



TurbiTechw² HR

High Range Suspended Solids Sensor

PRODUCT DATASHEET

APPLICATIONS

Membrane Batch Reactors
Mixed Liquor
Returned Activated Sludge
Surplus Activated Sludge

MEASUREMENT PRINCIPAL

Light Attenuation
Wavelength 860 nm

FEATURES

Fully automatic Self Cleaning
Flexible Mounting System
Large Optical Surface

BENEFITS

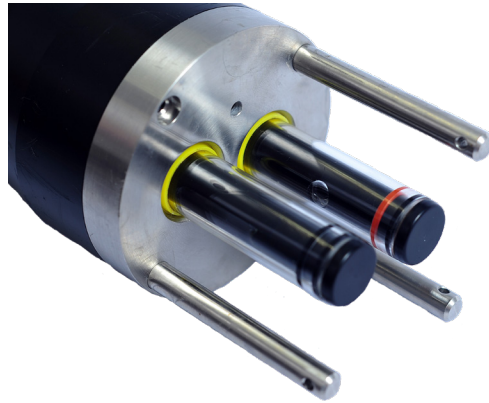
Automated Aeration Control
Low Cost of Ownership

COMPATIBLE MONITOR

7300w² Monitor

ALTERNATIVE SENSORS

TurbiTechw² LA
SoliTechw² IL



The TurbiTechw² HR Sensor has been specifically designed for use in wastewater treatment systems where high levels of suspended solids are desirable in the aeration phase. Membrane Batch reactors typically run with MLSS values in the region of 8,000 to 14,000 mg/l. MLSS concentrations promote numerous process benefits, including stable operation, complete nitrification, and reduced biosolids production reducing biological volume requirements (and associated footprint) to only 20-30 percent of conventional processes. Further, the membrane tanks provide extremely space efficient solids separation and do not require a clarifier in the system.

The TurbiTechw² HR Sensor is suitable for monitoring solids in higher ranges than the standard LA version of the sensor due to its shorter path length. The large optical surface and sample volume combine to ensure that the sensor is providing information that is reliable and representative of the solids present in the process. Deposits of fats and grease on the sensing area do not prevent the sensor from measuring unlike sensors with small optical surfaces.

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.

Call us on + 44(0) 1726 879800 www.partech.co.uk



TurbiTechw² HR

High Range Suspended Solids Sensor

PRODUCT SPECIFICATION



Physical

Dimensions
Weight
Protection Class
Enclosure Material
Cable Entries
Wetted Parts

Cable Type
Cable Length
Service Requirement

Environmental Data

Operating Temperature

Interface to Monitor

Power Supply
Sensor Output

Measurement

Range
Accuracy
Limit of Detection
Minimum Operating Range
Measurement Principle
Wavelength
Pressure Rating (Depth)
Flow Rate
Units

Mounting

Installation Type
Mounting Shaft
Handrail Attachment

470 x Ø80 mm
2.2 kg (inc 10 metres of cable)
IP68
Black Acetal Co-Polymer
Integral Cable Gland
Black Acetal, 316 Stainless Steel, Glass, Polyurethane, Nitrile
4 core, 2 Twisted Pair, 9 mm O/D Polyurethane Coated
10 metres standard, 100 metres maximum
Automatic Self Cleaning
Seal Service every 3500 cleans (application dependent)

0 to +50°C

12VDC from Monitor
ModTechw², RS485

0 - 50,000 mg/l
±5% of measured value or 250 mg/l whichever is greater
250 mg/l
0 - 5,000 mg/l
Light Attenuation
860 nm Infrared
1Bar or 14.5 psi
Not affected by flow rate, avoid dead spots and extreme turbulence
User Selectable mg/l, g/l, ppm, %SS, FAU

The actual measuring range will depend on the nature of the sample being monitored.

Dip
1.0 to 3 metres in 1 metre increments
Contact Partech for a full range of mounting options

Order Codes

Part No Description

223882 TurbiTechw² HR Sensor
(Cable Length: 10 metres, Nitrile Seals)

223883 TurbiTechw² HR Sensor
(Cable Length: 10 metres, Viton Seals)

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The company reserves the right to alter the specification without prior notice. E&OE

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Address: Rockhill Business Park, Higher Bugle, St Austell, Cornwall PL26 8RA, UK E: info@partech.co.uk