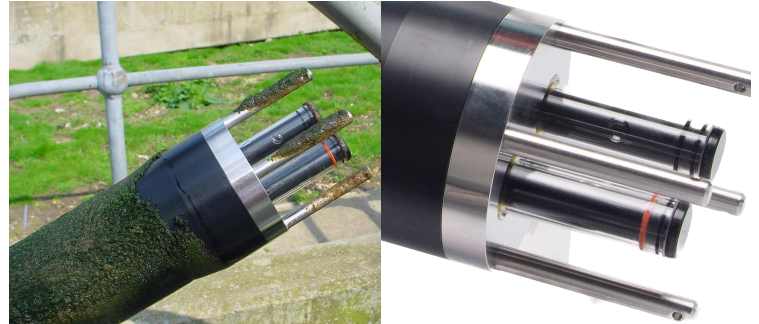
Fully automatic Self Cleaning  
Flexible Mounting System  
Large Optical Surface

### BENEFITS

Automated Aeration Control  
Low Cost of Ownership

### COMPATIBLE MONITOR

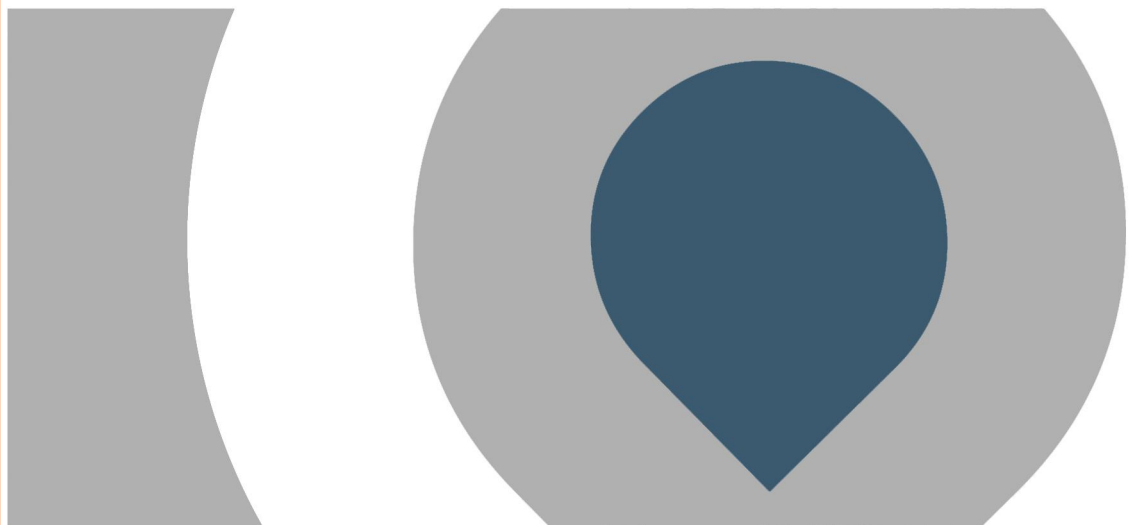
7200 Monitor



The Turbi-Tech 2000LS Sensor is designed to monitor the levels of Suspended Solids or Turbidity typically found in Final Effluent from municipal and industrial wastewater treatment plants. It is also capable of monitoring solids in the intake to both effluent and drinking water treatment processes. The normal operating range is between 0 - 50 and 0 - 500 FTU which can be extended for some applications.

Monitoring of these key parameters requires sensors that are reliable and accurate, the Turbi-Tech 2000LS fills this requirement perfectly. The large optical surfaces and sample volume ensure that the information provided by the sensor is both representative of the process and tolerant of fouling. In addition the sensor incorporates a self cleaning mechanism that ensures that the optical surfaces are kept clean at all times, the cleaning system is designed to avoid problems with ragging and does not smear the optical system. The cleaning system ensures that manual intervention on a routine basis is not required, the sensor should simply be checked as part of general site housekeeping.

