



# TurbiTech Suspended Solids and Turbidity Sensors

## THE TURBITECH SUSPENDED SOLIDS AND TURBIDITY SENSORS INCORPORATE A FULLY AUTOMATIC SELF-CLEANING SYSTEM THAT MAKES THEM EXPECTIONALLY RELIABLE AND EASY TO OPERATE AND MAINTAIN.

#### **ACCURATE MEASUREMENTS**

- A solid-state infrared light source provides stable measurements.
- Large optical surfaces and sample volumes improve tolerance to fouling between self-cleanings.

#### LOW COST OF OWNERSHIP

- The mechanical cleaning system eliminates the need for expensive and troublesome compressors required for air-blast cleaning. The sensor can be serviced in minutes without the need for specialist training.
- The cleaning process is automatically initiated by the 7300 Monitor (sold separately) 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 within a six-hour cleaning cycle.

#### **SENSOR OPTIONS**

- The LS version of the TurbiTech sensor operates using 90° Light Scatter.
- The TurbiTech LA & HR sensors have been designed for use in aeration systems. The TurbiTech HR sensor is suitable for monitoring solids at higher ranges than the standard LA version of the sensor due to its shorter path length.

### **ISO COMPLIANT**

• The TurbiTech LS version is compliant with the international standard for turbidity monitoring ISO 7027.

#### PARAMETERS

- Mixed Liquor Suspended Solids
- Total Suspended Solids
- Turbidity



## **Applications:**

- FINAL EFFLUENT
- PRIMARY INFLUENT
- PRIMARY SETTLED SEWAGE
- ACTIVATED SLUDGE
- RETURN ACTIVATED SLUDGE
- SURPLUS ACTIVATED SLUDGE
- MEMBRANE REACTORS
- BATCH REACTORS

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## **TurbiTech Suspended Solids and Turbidity Sensors**

GENERAL	TURBITECH SUSPENDED SOLIDS AND TURBIDITY SENSORS						
DIMENSIONS	470 x Ø80 mm (18.5 in x Ø3.1 in)		CABLE LENGTH		10 m (32.8 ft) standard, 100 m (328.1 ft) maximum		
WEIGHT	2.2 kg (4.8 lbs) inc 10 m (32 ft) of cable		SERVICE REQUIREMENTS		Automatic Self Cleaning Seal Service every 3500 cleans (application dependent)		
PROTECTION CLASS	IP68		INSTALLATION TYPE		Dip		
ENCLOSURE MATERIAL	Black Acetal Co-Polymer		MOUNTING SHAFT		1 to 3 m (3.3 ft to 9.8 ft) in 1 m (3.3 ft) increments		
CABLE ENTRIES	Intergral Cable Gland		OPERATING TEMPERATURE		0 to +50°C (32°F to 122°F)		
WETTED PARTS	Black Acetal, 316 Stainless Steel, Glass, Polyurethane, Nitrile		POWER SUPPLY		12VDC from Monitor		
CABLE TYPE	4 core, 2 Twisted Pair, 9 mm O/D Polyurethane Coated		SENSOR OUTPUT		ModTech, RS485		
STANDARD SENSORS	RANGE	ACCURACY		LIMIT OF DETECTION	MEASUREMENT PRINCIPLE	WAVELENGTH	PRESSURE RATING (DEPTH)
TurbiTech LS Sensor	0 - 100 FTU 0 - 500 FTU 0 - 1,000 FTU	$\pm 5\%$ of measured value or $\pm 0.5$ FTU, whichever is greater $\pm 5\%$ of measured value or $\pm 2.5$ FTU, whichever is greater $\pm 5\%$ of measured value or $\pm 5$ FTU, whichever is greater		0.5 FTU 2.5 FTU 5 FTU	90° Light Scatter	860 nm Infrared	1 Bar or 14.5 psi
TurbiTech LA Sensor	0 - 20,000 mg/l	$\pm 5\%$ of measured value or 100 mg/l, whichever is greater		100 mg/l	Light Attenuation	860 nm Infrared	1 Bar or 14.5 psi
TurbiTech HR Sensor	0 - 50,000 mg/l	$\pm 5\%$ of measured value or 250 mg/l, whichever is greater		250 mg/l	Light Attenuation	860 nm Infrared	1 Bar or 14.5 psi
WARRANTY	2 years						



## **RADIAL CLEANING**

The TurbiTech's unique optical cleaning system scrapes the grime off the optics and protects the optics from fouling between readings.



## FOULING RESISTANCE

The TurbiTech has a large sample volume, which minimizes the effect of small debris on the reading accuracy.



## **USER-FRIENDLY MAINTENANCE**

The TurbiTech seals are designed to be changed by the user. TurbiTech maintenance does not require special technical training.

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