The Turbi-Tech 2000LS Sensor employs Infrared light at 860 nm using the 90° Light Scatter principle in accordance with ISO7027 (2000). The cleaning mechanism is then sealed by 2 Nitrile 'H' Rings that finish the cleaning process. The cleaning process is automatically initiated by the 7200 Monitor at a user determined frequency. The cleaning process takes only 90 seconds, which means that the sensor is available for 99.5% of the time with a 5 hourly cleaning cycle.



Call us on +44 (0) 1726 879800 [www.partech.co.uk](http://www.partech.co.uk)

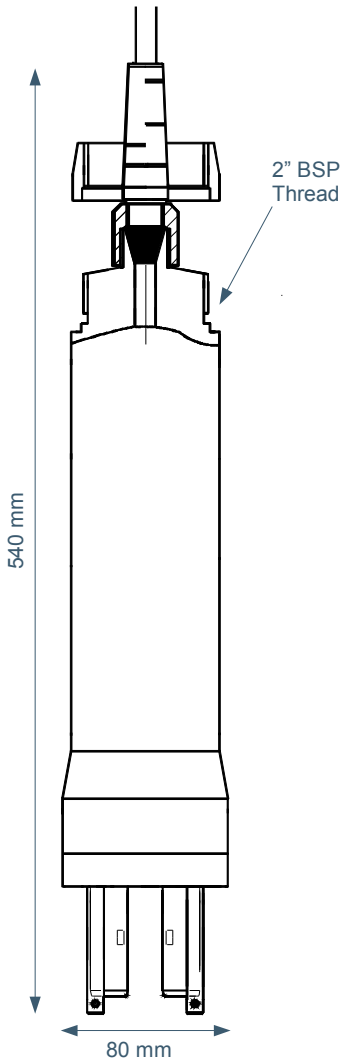




# Turbi-Tech 2000LS

## Suspended Solids or Turbidity Sensor

PRODUCT DATASHEET



### Physical

Dimensions  
Weight  
Protection Class  
Enclosure Material  
Cable Entries  
Wetted Parts  
Seal Material  
Cable Type  
Cable Length  
Service Requirement

### Environmental Data

Operating Temperature  
Storage Temperature  
Location

### Electrical

Power Supply

### Interface to Monitor

Type

### Measurement

Accuracy  
Resolution  
Repeatability  
Measurement Principle  
Wavelength/Frequency  
Response Time  
Pressure Rating (Depth)  
Flow Rate  
Maximum Range  
Minimum Range

### Mounting

Installation Type  
Mounting Shaft  
Handrail Attachment  
Stilling Tube

80 mm diameter x 540 mm long  
2 kg (inc 10 metres of cable)  
IP68  
Black Acetal Co-Polymer  
Integral Cable Gland  
Black Acetal, 316 Stainless Steel, Glass  
Polyurethane and Nitrile (Viton option)  
6 core, 9mm O/D Polyurethane Coated  
10 metres standard, 100 metres maximum  
Automatic Self Cleaning  
Seal Service every 3500 cleans (application dependent)

0 to 50°C  
-20 to 60°C  
Indoor/Outdoor

12VDC from 7200 Monitor

0-5 mA

Better than +/-5% FSD on real sample  
Dependent on range setting, typically +/-2%  
Better than +/-1% FSD on real sample  
90° Light Scatter, ISO 7027 compliant  
860 nm Infrared  
0.5 seconds - damping provided by monitor  
10 mWC  
Not affected by flowrate, avoid dead spots and extreme turbulence  
0 – 500 FTU or mg/l, extendible to 1000 FTU for some applications  
0 – 50 FTU or mg/l  
Measuring range will depend on the nature of the sample being monitored

Dip, Flowcell or Stilling Tube  
0.5 to 3 metres in 0.5 metre increments  
Part Numbers 160000 + 160080  
Available

Publication No: I84230DS-Iss07  
The company reserves the right to alter the specification without prior notice. E&OE

Call us on +44 (0) 1726 879800 [www.parotech.co.uk](http://www.parotech.co.uk)

parotech